

ENERGY TO TRANSFORM LIVES

INTEGRATED
ANNUAL REPORT
2018



ILLUMINATING LIVES AND LIVELIHOODS



TENAGA NASIONAL BERHAD (200866-W)

Energy is powerful. Not only does it spark one's desire for innovation and growth, it also spurs one's passion for excellence and success. Having proudly kept the nation progressing for the past seven decades, we shall continue to do so for the next seven decades and beyond.

Happy 70th Anniversary

www.tnb.com.my



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OUR DOMESTIC BUSINESSES



GENERATION

As the key component of our electricity production, the Generation Division is entrusted to operate and maintain TNB's portfolio of power generating assets, comprising of thermal generation facilities and major hydro-generation schemes in Peninsular Malaysia. In addition, the Division also supports the operations and maintenance of six (6) Independent Power Producers (IPPs).

CAPACITY

Total Domestic Generating Capacity

10,917.53 MW

For wholly-owned power plants in Peninsular Malaysia

AVAILABILITY

Equivalent Availability Factor (EAF)

88.93%

For wholly-owned power plants in Peninsular Malaysia

RELIABILITY

Equivalent Unplanned Outage Factor (EUOF)

3.84%

For wholly-owned power plants in Peninsular Malaysia



GRID

The Grid Division links the power produced by our Company and IPPs throughout Peninsular Malaysia with the Distribution Division's network. Electricity is also transmitted directly to large industrial customers via the National Grid.

18,338 MW

Maximum Demand on 15 August 2018

23,082 KM

Length of Domestic Transmission Network

443

Domestic Transmission Substations

SYSTEM MINUTES

0.35 MINUTES

which has been consistently below the 2-minute mark since FY2009

SYSTEM RESILIENCE

ZERO LOAD LOSS

for the 500kV system since FY2008

SYSTEM AVAILABILITY

99.79%



DISTRIBUTION NETWORK

The Distribution Network Division is responsible for the asset lifecycle of the Nation's distribution electricity supply system to the end-users, ensuring an uninterrupted supply of power to businesses and homes.

LENGTH OF DOMESTIC DISTRIBUTION NETWORK

660,038 KM

Circuit Kilometres of wholly-owned distribution network in Peninsular Malaysia

SAIDI

48.22 min/cust/yr

2017: 50.24 min/cust/yr



RETAIL

The Retail Division strives to win our customers by building long-term and meaningful relationship through continuous ongoing customer centric approaches.

AVAILABILITY

9.65 million

Customers in Peninsular Malaysia, Sabah and Labuan

118,814.46 GWh

Units Sold in 2018

(Sales in Peninsular Malaysia, Sabah and Labuan)

OUR INTERNATIONAL FOOTPRINT



UNITED KINGDOM

- 50% equity ownership in a UK Solar Portfolio via Vortex Solar Investments S.à.r.l with 365MWp total installed capacity
- 80% equity ownership in a UK Wind Portfolio via Tenaga Wind Ventures UK Ltd with 26.1MW total installed capacity

TURKEY

- 30% equity ownership in GAMA Enerji A.Ş. with 1,102MW installed capacity of gas, wind, hydro and 274,000m³/day water conveyance assets in Jordan

KUWAIT

- REMACO O&M for the 225MW Sabiya Power Generation & Water Distillation Plant
- REMACO O&M for the Shuaiba North Co-Gen 780MW Power; 204,000 m³/day water
- REMACO O&M for the 210MW Doha West Power Generation & Water Distillation Plant
- Maintenance Service Agreement (MSA) for Instrumentation and Control for the Doha West Plant and Shuwaikh Plant
- MSA for Mechanical Works for the Doha West Plant and Shuaiba Plant

SAUDI ARABIA

- 6% equity ownership in the Shuaibah Independent Water & Power Project (IWPP) with 900MW installed capacity of conventional plant and 1,030,000m³/day water desalination assets
- REMACO O&M Services for Shuaibah IWPP

PAKISTAN

- Liberty Power Ltd 235MW
- REMACO O&M Services - Balloki Power Plant

INDIA

- 30% equity ownership in GMR Energy Ltd with 2,299MW installed capacity of coal, gas and solar assets
- 50% equity ownership in JV company between REMACO and GMR Energy Ltd for plant O&M services

INDONESIA

- Development of the Sumatra - Peninsular Malaysia High Voltage Direct Current Interconnection

OUR VISION

To be among the leading corporations in energy and related businesses globally

OUR MISSION

We are committed to excellence in our products and services

ABOUT US

As the largest utility in Malaysia, Tenaga Nasional Berhad not only provides electricity to the country's homes, businesses and industries, but is also a key contributor to Nation-building.

We are present throughout the entire electricity production and supply value chain. We have also embraced the sustainability agenda by entering into the Renewable Energy space and at the same time undertaking other green and social initiatives to ensure we deliver value to all our stakeholders. These efforts are underpinned by our goal of ensuring the longevity of our business and the long-term well-being of our community.

In all of our endeavours, we are driven by our firm belief that we have a responsibility to improve the lives of the people of Malaysia. We therefore look forward to continuing to ensure a better and brighter tomorrow for us all.

WHO WE SERVE

We have served our industrial, commercial and residential customers in Malaysia for over 69 years.

INDUSTRIAL

Our industrial customers engage in the manufacture of goods and services. Although they make up the smallest segment of our customers, they also account for the majority of our electricity sales.

COMMERCIAL

Our commercial customers are our second-largest source of electricity sales, carrying out the business and commercial activities which drive our economy.

RESIDENTIAL

Our residential customers represent the majority of Malaysia's 32.6 million population. As our largest market, they drive us to deliver excellence in our products and services.

NOTICE OF THE 29TH ANNUAL GENERAL MEETING

NOTICE IS HEREBY GIVEN THAT the Twenty-Ninth Annual General Meeting (29th AGM) of Tenaga Nasional Berhad (“TNB” or “the Company”) will be held on Tuesday, 14 May 2019 at 10.00 a.m. at mySpace1@Ballroom, Level 3, The Malaysia International Trade & Exhibition Centre (MITEC), Kompleks MITEC, No. 8, Jalan Dutamas 2, 50480 Kuala Lumpur, Malaysia to transact the following businesses:



Tuesday, 14 May 2019 at 10.00 a.m.



mySpace1@Ballroom, Level 3, The Malaysia International Trade & Exhibition Centre (MITEC), Kompleks MITEC, No. 8, Jalan Dutamas 2, 50480 Kuala Lumpur, Malaysia

AGENDA

AS ORDINARY BUSINESS:

1. To receive the Audited Financial Statements for the Financial Year ended 31 December 2018 together with the Reports of the Directors and Auditors thereon.

(Please refer to Note (a) of the
Explanatory Notes on Ordinary Businesses)

2. To re-elect the following Directors who retire by rotation in accordance with Clause 64(1) of the Company's Constitution and being eligible offer themselves for re-election:

- (i) Tan Sri Leo Moggie
- (ii) Juniwati Rahmat Hussin

Ordinary Resolution 1
Ordinary Resolution 2

3. To re-elect the following Directors who were appointed to the Board and retire in accordance with Clause 63(2) of the Company's Constitution and being eligible offer themselves for re-election:

- (i) Gopala Krishnan K.Sundaram
- (ii) Ong Ai Lin
- (iii) Datuk Ahmad Badri bin Mohd Zahir
- (iv) Dato' Roslina binti Zainal
- (v) Amir Hamzah bin Azizan

Ordinary Resolution 3
Ordinary Resolution 4
Ordinary Resolution 5
Ordinary Resolution 6
Ordinary Resolution 7

4. To approve the payment of Non-Executive Directors' fees of RM2,057,419.35 for the Financial Year ended 31 December 2018.

Ordinary Resolution 8

5. To approve the payment of the following Non-Executive Directors' fees from 1 January 2019 until the next Annual General Meeting (AGM) of the Company:

- (i) Director's fee of RM30,000.00 per month for the Non-Executive Chairman;
- (ii) Director's fee of RM20,000.00 per month for each Non-Executive Directors.

Ordinary Resolution 9

6. To approve the payment of benefits to the Non-Executive Directors (excluding Non-Executive Directors' fees) amounting to RM2,258,100.00 from the 29th AGM until the next AGM of the Company.

Ordinary Resolution 10

7. To re-appoint Messrs PricewaterhouseCoopers PLT, having consented to act, as Auditors of the Company, to hold office until the conclusion of the next AGM and to authorise the Directors to fix their remuneration.

Ordinary Resolution 11

8. To transact any other business of which due notice shall have been given in accordance with the Companies Act 2016 (Act).

FURTHER NOTICE IS HEREBY GIVEN THAT for the purpose of determining a member who shall be entitled to attend this 29th AGM, the Company shall be requesting Bursa Malaysia Depository Sdn. Bhd. (Bursa Depository) in accordance with Clause 45(2) of the Company's Constitution and Section 34(1) of the Securities Industry (Central Depositories) Act 1991 (SICDA) to issue a General Meeting Record of Depositors (ROD) as at 7 May 2019. Only a depositor whose name appears on the ROD as at 7 May 2019 shall be entitled to attend the said Meeting or appoint proxy/proxies to attend and/or vote on his/her behalf.

BY ORDER OF THE BOARD

NORAZNI BINTI MOHD ISA

(LS 0009635)
Company Secretary

Kuala Lumpur
12 April 2019

EXPLANATORY NOTES ON ORDINARY BUSINESSES:

- (a) **Agenda No. 1** is meant for discussion only as the provision of Section 340(1)(a) of the Act does not require shareholders' approval for the Audited Financial Statements. As such, it is not put forward for voting.
- (b) **Ordinary Resolutions 1-7 – Proposed Re-election of Directors in accordance with Clauses 64(1) and 63(2) of the Company's Constitution**

Clause 64(1) of the Company's Constitution provides among others, that one-third (1/3) of the Directors at the time being of whom have been longest in office shall retire by rotation at the AGM of the Company and shall be eligible for re-election.

Clause 63(2) of the Company's Constitution provides among others, that the Directors shall have power at any time and from time to time to appoint any other person to be a Director of the Company either to fill a casual vacancy or as an addition to the existing Directors. Any Director so appointed shall hold office only until the next following AGM of the Company and shall then be eligible for re-election.

Board Nomination and Remuneration Committee (BNRC) and the Board have conducted an assessment on the independence of all Independent Directors including Juniwati Rahmat Hussin, Gopala Krishnan K.Sundaram and Ong Ai Lin and

are satisfied that they have complied with the independence criteria as required by the Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR) and continue to bring independent and objective judgment to the Board deliberations.

BNRC and the Board have also considered the Board Evaluation including the Self and Peer Assessment results of Juniwati Rahmat Hussin, Gopala Krishnan K.Sundaram and Ong Ai Lin and agreed that they have met the Board's expectation in terms of experience, expertise, integrity, competency, commitment and individual contribution by continuously performing their duties diligently as Directors of the Company.

Tan Sri Leo Moggie, Datuk Ahmad Badri bin Mohd Zahir and Amir Hamzah bin Azizan, being Appointed Directors by the Minister of Finance (Incorporated), the Special Shareholder of TNB, are also standing for re-election.

TNB Board on 15 March 2019, had approved for the appointment of Dato' Roslina binti Zainal as the Non-Independent Non-Executive Director. Being the former TNB Vice President, Regulatory Economics and Planning, her inclusion to the Board shall further strengthen the Board composition and give valuable insight on the future regulatory landscape of the electricity industry.

Subsequently, the Board on 26 March 2019 has approved, with the concurrence of TNB Special Shareholder for the appointment of Amir Hamzah bin Azizan as TNB President/Chief Executive Officer/Executive Director for a period of three (3) years with effect from 2 April 2019. Pursuant to Clause 63(2) of the Company's Constitution, Amir Hamzah bin Azizan also standing for re-election.

BNRC and the Board hereby recommend for the re-election of each Director who is retiring at the 29th AGM.

(c) **Ordinary Resolutions 8-10 – Non-Executive Directors' Remuneration**

Section 230(1) of the Act stipulates among others that the fees and any benefits payable to the Directors of a listed company and its subsidiaries shall be approved at a general meeting. As agreed by the Board, the shareholders' approval shall be sought at the 29th AGM on the Non-Executive Directors' remuneration through three (3) separate resolutions as follows:

- (i) **Ordinary Resolution 8** on the payment of Non-Executive Directors' fees in respect of the Financial Year ended 31 December 2018;
- (ii) **Ordinary Resolution 9** on the payment of Non-Executive Directors' fees for the Non-Executive Chairman and each Non-Executive Director from 1 January 2019 until the next AGM of the Company;
- (iii) **Ordinary Resolution 10** on the payment of benefits (excluding Non-Executive Directors' fees) to the Non-Executive Directors from the 29th AGM until the next AGM of the Company.

TNB Board on 11 April 2018, had approved on the engagement of Willis Towers Watson (WTW) to conduct a holistic and independent review of the Non-Executive Directors' Remuneration with the view to determine its market competitiveness and alignment with the latest regulations/corporate governance guidelines in Malaysia. TNB Non-Executive Directors remuneration was last reviewed in 2013.

Whilst there is no proposed revision to the existing Directors' fees, the proposed Ordinary Resolution 8-9 for the Financial Year ended 31 December 2018 and payment of the fees from 1 January 2019 until the conclusion of the next AGM are tabled herewith in line with the provision of the Act and best practices of corporate governance by ensuring full disclosure.

Notice of the 29th Annual General Meeting

Due to the limited listed company data in utilities industry in Malaysia, multiple data sources which extend beyond the local market and industry were considered by WTW. In its review, overall, TNB is market competitive, for most of the compensation elements and WTW recommended that the existing remuneration policy remains and it is to be reviewed in one (1) to two (2) years to ensure the market competitiveness.

The existing remuneration policy of Non-Executive Directors is as follows:

Description	TNB Board		TNB Subsidiaries	
	Chairman	Non-Executive Directors	Chairman	Non-Executive Directors
Monthly fixed fees	RM30,000 per month	RM20,000 per month	Category I – RM7,000 Category II – RM5,000	Category I – RM5,000 Category II – RM3,000
*Meeting Allowances (per meeting):				
(i) Board	RM2,500	RM2,000	RM1,500	RM1,000
(ii) Board Committees	RM2,000	RM1,500	RM1,000	RM800
Benefits	Medical, Business Peripherals, Electricity Bills, Travelling & Telecommunication and other claimable benefits			

* subject to not more than three (3) payments in a month.

In determining the estimated total amount of benefits payable, the Board has considered various factors including the number of scheduled and special meetings for the Board and Board Committees.

Payment of Non-Executive Directors' benefits will be made by the Company and its subsidiaries on a monthly basis and/or as and when incurred, provided that the proposed Ordinary Resolution 10 be passed at the 29th AGM. The Board is of the view that it is fair and justifiable for the payment of benefits to the Non-Executive Directors be made as and when incurred, after the Non-Executive Directors have discharged their responsibilities and rendered their services to the Company.

Details of the Directors' Remuneration for the Financial Year ended 31 December 2018 are enumerated on page 131 of the Corporate Governance Overview Statement of this Integrated Annual Report.

(d) Ordinary Resolution 11 – Re-appointment of Auditors

Based on the External Auditors Assessment Result for the Financial Year under review, Board Audit Committee and the Board are satisfied with the quality of service, adequacy of resources provided, communication, independence, objectivity and professionalism demonstrated by the External Auditors in carrying out their functions.

Being satisfied with the External Auditors' performance, the Board recommends their re-appointment for shareholders' approval at the forthcoming AGM.

Additional Information on Ordinary Resolutions 1 to 7

Additional Information on the particulars of the retiring Directors, as required under Appendix 8A of the MMLR is detailed out in the Statement Accompanying Notice of 29th AGM of this Integrated Annual Report.

NOTES:

1. A member of a Company shall be entitled to appoint another person as his/her proxy to exercise all or any of his/her rights to attend, participate, speak and vote at a meeting of members of the Company, in accordance with Section 334(1) of the Act.
2. Where a member is an authorised nominee as defined in accordance with the provisions of the SICDA, it may appoint up to two (2) proxies in respect of each Securities Account it holds with ordinary shares in the Company standing to the credit of the said Securities Account.
3. A member entitled to attend and vote at the Meeting is entitled to appoint not more than two (2) proxies to attend and vote on his/her behalf. Where a member appoints two (2) proxies, the appointments shall be invalid unless the proportion of the shareholdings to be represented by each proxy is specified.
4. The instrument appointing a proxy/Proxy Form shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy/Proxy Form is executed by a corporation, it shall be executed either under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.
5. A corporation which is a member may by resolution of its Directors or other governing body authorise such person as it thinks fit to act as its representative at the Meeting in accordance with Clause 51 of the Company's Constitution.
6. Duly completed Proxy Form must be deposited to the Boardroom Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia not less than twenty-four (24) hours before the time appointed for the taking of the poll or **no later than 13 May 2019 at 12.00 p.m.**
7. Pursuant to Paragraph 8.29A of the MMLR, voting at the 29th AGM of the Company will be conducted by poll. Poll Administrator and Independent Scrutineers will be appointed respectively to conduct the polling/e-voting process and to verify the results of the poll.

Registration of Members/Proxies

Registration of members/proxies attending the Meeting will start from 7.00 a.m. on the day of the Meeting and shall remain open until such time as may be determined by the Chairman of the Meeting. At the closure thereof, no person will be allowed to register for the Meeting nor enter the Meeting venue. Members/proxies are required to produce identification documents for registration.

STATEMENT ACCOMPANYING NOTICE OF THE 29TH ANNUAL GENERAL MEETING

(Pursuant to Paragraph 8.27(2) of the Main Market Listing
Requirements of Bursa Malaysia Securities Berhad)

The Directors who are retiring by rotation in accordance with Clause 64(1) of the Company's Constitution and seeking re-election:

- (i) Tan Sri Leo Moggie
- (ii) Juniwati Rahmat Hussin

The Directors who were appointed to the Board and are retiring in accordance with Clause 63(2) of the Company's Constitution and seeking re-election:

- (i) Gopala Krishnan K.Sundaram
- (ii) Ong Ai Lin
- (iii) Datuk Ahmad Badri bin Mohd Zahir
- (iv) Dato' Roslina binti Zainal
- (v) Amir Hamzah bin Azizan

The profiles of the above Directors are set out in A Committed Board on pages 100 to 109 of this Integrated Annual Report.

Save for Dato' Roslina binti Zainal who holds 18,400 ordinary shares in the Company, none of the above Directors has any interest in the securities of the Company or its Subsidiaries.

ADMINISTRATIVE NOTES OF THE 29TH ANNUAL GENERAL MEETING



Tuesday, 14 May 2019 at 10.00 a.m.



mySpace1@Ballroom, Level 3, The Malaysia International Trade & Exhibition Centre (MITEC), Kompleks MITEC, No. 8, Jalan Dutamas 2, 50480 Kuala Lumpur, Malaysia

GPS: 3.1791° N, 101.6679° E

PARKING AREA

Kindly park your vehicle at the designated parking area through the North or South entry in MITEC. The parking bays are subject to parking fees imposed by the Parking Management. Please validate your parking ticket at the Ticket Counter situated at the foyer Level 2.

REGISTRATION

Registration will start at 7.00 a.m. and registration counters shall remain open until such time as may be determined by the Chairman of the Meeting. There will be signages to direct you to the registration area. Please produce your original Identity Card (NRIC)/Passport during the registration.

NO PERSON WILL BE ALLOWED TO REGISTER ON BEHALF OF THE REGISTERED SHAREHOLDER/PROXY.

Upon verification and registration, you will be given a Wristband. No person will be allowed to enter the Meeting Hall without the Wristband.

The registration counters will only handle verification of shareholdings and registration process. You may proceed to the Help Desk for any other clarification or enquiry.

HELP DESK

Please proceed to the Help Desk located within the registration area if you need any assistance.

SOUVENIR ELIGIBILITY

Souvenir is to be given to shareholders and proxies who attended the 29th Annual General Meeting (AGM), holding 501 unit of shares and above only (**while stock last**).

Where a shareholder splits the shares by appointing more than one (1) proxy, **ONLY one (1) proxy** is entitled to one (1) souvenir.

Where a proxy represents multiple shareholders, the proxy shall be entitled to **ONLY one (1) souvenir**.

VOTING PROCEDURE

The voting at the 29th AGM will be conducted via e-polling. Boardroom Share Registrars Sdn. Bhd. has been appointed as Poll Administrator to conduct the polling process. An Independent Scrutineer will verify the result of the poll.

Please follow the instructions given during the AGM for the e-polling process.

REFRESHMENTS

Light refreshments will be served for the shareholders/proxies attending the AGM. Please proceed to the Refreshment Hall as indicated by the signages.

NO SMOKING POLICY

MITEC is a non-smoking building.

FIRST AID

Please refer to any of our staff/First Aiders should any assistance be required.

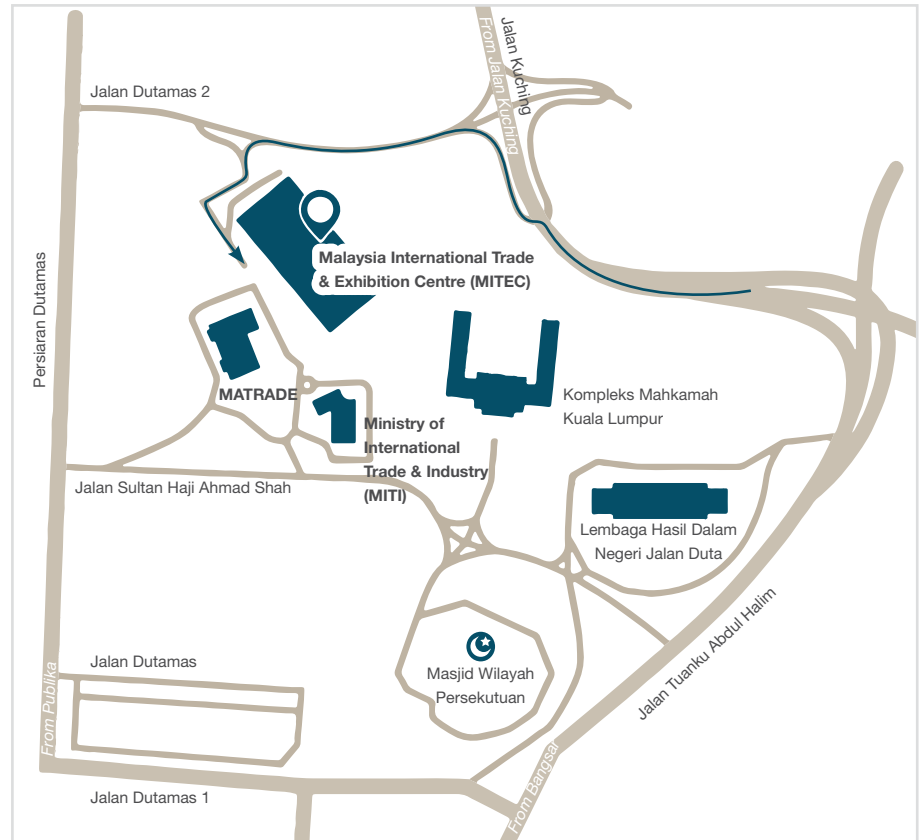
PERSONAL BELONGINGS

Please look after your personal belongings. TNB will not be held responsible/liable for any missing items.

ENQUIRY

Any general queries in relation to the AGM, please contact the Share Registrar during office hours from 8.30 a.m. to 5.30 p.m. (Monday to Friday).

Telephone : +603-7849 0777
Facsimile : +603-7841 8151/8152



HOW TO GET TO MITEC



By Car

The following major roads, expressways and highways will conveniently direct shareholders/proxies to MITEC:

DUKE (Duta - Ulu-Kelang Expressway)
NKVE (New Klang Valley Expressway)
SPRINT Highway
Jalan Kuching



By Taxi

Catch a Taxi/Grab from anywhere in Kuala Lumpur or Petaling Jaya and request for a drop-off at North or South Entrance.

Taxis or Airport Limo are also available from Kuala Lumpur International Airport (KLIA) to MITEC and the drive to MITEC takes about an hour journey.



By Bus

T821 - MRT Semantan - Kompleks Mahkamah Jalan Duta
(Only on weekdays) until 8.00 p.m.

852 - Titiwangsa Bus Hub - MATRADE
(Everyday) until 11.30 p.m.

851 - Pasar Seni Bus Hub - Kompleks Mahkamah Jalan Duta
(Only on weekdays) until 11.30 p.m.



By Train

MRT Semantan
LRT/Monorail Titiwangsa

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OUR REPORTING JOURNEY

Our reporting landscape this year continues with the Integrated Annual Report (IAR) format. The Integrated Reporting <IR> Framework, which we adopt, informs the integrated thinking of TNB and how we create value, by conveying relevant aspects of our value-creation process to our stakeholders. The globally-recognised <IR> standard is in line with our aspiration to become a world-class utility.

This IAR encapsulates TNB's Economic, Environmental, Social and Governance measures, including programmes, policies and developments for the financial year ended 31 December 2018 (FY2018), as we strive to provide accurate and up-to-date disclosures on our business.

The report aims to provide concise and relevant information on the performance of our domestic and international operations within the context of our external environment, how we are governed, our future prospects, as well as our long-term strategy to become a Top 10 Global Utility (by market capitalisation) by 2025.

Our IAR is to be read in conjunction with our Sustainability Report, which provides related details on our sustainability journey and efforts that form an integral part in meeting our global aspirations.

In addition to the <IR> standard, the contents and development of this IAR and our accompanying Sustainability Report, continues to be guided by Bursa Malaysia's Main Market Listing Requirements and Sustainability Reporting Guide (2018); the Malaysian Code on Corporate Governance (2017); and the GRI Sustainability Reporting Standards (GRI Standards: Core Option). It also highlights the alignment of our sustainability performance and material matters with targeted United Nations Sustainable Development Goals (UN SDGs) – under the global 2030 Agenda for Sustainable Development.

The impacts and contributions of TNB's business to the six (6) capitals of value creation, as described in the <IR> Framework, are presented in this IAR in an integrated manner.

THIS IAR INCORPORATES THE FOLLOWING NAVIGATION ICONS TO IDENTIFY OUR REPORTING OF EACH OF THE SIX (6) VALUE CREATION CAPITALS:



FINANCIAL CAPITAL

- Prudent capital allocation balancing growth and stakeholder expectation
- Ensure responsible debt structure in line with our business profile



MANUFACTURED CAPITAL

- Sustainable asset management in line with best available practices
- Developing new capacity and services in line with corporate strategic plan



NATURAL CAPITAL

- Protect our environment and biodiversity
- Combat climate change through reduction of greenhouse gas (GHG) emissions



INTELLECTUAL CAPITAL

- Continued support for technological advancement through research and development
- Explore new efficiency drivers, products, services and business models



HUMAN CAPITAL

- Efficient management of human capital resources
- Foster stable, safe and high quality employment
- Development of our talent at all levels



SOCIAL AND RELATIONSHIP CAPITAL

- Build strong relationship with stakeholders through meaningful engagement

KEY HIGHLIGHTS



KEY FINANCIAL HIGHLIGHTS

FINANCIAL YEAR/PERIOD* ENDED 31 DECEMBER	GROUP		COMPANY	
	2018	2017* (Restated)	2018	2017* (Restated)
PROFITABILITY (RM Million)				
Revenue	50,392.5	15,692.2	47,063.3	14,718.2
Operating profit	6,875.6	3,014.0	6,070.8	2,668.2
Profit before taxation and zakat	5,046.6	2,843.5	4,314.1	2,625.4
Net profit attributable to owners of the Company	3,723.7	2,622.3	3,218.6	2,452.3
KEY BALANCE SHEET DATA (RM Million)				
Property, plant and equipment	111,445.5	104,807.6	83,921.1	81,792.6
Total assets	153,695.0	144,250.0	125,141.5	118,048.8
Total borrowings	47,832.4	41,443.7	21,637.0	15,348.1
Total liabilities	94,643.1	86,261.0	73,411.4	66,306.0
Share capital	11,446.1	11,199.6	11,446.1	11,199.6
Shareholders' equity	59,051.9	57,989.0	51,730.1	51,742.8
SHARE INFORMATION				
<u>Per share (sen)</u>				
Basic earnings	65.6	46.3		
Diluted earnings	65.4	46.2		
Dividend (sen):				
- Interim	30.27	-		
- Final	23.00	21.4		
Net assets per share attributable to owners of the Company	1,017.0	1,007.2		
FINANCIAL RATIOS				
Return on assets (%)	3.2	5.3		
EBITDA margin (%)	26.5	32.3		
Debt-equity (net of cash) ratio	0.50	0.4		

SIX-YEAR/PERIOD* GROUP FINANCIAL SUMMARY

GROUP						
	31.08.2014	31.08.2015	31.08.2016	31.08.2017	31.12.2017* (Restated)	31.12.2018
OPERATING RESULTS (RM Million)⁽¹⁾						
Revenue	42,792.4	43,286.8	44,531.5	47,416.9	15,692.2	50,392.5
Operating profit	7,181.0	8,627.6	9,072.0	9,364.0	3,014.0	6,875.6
Profit before taxation and zakat	7,114.7	7,133.7	8,066.8	8,281.8	2,843.5	5,046.6
Net profit attributable to owners of the Company	6,467.0	6,118.4	7,367.6	6,904.0	2,622.3	3,723.7
KEY BALANCE SHEET DATA (RM Million)⁽²⁾						
Property, plant and equipment	83,045.1	90,300.3	96,512.7	103,083.7	104,807.6	111,445.5
Total assets	110,665.4	117,135.0	132,902.2	142,012.4	144,250.0	153,695.0
Total borrowings	25,456.0	24,698.9	34,306.7	38,846.5	41,443.7	47,832.4
Total liabilities	67,206.2	69,668.1	80,302.5	84,427.6	86,261.0	94,643.1
Share capital	5,643.6	5,643.6	11,025.8	11,124.9	11,199.6	11,446.1
Shareholders' equity	43,222.0	47,208.0	52,599.7	57,584.8	57,989.0	59,051.9
SHARE INFORMATION						
Per share (sen)						
Basic earnings	114.6	108.4	130.6	122.0	46.3	65.6
Diluted earnings	114.6	108.4	130.2	121.5	46.2	65.4
Gross dividend	29.0	29.0	32.0	61.0	21.4	53.3
Net assets	765.9	836.5	928.3	1,009.2	1,007.2	1,017.0
Share price as at reporting date (RM)	12.4	11.2	14.7	14.3	15.3	13.6
FINANCIAL RATIOS						
Return on assets (%)	6.2	6.6	6.4	5.4	5.3	3.2
Return on shareholders' equity (%)	15.8	16.3	16.1	13.3	13.2	8.3
Gearing (%)	36.9	34.2	39.5	40.3	41.6	44.8
EBITDA margin (%)	28.2	32.2	33.2	32.6	32.3	26.5
Effective weighted average cost of funds (%)	4.9	4.8	5.1	4.7	5.0	5.0
Interest coverage (%)	13.8	14.7	14.2	10.6	9.5	7.9
Currency mix (RM:Foreign)	77:23	78:22	83:17	77:23	79:21	74:26
Debt-equity (net of cash) ratio ⁽³⁾	0.3	0.3	0.3	0.4	0.4	0.5

* Financial Period Ended 31 December 2017

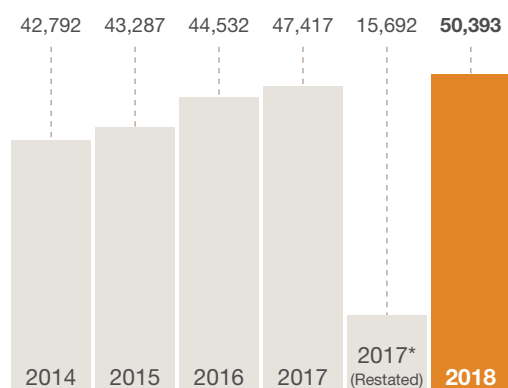
⁽¹⁾ Amounts for financial period ended 31 December 2017 have been restated for the Amendments to MFRS15 which was adopted in FY2018

⁽²⁾ Balances as at 31 December 2017 have been restated for the Amendments to MFRS15 which was adopted in FY2018

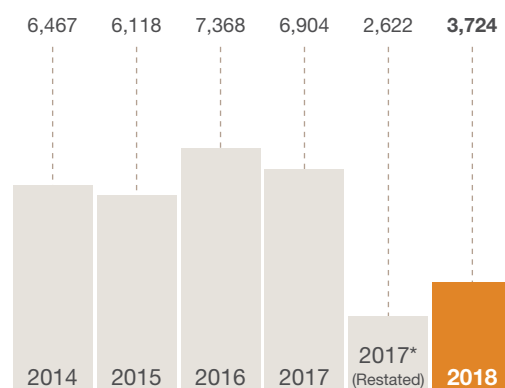
⁽³⁾ Cash includes financial assets at fair value through profit or loss (FVTPL)

SIX-YEAR/PERIOD* GROUP GROWTH SUMMARY

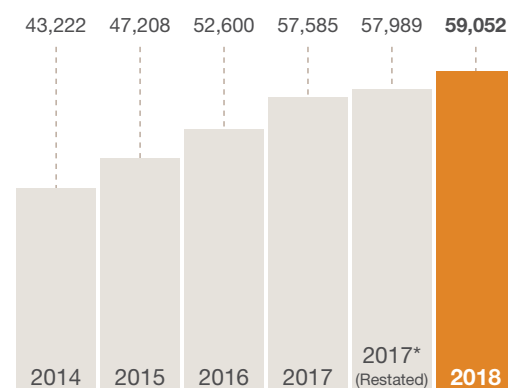
REVENUE (RM MILLION)



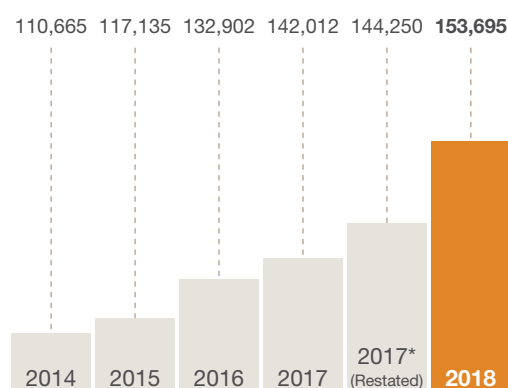
NET PROFIT ATTRIBUTABLE TO OWNERS OF THE COMPANY (RM MILLION)



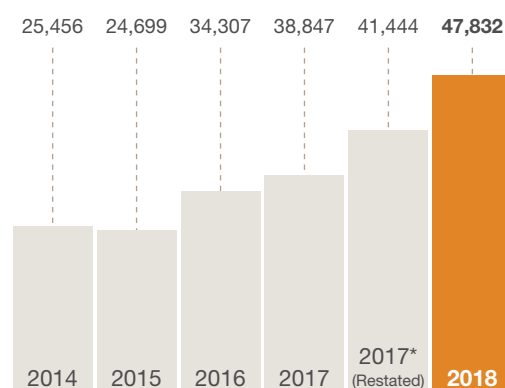
SHAREHOLDERS' EQUITY (RM MILLION)



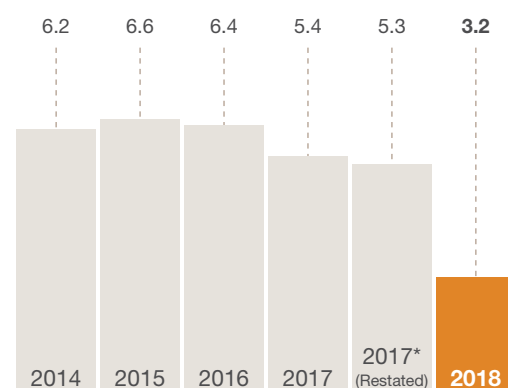
TOTAL ASSETS (RM MILLION)



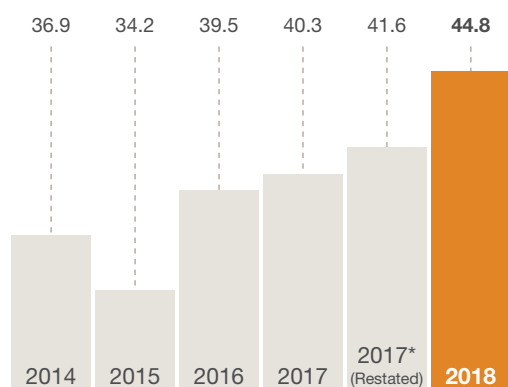
TOTAL BORROWINGS (RM MILLION)



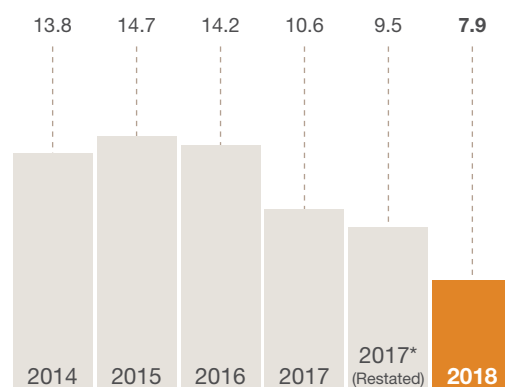
RETURN ON ASSETS (%)



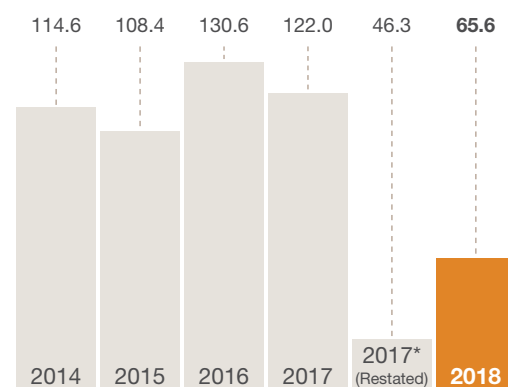
GEARING (%)



INTEREST COVERAGE (%)



BASIC EPS (SEN)



* Financial Period Ended 31 December 2017

CHAIRMAN'S LETTER TO SHAREHOLDERS

“Our diversified footprint and agility in providing innovative and creative offerings will undoubtedly provide us the added advantage in capturing opportunities in the geographies and areas that we serve.”



DEAR SHAREHOLDERS,

It is my pleasure, on behalf of the Board of Directors of Tenaga Nasional Berhad (TNB), to present you our Integrated Annual Report (IAR) for the Financial Year ended 31 December 2018 (FY2018). Through the strategic efforts initiated under our Reimagining TNB (2017-2025) blueprint, we continue to register revenue growth and healthy profits throughout the financial year, fostered by a conducive regulatory environment. We are also pleased to report that TNB's Sustainability Commitments continues to reap positive outcomes to ensure sustainable progression and development.

STEADY EARNINGS EXPANSION UNDERScoreD BY SOLID OPERATING PERFORMANCE

Driven by higher electricity demand which peaked in August 2018 to 18,338MW registering a rise of 3.1% from FY2017, our Group revenue grew 6.3% from FY2017 (September 2016 – August 2017) to RM50.39 billion. Net profit for FY2018 was lower at RM3.75 billion compared to RM6.91 billion in FY2017, mainly due to regulatory adjustment as a result of regulatory changes in the Second Regulatory Period (RP2) (2018-2020), impairment, and forex translation.

Underpinning our higher revenue in FY2018, electricity demand continued its positive momentum in FY2018, with annual electricity sales recorded at 1.4 percentage points higher than initially projected under RP2 of the Incentive Based Regulation (IBR) framework.

ANNUAL ELECTRICITY SALES*

1.4%
POINT HIGHER

TOTAL DIVIDEND

53.3 sen
PER ORDINARY SHARE

* Comparison with RP2 forecast

The Group remains committed to create long-term value for our shareholders by consistently delivering optimum dividends for each financial year. For the current financial year, the Board had approved a single-tier interim dividend of 30.3 sen per ordinary share amounting to a dividend payout of RM1.72 billion (paid in October 2018); and a final single-tier dividend of 23.0 sen per ordinary share amounting to a dividend payout of RM1.31 billion.

With this, TNB's total dividend in FY2018 amounts to 53.3 sen per Ordinary Share at a total value of RM3.03 billion. The dividend payout is equivalent to 55.8% of the Adjusted Group Profit After Tax and Minority Interests (PATAMI) (excluding Extraordinary and Non-Recurring Items) for FY2018, which is in line with TNB's revised dividend policy of between 30% and 60% of Group PATAMI.

NEW REGULATORY PERIOD FOR THE MALAYSIA ELECTRICITY SUPPLY INDUSTRY

To ensure the continued stability and orderly development of the local electricity supply industry, we have been engaging the Government and the Energy Commission (EC) since 2016 to prepare the necessary framework and recommendations to enable a smooth transition into RP2.

Following a series of negotiation sessions in 2017, the Government, through the EC, had approved the average base tariff for RP2 to be set at 39.45 sen per kWh. Included in the new base tariff is also the capital investment approval of RM18.8 billion to upgrade our regulated assets by embedding automation and technology into the grid.

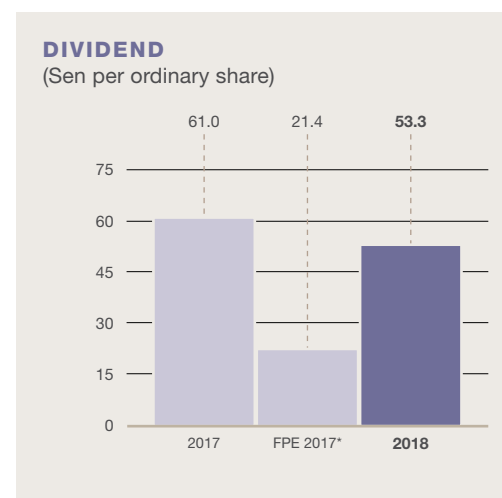
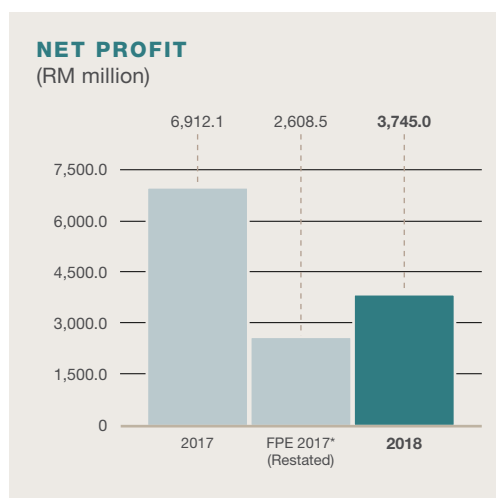
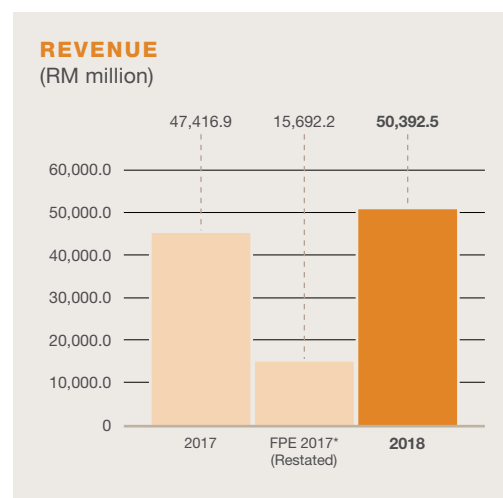


Malaysia, through TNB, has one of the most reliable energy networks in the region.

This upgrade will enable us to support the Nation's aspiration for increased utilisation of sustainable energy by ensuring that our grid will be able to facilitate the bi-directional flow of energy resulting from the injection of distributed renewable generation anywhere along it.

Notably, the sustainable ecosystem afforded by the IBR framework and the Imbalance Cost Pass-Through (ICPT) mechanism implemented in the last four (4) years have resulted in Malaysia having one of the most reliable energy networks in the region – on par with other advanced countries.

As a proactive and forward-looking organisation, preparatory works are already underway to gear ourselves for the Third Regulatory Period (RP3) (2021-2023). Upon receiving the endorsement of the Management team and approval of the Board, we expect our IBR RP3 proposal to be submitted to the EC by December 2019.



* Financial Period Ended 31 December 2017

EMBRACING LIBERALISATION OF MALAYSIA ELECTRICITY SUPPLY INDUSTRY

With the wave of technology disruptions arriving at our shores, we firmly believe that it is important for the Malaysia Electricity Supply Industry (MESI) to be prepared for the oncoming fundamental shifts impacting the global electricity industry. The Government's timely reform efforts through the MESI 2.0 is a key step to prepare the industry, ahead of global trends. We foresee a rising need to future-proof Malaysia's industry structure and regulations, and to empower consumers to make smarter choices in a more democratised and decentralised setting.

Having anticipated these market-wide reforms, we launched our Strategic Plan under Reimagining TNB. We are proud of the solid foundations we have put in place today, which has transformed our internal processes and structure, rendering TNB more technologically advanced, and cost-optimised than we were four (4) years ago.

We are excited with the growth prospects ahead that would see us delivering even better services, and catalyse new market growth by unlocking the value of network assets, which will lead to improving sustainable value for all our stakeholders. We see this as part of our unwavering commitment and contribution to realise the Nation's ambitions.

IMPROVING SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

In moving towards our Reimagining TNB aspiration to be among the Top 10 Global Utility Companies by market capitalisation in 2025, we are cognisant of our role as a responsible corporate citizen in enhancing social equity, helping the needy, conserving the environment, and improving the livelihoods of the local communities in which we operate, especially through better education.

Throughout the years, TNB has been a strong proponent in bettering lives through offering scholarships and financial assistance to the needy and those from the lower-income group. Beneficiaries from our TNB 'Back to School' programme include deserving B40 primary school students (from families with median household income not exceeding RM3,000 per month), who received assistance in terms of basic school supplies, such as school uniforms and stationery.

We are cognisant of our role as a responsible corporate citizen in enhancing social equity.



Through programmes such as My Brighter Future (MyBF), TNB continues to be a strong proponent in bettering lives by offering scholarships and financial assistance to the needy and those from the lower-income group.

'DERMASISWA MY BRIGHTER FUTURE (MYBF) PROGRAMME'

Total of 945

B40 students pursuing their tertiary education in the
STEM in local universities

Additionally, the 'Dermasiswa My Brighter Future (MyBF) Programme', which was launched in August 2018, has seen a total of 945 B40 students pursuing their tertiary education in Science, Technology, Engineering and Mathematics (STEM) in local universities, financed by TNB through Yayasan Tenaga Nasional (YTN). The *Dermasiswa* sponsorship provided for the B40 tertiary students includes allowances for board and lodging, tuition fees, and living expenses throughout the duration of their studies. The *Dermasiswa* programme is in addition to YTN's ongoing scholarships and convertible loans, for which TNB provided for 1,974 students in FY2018.

We also continued to work with Yayasan AMIR and the Ministry of Education for our 'Trust Schools Programme', where we helped provide eight (8) rural schools located in the vicinity of our power stations by guiding and coaching 500 teachers and school personnel in adopting effective teaching skills and pedagogy which now is benefiting 6,715 students who are studying in these schools.

Understanding the financial constraints and emotional strife faced by lower-income families whose family members undergo prolonged medical treatment in a hospital, we decided to play our part in giving back to society by partnering with the National Welfare Foundation (*Yayasan Kebajikan Negara*) to provide safe and comfortable accommodation for those in need.

Under the 'Better, Brighter Shelter Programme', TNB endeavours to uplift the conditions and facilities of 'transit homes' at the National Heart Institute in Kuala Lumpur, and the Serdang Hospital in Selangor, to cater for underprivileged folks who need to be at the side of their unwell family members during critical times.

Meanwhile, TNB's environmental commitments continued to flourish during FY2018 with our Fireflies Conservation Project at the coastal village of Kampung Kuantan in Kuala Selangor, which is home to one of the largest firefly colonies in Southeast Asia. Through dedicated conservation efforts, the firefly colony today thrives as does the local community who make a living from eco-tourism. Given the success of this programme, TNB through TNB Research Sdn. Bhd. has decided to replicate the conservation project in three (3) other locations, namely, Kampung Yak Yah in Kemaman, Terengganu; Kampung Sungai Timun in Rembau, Negeri Sembilan; and Kampung Dew in Taiping, Perak.



Upon launching of the 'Better, Brighter Shelter Programme', Deputy Prime Minister Dato' Seri Dr. Wan Azizah Wan Ismail visited the shelters at Serdang Hospital in Selangor.

BETTER, BRIGHTER PROSPECTS

The oncoming disruption to the energy supply value chain, underpinned by new technology breakthroughs, changing regulatory environment and evolving customer expectations, present a whole new business landscape for TNB in the coming years.

In commemorating our 70th anniversary of being a nation-builder, we remain confident that our highly skilled workforce, coupled with the measures executed under our Reimagining TNB strategy will position us favourably in capturing new opportunities arising from the industry's journey towards a more sustainable future.

Moving ahead, the transformation of the global energy supply industry will continue to accelerate as the forces of decarbonisation, decentralisation, deregulation and digitalisation of the industry further shape how electricity is generated, distributed and consumed. We, at TNB, strive to be a reliable partner and an anchor to our stakeholders and the nation in meeting the challenges ahead.

ACKNOWLEDGEMENTS

On behalf of the Board and TNB, I would like to thank the Government for the continued support of the IBR framework and ICPT mechanism which have been instrumental in enabling the Company to operate efficiently and provide reasonable tariffs to our customers. We look forward to continuing our collaboration with the EC and relevant agencies in achieving the MESI reform objectives to ensure long-term energy security and a more equitable industry for all stakeholders.

I would also like to record a special tribute to Datuk Seri Ir. Azman bin Mohd. Under his leadership, TNB has received numerous accolades, including the World Branding Award in 2018, bestowed by the prestigious London-based World Branding Forum. During his tenure, TNB was ranked 22nd among global utility players by Brand Finance, a renowned brand valuation agency. TNB's achievements throughout the years reflect Datuk Seri's outstanding capabilities as President/Chief Executive Officer (President/CEO).

At the same time, I would like to welcome our new President/CEO, Amir Hamzah bin Azizan. He comes with 28 years of industry and international experience, as well as extensive knowledge of the oil and gas industry and marine logistics sector. I share the Board's view that our new incumbent will take the Company to greater heights and to a better and brighter future based on the foundation laid by his predecessors.

To our valued 35,000 employees, I would like to record my gratitude for your loyalty and utmost dedication in giving your best for the Company, as well as to my fellow Board members for your commitment and guidance. A word of appreciation goes to our suppliers, vendors and contractors for your cooperation that enabled smooth operations within TNB. And last, but not least, to all our shareholders and customers, for your continued support and trust in us.

TNB would not have accomplished all the feats that we have set out to do without all your contributions.



TAN SRI LEO MOGGIE
Chairman

2018 YEAR IN REVIEW



The year in review saw us making great strides in our transformation, as we moved closer to achieving the objectives and priorities set under Reimagining TNB (2017-2025). In our bid to realise the long-term growth aspirations encapsulated under each of the four (4) strategic pillars of Future Generation Sources, Grid of the Future, Winning the Customer and Future Proof Regulations, we make a conscious effort to safeguard the values and interests of our stakeholders, while building sustainability into our business, and acting with the highest ethical standards.

GROUP BUSINESS MODEL

OUR STRATEGY

FUTURE GENERATION SOURCES

Top Priorities

- Growing TNB's renewable capacity
- Expansion of capacity into selected international strategic markets with strong growth prospects
- Improving performance of existing generation fleet

For more information, please refer to page 24

GRID OF THE FUTURE

Top Priorities

- Upgrading existing network infrastructure into a smart, automated and digitally-enabled network
- Optimising network's productivity, efficiency and reliability
- Leveraging innovation in the network to transform customer experience

For more information, please refer to page 26

WINNING THE CUSTOMER

Top Priorities

- Enhancing customers' experience
- Improving retail's team productivity and efficiency
- Growth through innovations of new products and services offering

For more information, please refer to page 28

FUTURE PROOF REGULATIONS

Top Priorities

- Working together with key stakeholders towards a stable and sustainable regulatory landscape

For more information, please refer to page 30

OUR CAPITALS

FINANCIAL CAPITAL

Shareholders' Funds
RM 59,051.9 million

Total Borrowings
RM 47,832.4 million

Effective Weighted Average Cost of Funds (%)

FY2018	5.0
FPE 2017* (Restated)	5.0
FY2017	4.9
FY2016	5.1
FY2015	4.8
FY2014	4.9

* Financial Period Ended 31 December 2017

For more information, please refer to page 32

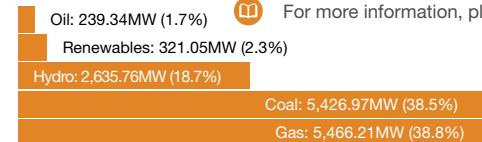
MANUFACTURED CAPITAL

14,089.34MW

Equity MW of generating capacity

708,364⁽¹⁾

Circuit kilometers of transmission and distribution line



89,772⁽¹⁾

Primary and secondary substations

96,353⁽¹⁾

Primary and secondary transformers

For more information, please refer to page 34

NATURAL CAPITAL

Fuel Use⁽²⁾
COAL
501,510.64TJ

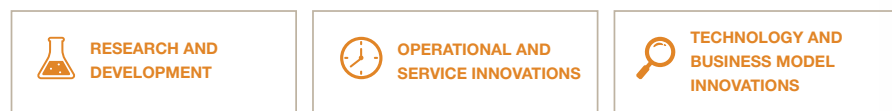
OIL
703.61

GAS
240,277.33TJ

DISTILLATE
1,420.79TJ

For more information, please refer to page 36

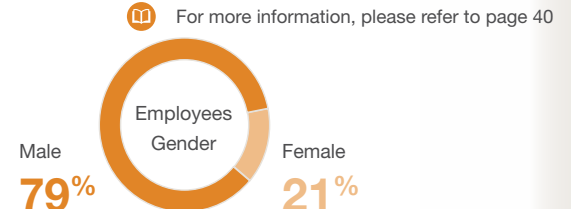
INTELLECTUAL CAPITAL



For more information, please refer to page 38

HUMAN CAPITAL

Employees
35,574
TNB Group



For more information, please refer to page 40

SOCIAL AND RELATIONSHIP CAPITAL



For more information, please refer to page 42

INPUT FROM SIX CAPITALS

Input from the six (6) capitals ensure we maintain a sustainable business. We recognise that an organisation depends on all forms of capitals, not just financial capital to contribute to the success of our business models. Our ability to enhance the stocks or values of these capitals are essential to the growth of our business.

THE VALUES CREATED AND ITS IMPACT

ECONOMIC

Suppliers and Contractors

Fuel and Other Operating Costs

Fuel cost

RM 11,634.0 million

Other Operating cost

RM 28,534.9 million

Capital Providers

Shareholders Total dividends

RM 2,931.9 million

Lenders Financial cost

RM 1,688.5 million

Employees

Staff Expenses

RM 3,685.8 million

Government and Regulators

Taxes

RM 1,301.6 million

COMMUNITY

26

Adopted
Schools

2,919

Number of Graduate
Students Assisted

13,040

Number of Rural Primary
Students Assisted

CUSTOMERS

Total Energy Units Sold⁽³⁾:

118,814.46
GWh

Customer Accounts⁽⁵⁾:

9.65
million

CSI:

Peninsular Malaysia

8.1

Sabah

7.7

SAIDI:

Peninsular Malaysia

48.22

Sabah

267.87

SYSTEM MINUTES:

Peninsular Malaysia

0.35

Sabah

42.97

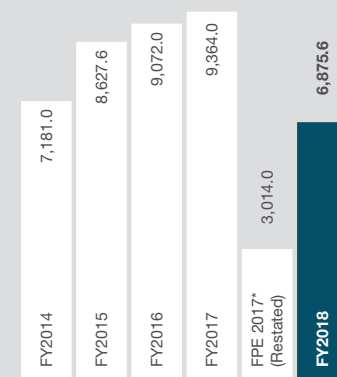
Total Energy Sold by Region

International⁽⁴⁾ Sabah⁽³⁾ Peninsular Malaysia⁽³⁾



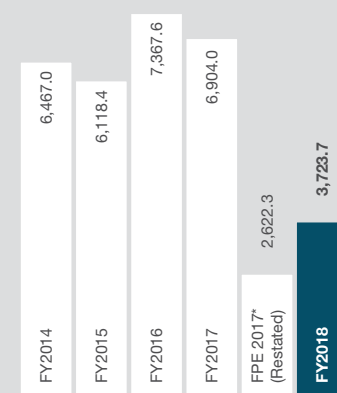
OPERATING PROFIT

RM 6,875.6 million



NET PROFIT ATTRIBUTABLE TO OWNERS OF THE COMPANY

RM 3,723.7 million



* Financial Period Ended 31 December 2017

ENVIRONMENT

Emissions Intensity⁽⁶⁾

0.54
tCO₂e/MWh

Greenhouse Gas Emissions
Intensity

Emissions Mitigated⁽⁶⁾

5,030,079.7
tCO₂e

Mitigation due to TNB's use of (1) Non-Carbon generation, (2) Energy efficiency across value chain, (3) Clean coal technology, (4) Tree replanting

Non-Carbon Energy

2,968.1
MW

21.24% of TNB's equity generating capacity

Notes:

- ⁽¹⁾ For TNB operations in Peninsular Malaysia and Sabah only.
- ⁽²⁾ From power plants which TNB has controlling stake for period FY2018.
- ⁽³⁾ From domestic power plants which TNB has invested and have power purchasing agreement for domestic customers.
- ⁽⁴⁾ Unit sold by wholly-owned TNB international power plants only.
- ⁽⁵⁾ Including 9.04 million customers in Peninsular Malaysia and 0.61 million customers in Sabah.
- ⁽⁶⁾ For TNB operations in Peninsular Malaysia only.



FUTURE GENERATION SOURCES

Our “*Future Generation Sources*” strategic driver leads TNB’s generation capacity growth strategy, as we actively diversify into energy sources that are able to meet the needs of the future in a sustainable, reliable, and affordable manner.



OBJECTIVES

Future Generation Sources are focused on delivering value towards our Reimagining TNB aspirations by shaping TNB’s generation capability and portfolio growth in clean energy, with the ultimate aim to position TNB as a renewables leader in the ASEAN region. We progress our renewable energy (RE) aspirations by continuously pushing the innovation envelope, engaging in strategic collaborations with established players in the RE sector, and applying emerging technologies to enable the efficient generation, distribution and storage of clean energy.

At the same time, we strive to ensure that our conventional generation assets continue to perform at the highest efficiency level to provide sustainable, reliable, and affordable energy to our customers. We are looking to expand our domestic generation capacity to fuel the Nation’s economic trajectory, whilst continuously building our international generation capacity in selected strategic markets.



Improving our sustainability through our foray into the wind energy market.

	Number of power plants	Total installed capacity (MW)	Equity capacity	Electricity sold (GWh)	Capacity under construction (MW)
Wholly-owned					
Coal	2	4,080.0	4,080.0	29,363.4	
Gas	9	4,486.4	4,486.4	25,537.6	
Non-carbon	38	2,607.5	2,607.9	4,965.4	30.0
Others					
Majority-owned					
Coal	1 ⁽¹⁾	1,486.0	891.6	9,878.1	2,000.0
Gas	2 ⁽¹⁾	872.4	547.2	505.73	1,440.0
Non-carbon	57	102.7	84.4	440.6	
Others	23	223.3	185.3	328.4	
Minority-owned					
Coal	2	1,650.0	455.4	9,967.4	
Gas	3	1,476.0	432.6	3,595.9	
Non-carbon	33	639.9	264.5	1,003.1	180.0
Others	1	900.0	54.0	7,449.4	

⁽¹⁾ Our majority-owned plant, KEV, operates both coal-fired turbines and gas-fired turbines and appears as both coal and gas plant in this table

STRATEGIC RISKS

Competency mismatch to drive strategy

Inability to mitigate regulatory constraints

Unable to keep pace with changing customers' expectations

DEVELOPMENTS IN FY2018

In January 2018, we established TNB Renewables Energy Sdn. Bhd. (TRe) to spearhead and accelerate our RE business growth in Malaysia. Under TRe, we intensified efforts in progressing our three-pronged RE strategy by capturing growth opportunities in utility-scale RE assets, small-scale RE assets, and expanding our retail self-generation platform.

We also reviewed our international RE strategy, resulting in a decision to focus on growing our assets in five (5) selected locations, namely, Turkey, India, the United Kingdom, Australia and the ASEAN region. To step up our international presence, we are currently exploring collaboration opportunities with several experienced partners with established footprint in these key markets. Concurrently, we have developed an international operating model that is expected to enhance our ability to push business growth and ensure effective management of our assets.

GSPARX, a fully-owned subsidiary of TRe, was formed to grow our retail self-generation business.



For more information on GSPARX is available on page 29 in the Winning the Customer Section.

To ensure sustainable value creation, we continued to demonstrate excellence in managing our generation assets through our holistic asset optimisation methodology, which aims to sustainably monetise value from each of our assets throughout its entire lifecycle.



For more information on our Generation Performance, please refer to 'Manufactured Capital' on pages 34 to 35 in Our Capitals section.

In streamlining our generation operations to be leaner and more cost-effective, our Generation Division's Business Turnaround Programme's pilot project at our TNB Janamanjung plant continues to deliver positive traction.

Following the encouraging results at TNB Janamanjung plant, the programme was extended to our TNB Prai plant, Connaught Bridge plant and Port Dickson plant, where our turnaround team has completed Phase 1 while work for Phase 2 is currently in progress.

IMPROVING OUR SUSTAINABILITY

During the year, our total installed RE capacity increased by 70.88MW to a total of 332MW, through:

- The acquisition of an 80% equity interest in two (2) RE companies registered in the United Kingdom, namely, GVO Wind Ltd and Bluemerang Capital Ltd, provided us a generation equity of 20.88MW. This marked TNB's maiden foray into the onshore wind energy market; and
- The successful commissioning of our domestic 50MW Large Scale Solar (LSS) TNB Sepang project with 230,000 solar photovoltaic (PV) panels.

Recognising that developing the right talent is crucial to realising our long-term sustainability goals, we endeavoured to groom future leaders through our Generation Leadership Development Programme. The six-month programme, which commenced in April 2018, saw 47 qualified Generation Division executives elevate their expertise.

To build resilient communities around our areas of business, we have invested significantly to improve emergency preparedness and dam maintenance at three (3) hydroelectric schemes. Our efforts were focused on:

- Enhancing the area's emergency response plan through regular drills involving local authorities, state agencies and local residents;

- Upgrading the monitoring system at our dam;
- Reviewing and upgrading garbage management along the dam's upper catchment area and continuous removal of dam sediments;
- Improving the notification processes and communication infrastructure to all stakeholders; and
- Conducting regular Integrated Community Based Disaster Management (ICBDM) awareness sessions on the threat of potential floods to local authorities and residents.

OUTLOOK

In the coming year, we strive to raise our operating efficiency through concerted efforts ranging from expanding our Generation Division's Business Turnaround Programme to broadening our corporate reorganisation exercise with an aim to create a highly-skilled, knowledgeable and effective workforce to meet the challenges ahead.

On new electricity resources to meet rising demand, we look forward to increase our thermal-based capacity with our 70%-owned 2 x 1,000MW ultra-supercritical Jimah East Power Plant that is expected to be commissioned in FY2019 (Unit 1: June 2019 and Unit 2: December 2019). Following that, we shall ensure the timely delivery of our 51%-owned 1,440MW combined-cycle gas turbine Southern Power Generation (SPG) Pasir Gudang Plant in 2020.



GRID OF THE FUTURE

“Grid of the Future” strategic driver progresses our power transmission system to be among the most technologically advanced and reliable in the world, and to meet future challenges and growing demand in an increasingly liberalised generation market.



OBJECTIVES

The grid network functions as the backbone of TNB’s electricity supply chain, transporting bulk electricity from power generators to the distribution network to brighten homes, offices and commercial spaces, while supplying directly to industries for manufacturing. With the rising electricity demand, ‘Keeping the Lights On’ – remains our most critical task, to ensure secure and reliable electricity supply to fuel the Nation’s growth.

We endeavour to future-proof our energy transmission system by advancing our grid architecture to be one of the smartest, most efficient, automated and digitalised power networks. As the Nation’s power utility provider, we aspire to transform our customers’ experience through innovative offerings that create trust, pride, confidence and loyalty.

To-date, the first phase of our ‘Grid of the Future’ strategy (2016-2020) is firmly in place and involves the piloting and rollout of the elements that we believe will form the foundation of the modern grid, namely, the Advanced Metering Infrastructure (AMI), Distribution Automation (DA), Geospatial Information System (GIS), Volt-Var Optimisation, and Mobility Solutions for workforce management.



TNB continues to scale new heights with grid network improvement to meet rising demand and customer's future expectations.

Grid Statistics

TRANSMISSION LINES	TRANSMISSION SUBSTATIONS	ELECTRICITY TRANSMITTED	PEAK DEMAND
Wholly-owned 23,082.3 KM	Wholly-owned 443 substations	Wholly-owned 114,707.9 GWh	Wholly-owned 18,338.0 MWh
Majority-owned 2,888.5 KM	Majority-owned 45 substations	Majority-owned 1,724.8 GWh	Majority-owned 955.1 MWh
DISTRIBUTION LINES	DISTRIBUTION SUBSTATIONS	ELECTRICITY DISTRIBUTED	
Wholly-owned 660,038.0 KM	Wholly-owned 81,327 substations	Wholly-owned 113,469.2 GWh	
Majority-owned 22,355.0 KM	Majority-owned 7,957 substations	Majority-owned 5,345.2 GWh	

STRATEGIC RISKS

Inability to mitigate regulatory constraints

Incapacity to leverage on technology

Inability to adapt to changing market environment

DEVELOPMENTS IN FY2018

In supporting our 'Grid of the Future' strategy, we have successfully completed the separation of the Distribution Division into

1. Distribution Network Division – to focus on improving operational efficiency and digitisation of the distribution grid; and
2. Retail Division – to focus on enhancing customer loyalty, developing new products and services and growing the retail energy business.

We established 'Grid of the Future' (GoTF) Steering Committee and GoTF Maturity Model to enable centralised decision-making with clear accountability hierarchy and benchmarking against world-class performing systems.

We also completed the enhancement of the current 'Transmission Grid Strategic Plan' that was carried out to align with our 'Grid of the Future' aspiration set under Reimagining TNB. Concurrent with this strategic plan, the 'Transmission Grid Digitalisation Transformation' programme was also initiated this year, anchoring on three (3) core pillars, namely, Asset Management, Workforce Management and Grid Operations, to achieve operational excellence. Among the initiatives implemented this year under this digitalisation exercise include:

- i. Utilised an online monitoring and analysis system for gas-insulated transformers and switchgears to improve maintenance effectiveness and accuracy;
- ii. Scaled our drone fleet to carry out aerial patrolling of transmission towers and rentices across the distribution network and to uplift the efficacy of land planning and surveillance exercises carried out by our operation and maintenance teams;

iii. Improved grid fault diagnosis and sharpened location precision to enable quicker grid restoration by the Grid System Operator and our maintenance team; and

iv. Continued certification of ISO 27001:2013 through the successful implementation of three (3) cyber drills via cyber-attack simulations, as well as organising awareness and training programmes to increase our support team's proficiency and understanding on the importance of data protection.

In sustaining the excellent performance of our transmission network, we have continued the expansion and strengthening of our 500kV Grid Superhighway which will enable secure and efficient power transfer from other locations to the Central Area region, which accounts for 45% of Peninsular Malaysia's electricity demand.


In addition to transmission grid upgrading works, we also ensured the continued modernisation

and digitalisation of our distribution grid through the following initiatives:

- Completed the implementation of 190,000 smart meters in Melaka. For 2019, the installation programme will expand beyond Melaka with a focus on homes and businesses in the Klang Valley;
- Successfully fitted the 113 MVar of capacitor banks throughout our distribution network, in line with plans to optimise Volt-Var to improve the quality of electricity supply to our customers;
- Converted 3,672 distribution substations into Supervisory Control and Data Acquisition-enabled (SCADA-rised) substations, bringing the total number of distribution substations equipped with DA technology to more than 12,000 substations nationwide. Under the current GoTF strategy, TNB plans to upgrade all distribution substations located in major cities by 2025; and
- Successful deployment of mobility solutions for TNB meter management throughout Peninsular Malaysia.

DELIVERING BEST-IN-CLASS GRID PERFORMANCE

Through the world-class management of our transmission network and operational excellence, Malaysia's power supply system is performing on par with developed nations, with SAIDI not exceeding 51 minutes per customer per year since 2015, accomplishing 12 consecutive years of zero major disturbance, and nine (9) consecutive years of zero load loss tripping for the 500kV Grid Superhighway.

 For more information on our grid performance, please refer to 'Manufactured Capital' on pages 34 to 35 in Our Capitals section.

OUTLOOK

As we move towards a fully digitalised and automated grid and distribution network in the near future, nurturing a continuous talent pipeline will be a priority to realise the goals and ambitions we have set. In the coming year, we look to establish our Grid Academy to focus on developing subject matter experts with the requisite financial, technical and leadership capabilities to become future leaders of the Grid Division.

In terms of infrastructure, we will continue to strengthen the functionality, reliability and performance of our 500kV Grid Superhighway around the Central Area to ensure continued power supply with minimal transmission loss, as well as equipping 3,000 additional distribution substations with DA technology. We will also strive to complete our Asset Investment Plan for the grid and distribution network proposal to be submitted to the Government and regulator, ahead of the upcoming Third Regulatory Period (2021-2023).



WINNING THE CUSTOMER

Our “Winning the Customer” strategic driver guides wins in the kWh and beyond energy businesses by building a retailer with customer centricity anchored by quality service, innovative solutions, enhanced stakeholder communications and cost leadership throughout the customer journey to meet ever-evolving needs and values.



OBJECTIVES

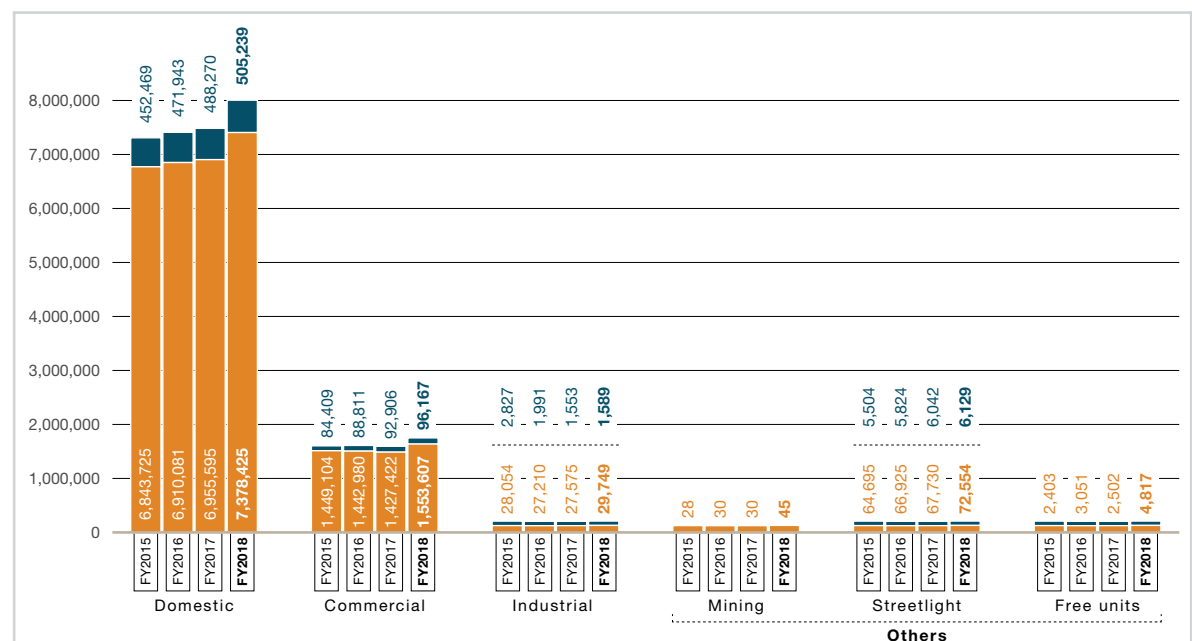
To maintain the trust of our nine (9) million customers nationwide, our Retail Division will create exceptional customer experience in delivering quality customer service and best and innovative solutions based on customer needs and values.

We are continuously engaging the customers via various methods encompassing click, call and come over channels as part of our efforts to reach out to all walks of customers through personal engagements and meet-ups with associations, consumer groups and all related stakeholders. Furthermore, we are also available for the customers through our Kedai Tenaga outlets, CareLine, myTNB web and mobile application.



Customers

Peninsular Malaysia Sabah



STRATEGIC RISKS

Competency mismatch to drive strategy

Unable to keep pace with changing customers' expectations

Inability to adapt to changing market environment

ACHIEVEMENTS IN FY2018

Our customer base grew 2.79% year-on-year in FY2018. With rising demand, the total domestic annual electricity sales grew to 118,814GWh.

The successful separation of our Distribution Network and Retail Divisions provides clear focus for our Retail Division to further strengthen our presence and branding in the energy retail market.

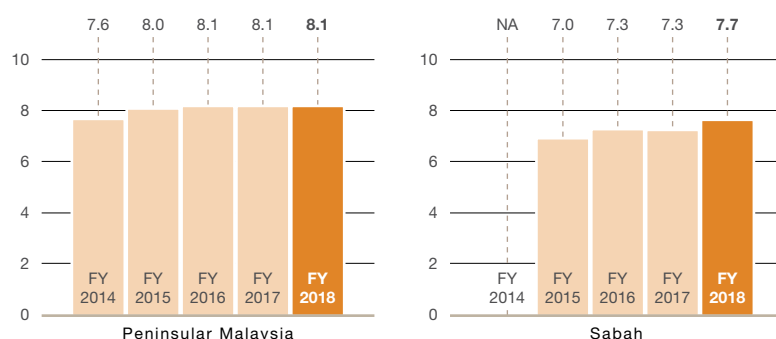
We accomplished a CSI score of 8.1 for the third consecutive year in FY2018, comparing favourably with the level of customer satisfaction towards energy utilities in the United States which stood at 75.2 (on a 100-point scale) in 2018, according to data released by the American Customer Satisfaction Index.

We continue developing products and services that will enable our customers to better manage their power consumption, such as:

- Home Energy Report: We continued to provide our customers with a detailed report of their home energy consumption that includes comparison with other similar homes. The programme has been successful in promoting more efficient energy utilisation, with energy savings of 47,792 MWh achieved (October 2017 - September 2018).
- Making Electricity Visible (MaEVI): We provide interested customers with the option to use MaEVI, our internally developed app based smart home energy management system.
- Energy Management Solutions: We continued to promote the solution to our business customers to help reduce their electricity cost by avoiding surcharges through multiple solutions.
- myTNB mobile app: Downloaded by 540,000 TNB account holders. The app allows our customers to enjoy a seamless experience to interact with us.
- TNB Payment Kiosks: We further improved our payment facilities by adding both number of kiosks and number of functions offered.
- Full-Fledge Contact Centre: Raising the bar on customer engagement, we upgraded our call centre to become a full-fledge contact centre, known as TNB CareLine (dial or SMS 15454) which has recently been awarded with 5 Global Business Services Asia Award during the year.

During the year, our Retail Division also carried out a total of 40 engagement sessions on energy conservation with 14,500 stakeholders including government agencies, non-governmental organisations, social and community leaders, universities and school students, as well as TNB staff.

CSI (5 Years)



- We partnered with the Malaysian Green Technology Corporation (MGTC) with a target to install up to 10,000 charging stations nationwide; and
- We also adopted the Green Energy Programme (GEP) to drive RE utilisation and energy efficiency for the Senai-Desaru Expressway, together with the Malaysian Industry-Government Group for High Technology and concessionaire Senai-Desaru Expressway Bhd.

OUTLOOK

- In 2019, Retail Division will drive TNB's aspiration to become the Retailer of Choice;
- We will focus on Winning kWh, Winning Energy, Winning Utilities and Full Suite of Services. The focus into differentiated areas will allow our Retail team to provide greater customer empowerment and choice whilst sustaining and growing in a dynamic and disrupted industry;
- Continue to provide high quality service experience and best innovative solutions to customers with ever changing needs and values;
- Maximise business value by becoming cost leader anchoring on cost-to-serve, cost-to-acquire, cost-to-retain, and cost-to-exit;
- Through a holistic approach on stakeholders engagement and communication, we aim to better communicate with our customers and other stakeholders as well as to continuously promote customer centricity;
- Reskill and develop new retailer key capabilities such as customer experience, marketing, sales, commercial and customer communications through Retail Academy; and
- In anticipation of the increasing shift towards digitalisation, Retail will leverage new agile technologies in delivering digital customer care to adapt towards changing customer expectations.

EXPANDING RE ADOPTION

In 2018, we formed a new subsidiary to drive RE self-generation among Malaysian residents and businesses:

- We established GSPARX Sdn. Bhd. – a wholly-owned subsidiary to provide self-generation/consumption solutions for the customers. Through the new Net Energy Metering (NEM) Scheme and Supply Agreement for Renewable Energy (SARE), GSPARX adds value by providing investment for its Zero Capex solutions for commercial and industrial customers. GSPARX also provides quality solar PV system for residential customers, through cash and loan (leasing) options. To date, some 1.3MWp worth of RE contracts have been confirmed under GSPARX. GSPARX aspires to work with local reputable installers, enabling green prosumers and contributing towards Malaysia's RE target.



FUTURE PROOF REGULATIONS

“Future Proof Regulations” strategic driver navigates TNB’s efforts in ensuring the sustainability of the future market as we move towards a transparent, liberalised and democratised energy supply market.



OBJECTIVES

Future Proof Regulations strives to enhance the sustainability and competitiveness of the power industry amid an increasingly decentralised, digitalised and decarbonised economy. To this end, we are committed to continuously improve the current Incentive Based Regulation (IBR) Framework for our regulated business in Malaysia based on transparent and efficient tariff design principles.

We also strive to safeguard TNB’s regulatory play in our overseas businesses. We believe in adopting a partnership approach with industry players and regulators to work towards sustaining the industry’s growth and sustainability through effective legislations and market-based policies.



CEPSI provided the opportunity to showcase our commitment and preparedness for the future to the world.

STRATEGIC RISKS

Inability to mitigate regulatory constraints

Ineffective engagement with stakeholders

Inability to adapt to changing market environment

DEVELOPMENTS IN FY2018

During the 22nd Conference of the Electric Power Supply Industry (CEPSI) 2018, the Malaysian Government announced the launch of the Government’s reform initiative for the power industry, by reactivating a Government agency, Malaysia Programme Office for Power Electricity Reform (MyPower) under the Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC).

The Government announced in July 2018 the cancellation of four (4) Independent Power Producer (IPP) projects awarded earlier due to non-compliance of the conditions stipulated. These cancellations are not expected to impact Malaysia’s electricity supply security.

2018 also saw concerted efforts by the Malaysian Government to provide a conducive environment to grow renewable energy (RE) through MESTECC's announcement to push RE generation capacity in Malaysia's energy mix to 20% by 2025 – equivalent to about 4GW of new RE injection.

In line with the Government's RE aspirations, MESTECC has announced the following policies:

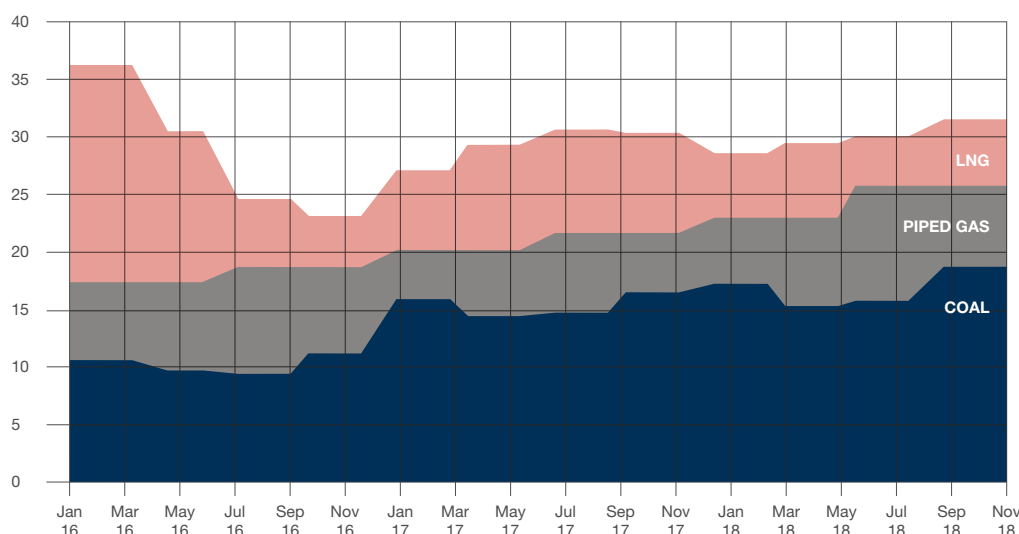
- I. Effective 1 January 2019, the new Net Energy Metering (NEM) scheme will be improved from the net billing concept to the pure net energy metering scheme.
- II. The Supply Agreement for Renewable Energy (SARE), which is key in enabling the 'solar leasing concept', was introduced to support the growth of retail solar power self-generation in Malaysia.

FY2018 marked the first year under the Second Regulatory Period (RP2), with an annual allowable return of 7.3%, forecast cost of USD75 per metric tonne (MT) for coal, RM24.2/mmBTU - RM27.2/mmBTU for domestic piped gas and RM35/mmBTU for Liquefied Natural Gas (LNG), along with RM18.8 billion for grid investments.

In line with RP2, Energy Commission (EC) published a revised framework on electricity tariff determination for the Peninsular Malaysia which introduced the implementation of the Annual Regulatory Adjustments, where TNB is required to return to the industry any excess revenue collected. Given this recent regulatory development, it is foreseen that profit in the next two financial years (2nd and 3rd years of RP2) will be lower as compared to 2017 level.

The Government of Malaysia has decided to continue with the implementation of the Imbalance Cost Pass-Through (ICPT) mechanism in the July 2018 and January 2019 cycles. This allowed the pass-through of higher generation costs owing to increased average global fuel prices. The average costs of coal during the two cycles were USD91.66 per MT as of June 2018 and USD97.84 per MT as of December 2018, in comparison with the base cost of USD75 per MT.

MALAYSIA FUEL MIX TREND CHART (RM/GJ)



CEPSI 2018

Attended by more than 2,000 industry delegates and above 4,500 visitors from all over the world, the 22nd installment of CEPSI 2018 was a resounding success.

As the appointed chair (2017-2018) and on behalf of the Association of the Electricity Supply Industry of East Asia and the Western Pacific (AESIEAP), it was our honour to host the conference and concurrent exhibition, themed "Reimagining Utility of the Future", which took place at the Kuala Lumpur Convention Centre from 17th to 22nd September 2018.

We would like to take this opportunity to thank the Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad, for delivering the special address, and the Minister of MESTECC, Yeo Bee Yin, for her inspiring keynote address. A special thanks also goes to all our partners and sponsors for their generous support, industry captains for their participation, as well as the relevant Government agencies and our employees for making CEPSI 2018 a memorable event.

We are proud to be given the opportunity to gather world-leading figures from more than 30 countries to hold in-depth discussions on industry-defining issues and challenges and to share the latest technological innovations, strategies, and success stories.

OUTLOOK

- Malaysia's Clean Air Regulations, gazetted in June 2014 is expected to come into force in 2019. All power plants are expected to comply with the revised emission standards set under this new regulation.
- MESTECC will be undertaking a series of open tenders in 2019 to install an estimate 500MW of new RE capacity under the third cycle of the Large Scale Solar scheme.
- TNB's PAKA GF4 unit (257MW) is expected to retire with its PPA expiring on 31st December 2019.
- TNB is expected to submit its initial IBR RP3 proposal to EC by December 2019 in preparation of the commencement of negotiations in early 2020.

FINANCIAL CAPITAL

FINANCIAL HIGHLIGHTS

Group revenue for Financial Year 2018, was recorded at RM50.39 billion. This represented a revenue increase of 6.3% compared to financial year ended 31 August 2017 (FY2017), on the back of 2.6% demand growth. Among the main contributors for the growth in the Industrial sector are the Electric and Electronic and paper-based product manufacturing sectors. Meanwhile, the growth in the Commercial sector are contributed by the business and accommodation services sectors.

Group EBITDA for FY2018 was RM13.37 billion with a margin of 26.5%, compared to RM15.47 billion with a margin of 32.6% in FY2017. The decrease was mainly due to higher operational expenses and one-off adjustments.

Group Profit After Tax, or PAT of RM3.75 billion was impacted by Other Regulatory Adjustment which was returned to the industry, forex translation losses and adverse movement in share of losses in associates.

FY2018 saw TNB's renewable energy portfolio in United Kingdom (through Tenaga Wind Ventures and Vortex Solar), recording favourable performance.

CAPITAL ALLOCATION

TNB has a capital planning and allocation process that is essential in translating TNB's aspirations into viable achievements.

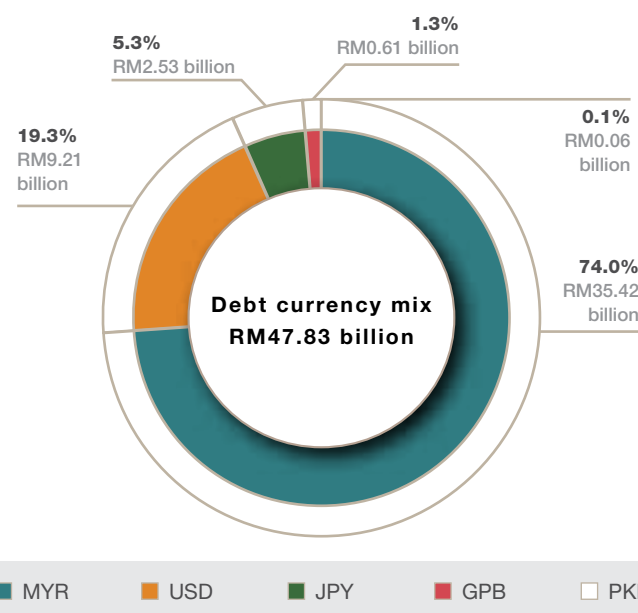
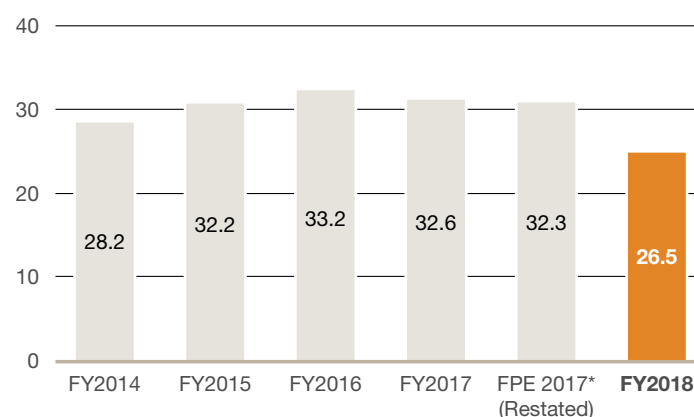
Through strategic capital allocation framework, the Company's top management can effectively and efficiently allocate scarce financial resources and make all-important decisions between attaining growth, preserving success and creating sustainable values by balancing the business capital requirements with the stakeholders' aspirations and expectations.

This capital allocation framework has enabled TNB to:

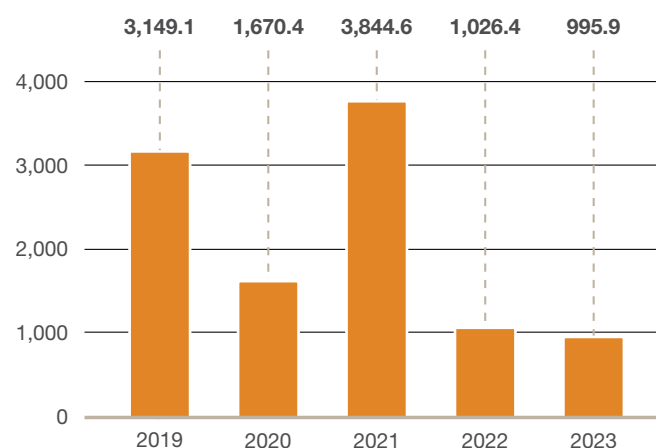
- Move away from a rigid line by line budget-driven process towards an agile and strategy driven planning process;
- Simplify and reduce time-consuming processes in the preparation of TNB's annual business plan and budgeting;
- Remain vigilant by continuously streamlining capital spending at lower risk;
- Explore new business segments such as development and investment in renewable energy assets (solar and wind); and
- Increase geographic diversification by exploring opportunities outside Malaysia apart from our existing footprint in the Middle East and Pakistan. TNB has invested in emerging and developing markets such as India and Turkey. Aside from that, TNB has also entered into a developed market in the United Kingdom since 2017.

2018 Highlights

EBITDA Margin (%)



Debt Maturity Profile (RM Million)



BORROWINGS

Supported by strong credit rating of AAA rating by RAM, A by Moodys and BBB+ by S&P, TNB has the flexibility to tap funding sources from the capital market, banks and other financial institutions from both domestic and international fronts.

TNB had established a RM5.0 billion Islamic Medium Term Note Sukuk Programme and a USD2.5 billion Multi-Currency Medium Term Note Sukuk Programme to meet its funding requirements. The purposes of both programmes are to fund capex, general corporate purposes and investments. The limits of both Programmes can be increased if there is a requirement in the future.

In addition, various short term banking trade lines had been established with most of the locally domiciled banks in Malaysia, which could form another source of short term funding plan to support TNB's working capital requirements.

TNB is governed by its Treasury Policy in managing forex and interest rates exposures with the objective to protect TNB group's profit from material adverse movements due to rates fluctuations. TNB has been managing its short-term forex exposures through hedging a minimum of 50% of known foreign currency exposure up to a 12-month period through forward exchange contracts and natural hedges.

DIVIDEND

In 2017, TNB's Board of Directors had approved a Revised Dividend Policy where dividends are to be paid out based on 30% to 60% of the TNB Group Consolidated Net Profit Attributable To Shareholders After Minority Interest (PATAMI). The revised TNB's dividend policy has increased transparency of the dividend pay out to stakeholder.

In compliance to the Companies Act 2016, the management assessed the company's solvency before making a distribution to the shareholders and its ability to pay its debts as and when debts become due within twelve months immediately after the distribution is made.

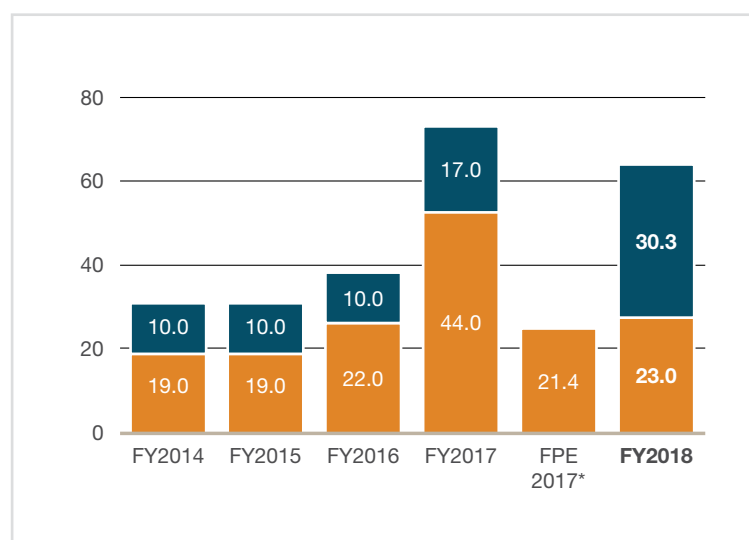
Despite the challenges faced in FY2018, TNB has taken a view that the one-off adjustments should not affect the dividend payout. Hence, the adjustments were normalised in order to compute the Adjusted PATAMI.

For FY2018, the Board of Directors had approved a 55.8% dividend payout ratio from the Group Adjusted PATAMI of RM5.42 billion, amounting to RM3.03 billion. This translates to a total of 53.3 sen per share for FY2018, of which 23.0 sen per share will be distributed as the final single-tier dividend.

2018 Highlights

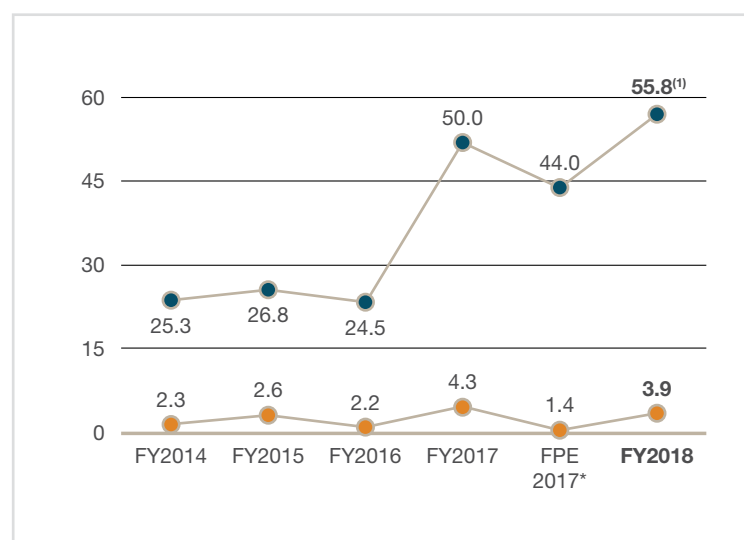
Total Dividend (RM sen)

■ Interim ■ Final



Dividend distribution (%)

● Dividend payout of Group PATAMI ● Dividend yield



⁽¹⁾ Dividend Payout of Adjusted Group PATAMI

* Financial Period Ended 31 December 2017



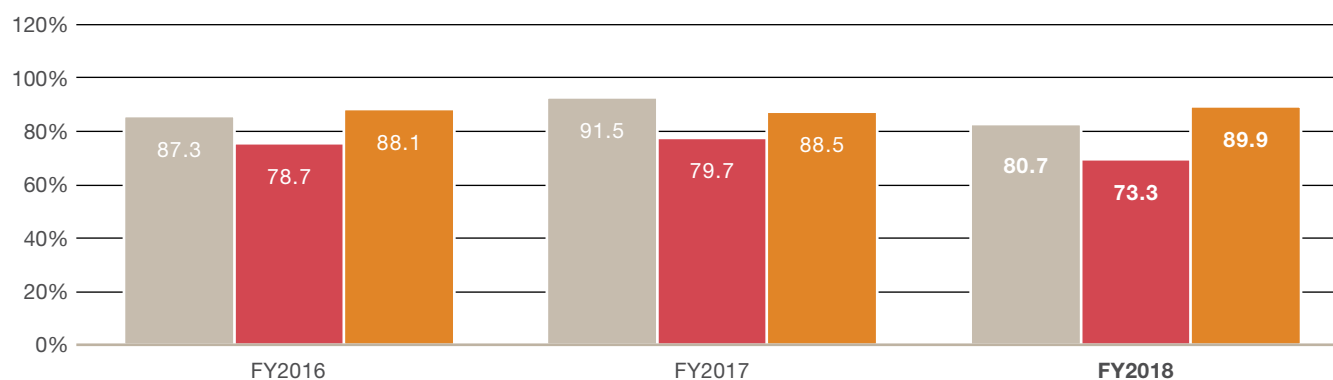
MANUFACTURED CAPITAL

Assets	Key Activities In 2018	Outlook
Power Generation Assets		
<p>TNB generation assets consist of:</p> <ul style="list-style-type: none"> 5 coal fired plants 14 gas fired plants 24 distillate fired plants 128 non-carbon plants of various technologies (hydro, solar, and wind) 	<ul style="list-style-type: none"> ISO 55001 certification has successfully been renewed for TNB's wholly-owned domestic plants Performance of TNB's peninsular plants continue to improve with a 4% increase in overall average plant availability Successful completion of acquisition of 20.88MW wind capacity Successful COD of TNB's pioneer Large Scale Solar plant in Sepang, Selangor Completion of initial phase of generation transformation programme Upgrading of TNB's current domestic power plants in meeting emission levels set out in the Clean Air Regulation 2014 	<ul style="list-style-type: none"> Commencement of Large Scale Solar plant construction in Bukit Selambau Expansion of current generation leadership development programme to create new batch of architect level leaders Continued construction of Jimah East Power (2,000MW) which is currently at 98.1% project progress and is expected to meet its target COD in June 2019 Continued construction of SPG (1,440MW) which is currently at 73.7% project progress and is expected to meet its target COD in July 2020
Power Network Assets		
<p>TNB network assets consist of:</p> <ul style="list-style-type: none"> 25,971 circuit km of Transmission network 488 Transmission substations 682,393.0 circuit km of Distribution network 89,284 Distribution substations 	<ul style="list-style-type: none"> Maintained domestic networks at world-class performance with transmission system minutes of 0.35, and distribution SAIDI of 48.22 Successfully completed RM6.372 billion worth of network enhancement in 2018 as allocated under the current regulatory period. Amongst the assets constructed are: <ul style="list-style-type: none"> 19,506.0 km of networks, and construction of 1,877 new substations to better serve domestic customers Installation of 160,000 smart meters in line with Government target of having 1.5 million smart meters by 2020 SCADA-risation of 3,672 distribution substation in line with initiatives of building the Grid of the Future Implementation of Asset Performance Management System ensuring holistic management of assets through its life cycle Review of the current Grid Strategic Plan that will cater to the enhancement to TNB's transmission grid over the next 10 years Successful deployment of TNB's geospatial information system to three (3) regions, Kuala Lumpur, Kuala Selangor and Putrajaya that will enhance network planning activities 	<ul style="list-style-type: none"> Continued deployment of smart meters in large city centres in Peninsular Malaysia Establishment of a Grid Academy that will look to improve Grid leadership and management capabilities Implementation of Grid Digitalisation transformation programme that was approved in 2018, along four (4) focus areas: <ul style="list-style-type: none"> Digital Empowered Workforce, Intelligent Asset Management, Intelligent Grid Operation, and Grid Insight & Innovations.
Non-Power Assets		
<p>Amongst non-power assets managed by TNB are:</p> <ul style="list-style-type: none"> TNB manages over 5.8 million square feet of office and operational work spaces TNB manages over 16,000 km of fibre optic network TNB manages over 4,100 vehicles 	<ul style="list-style-type: none"> Establishment of REVD, entity within TNB specific to manage and optimises savings from TNB's real estate assets Laid over 700 km of fibre optic cable as part of TNB's power network extension Conducted high speed broadband pilot using TNB's fibre optic cable in line with Government's National Fiberisation and Connectivity Plan (NFCP) in Jasin, Melaka involving 1,100 homes Commencement of TNB HQ campus development works 	<ul style="list-style-type: none"> Continued development of TNB HQ campus Enhancement of TNB's integrated facilities management and real estate project management control to unlock value and optimise savings Complete NFCP pilot trial

2018 Highlights

Equivalent Availability Factor (EAF)

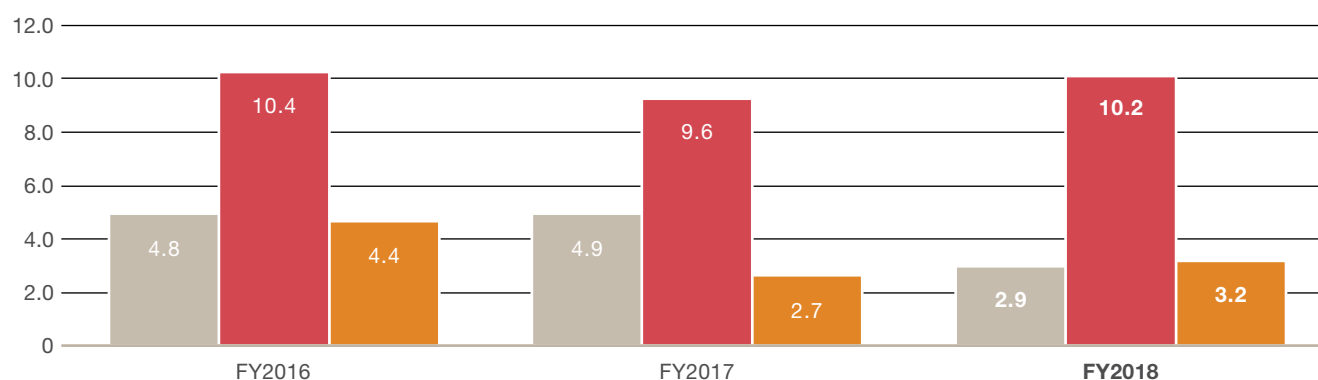
Peninsular Malaysia⁽¹⁾ Sabah International⁽²⁾



⁽¹⁾ Performance of TNB's wholly-owned power plants in Peninsular Malaysia
⁽²⁾ Performance of TNB's wholly-owned power plants internationally

Equivalent Unplanned Outage Factor (EUOF)

Peninsular Malaysia⁽¹⁾ Sabah International⁽²⁾

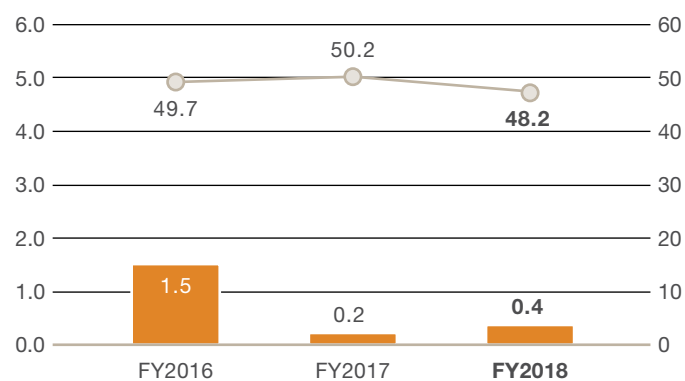


⁽¹⁾ Performance of TNB's wholly-owned power plants in Peninsular Malaysia
⁽²⁾ Performance of TNB's wholly-owned power plants internationally

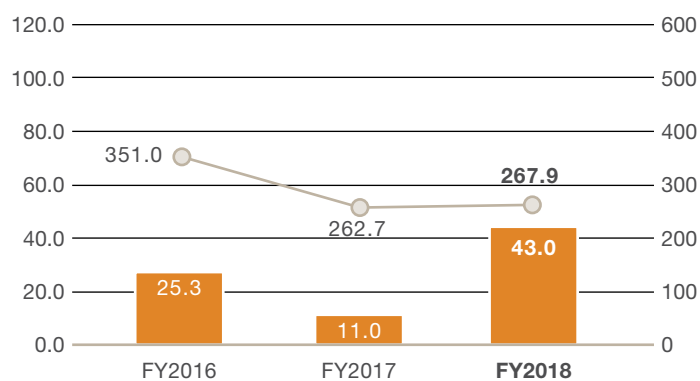
System Minutes & System Average Interruption Duration Index (SAIDI)

System Minutes SAIDI

Peninsular Malaysia



Sabah (SESB)

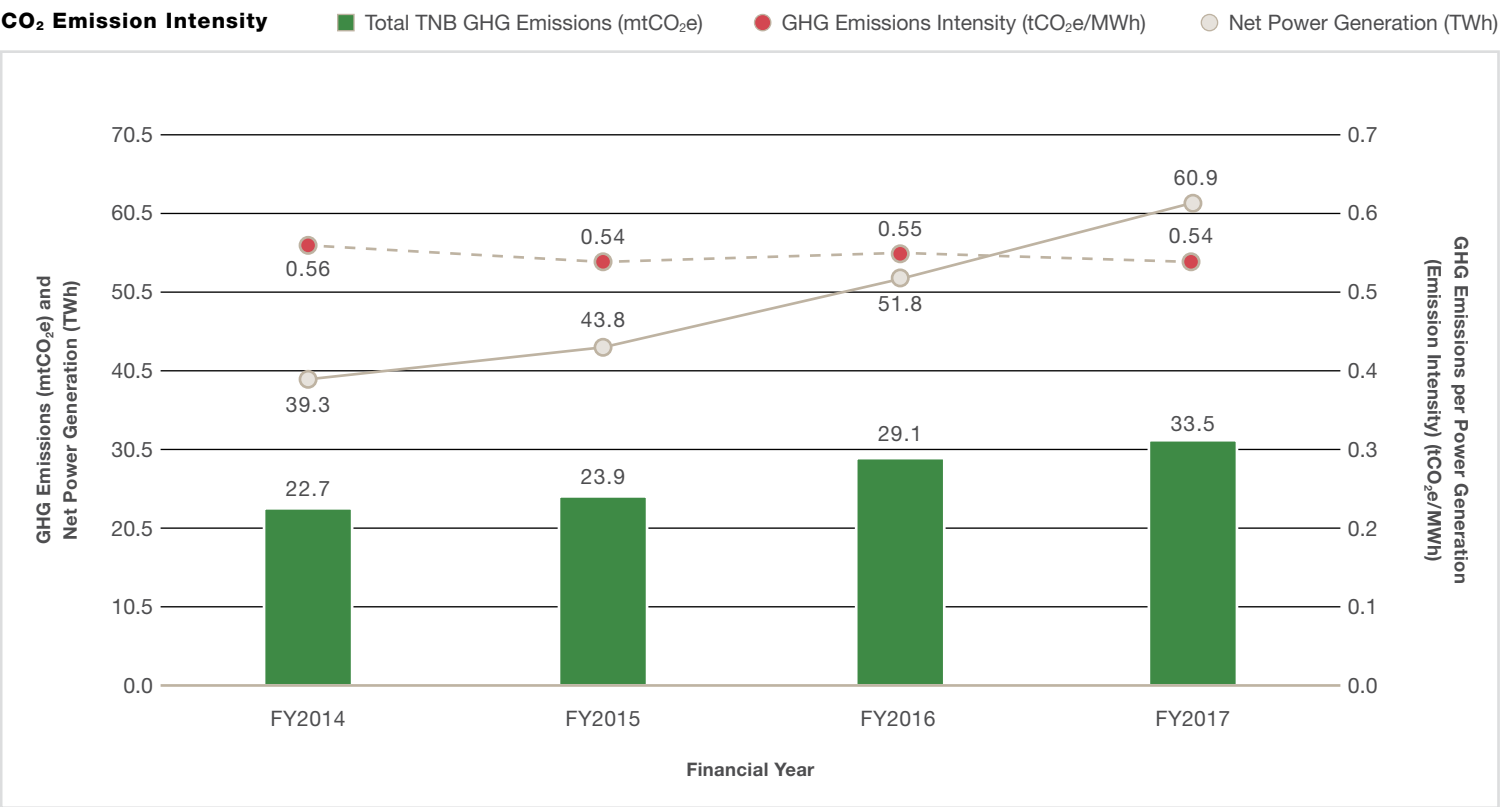




NATURAL CAPITAL

Approach	Key Activities In 2018	Outlook
Protecting our natural heritage		
TNB takes responsibility in protecting and preserving the flora and fauna associated with our activities	<ul style="list-style-type: none"> Monitoring of IUCN red list occupants within our power plant operating area Conducted 18 biodiversity programmes within our Hulu Terengganu hydroelectric station area Conducted 11 biodiversity programmes within our Sungai Perak hydroelectric station Partnership with National Hydraulic Research Institute of Malaysia (NAHRIM) to enhance water management at Sungai Perak and Cameron Highlands Protection programme for <i>Kelah</i> fish resources and <i>Rafflesia</i> plants within the Royal Belum State Park Continued adoption of ISO 14001 standards in the operations of our domestic plants 	<ul style="list-style-type: none"> Continued protection, restoration, and recovery of natural capital surrounding our area of activities
Combatting climate change		
TNB is committed towards a low carbon economy by embracing and supporting renewable energy generation and reduction of both GHG and non-GHG emissions	<ul style="list-style-type: none"> 1% reduction in GHG emission per MWh produced in 2017 compared with previous year Continued upgrading of TNB conventional power plants to be in line with the Clean Air Regulations 2014 that is expected to be enforced in July 2019 Increased of emission-free capacity by 1.69%, with the acquisition of GVO Wind Ltd and Bluemerang Capital Ltd Timely completion of our first Large Scale Solar Continued retrofitting of TNB offices to improve building energy efficiency and management Continued implementation of our Home Energy Report programme that has resulted in a carbon emission avoidance of 33,168 tonnes CO₂ emissions Continued development of internal online GHG emission management system that is expected to go live in 2019 	<ul style="list-style-type: none"> Increase emission-free capacity both domestically and internationally Completion of online GHG emission management system Completion of plant upgrading in line with Clean Air Regulations 2014
Sustainable business practices		
TNB is committed to continuously improve our operational performance, energy efficiency, stakeholder engagement and management of natural resources	<ul style="list-style-type: none"> Continuous improvement of our operational efficiencies Establishment of a TNB Green Energy Development Fund (TGEDF) with clear terms of reference and implementation mechanism. The TGEDF is established to create and explore opportunities aimed at minimising the environmental impact of our business. As of December 2018, TGEDF has approved RM13 million to fund the exploration of six (6) such opportunities Continuous engagement with relevant stakeholders to mitigate concerns and impact of any environmental incident associated with our activities Preparation of Sustainability Report 2017 	<ul style="list-style-type: none"> Continuous communication of environmental performance, development and methodology

2018 Highlights



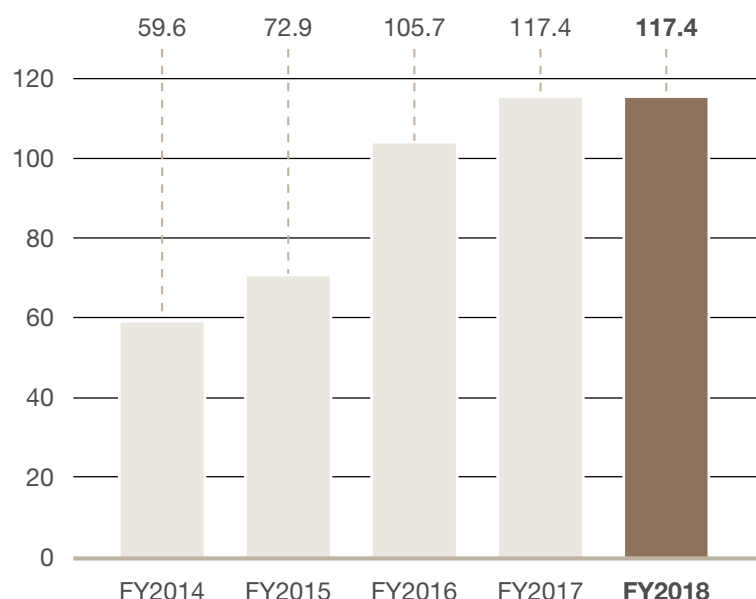


INTELLECTUAL CAPITAL

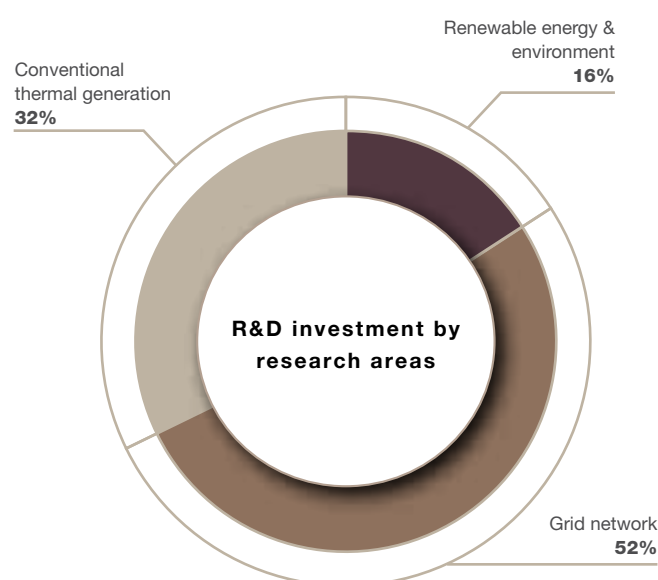
Management Approach	Key Activities In 2018	Outlook
Research and development		
Continued support of technological advancement through research and development	<ul style="list-style-type: none"> Investment of more than RM117 million in R&D for 2018, focusing on renewable energy and environment, conventional generation, and grid networks Launched collaboration between TNB Research (wholly-owned subsidiary of TNB) and Institute of Technology Petronas which look to explore joint research and development in the energy sector Collaboration between TNB Research and Malaysian Global Innovation & Creativity (MaGIC) with the aim of building a healthy micro-ecosystem for the electricity supply industry 	<ul style="list-style-type: none"> Continued investment in research and development as one of the key enablers in addressing the challenges facing the industry
Operational and service innovations		
Explore and develop innovations that will optimise TNB's operations, enhance asset management, and reduce operation and maintenance costs	<ul style="list-style-type: none"> Successfully completed eight (8) strategic Proof of Concept (POC) innovations on the application of emerging technologies such as blockchain, augmented reality and robotics which have potential of delivering RM3.8 million cost savings per annum Introduction of new retail products/services to promote energy efficiency Implementation of centralised billing has led to timely end-to-end billing management 	<ul style="list-style-type: none"> Exploring retail energy marketplace model with the aim of delighting our end customer Develop initial sustainable products/ services for TNB Smart City solution Collaborate with local university (Universiti Tenaga Nasional) to establish a Smart Campus
Development of new products and services for both regulated and non-regulated business		
Technology and business model innovations		
Invest in incubating applications of new technology and disruptive business model, from both internal and external sources	<ul style="list-style-type: none"> Establishment of Business Innovation Incubator (BII) entity with the purpose to incubate innovation and launch start-up prototypes with a focus on commercialisation at scale Establishment of internal committee to evaluate and endorse high-impact innovation proposals Endorsement of four (4) high-impact innovation proposals for incubation by BII Establishment of a simplified internal innovation framework that is aimed at increasing crowdsourcing of ideas and shortening steps from ideation to actualisation 	<ul style="list-style-type: none"> Appointment of a venture capital partner for innovation investment in the energy sector Increasing the number of high impact proposal under incubation

2018 Highlights

R&D investment over the last 5 years (million)

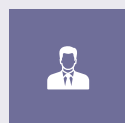


Breakdown of R&D investment by research areas



Listing of sample R&D projects

Research Areas	Key Projects
Renewable energy and environment	<ul style="list-style-type: none"> Project on developing a technically, economically and environmentally feasible floating solar photovoltaic system for domestic implementation Development of suitable carbon material use to improve the capturing of GHG emission in coal power plants Design, development and commercialise improved impulse hydro turbine capable of higher turbine efficiency Develop active management of distribution network with distributed renewables as a Distributed Generation model
Conventional thermal generation	<ul style="list-style-type: none"> Development of conventional thermal boiler profile to further optimise performance and efficiency Optimisation of coal management systems to improve coal condition and transportation Development of improved dynamic cooling model for gas turbine power plants Development of model aimed at optimising power generation costs, energy conversion efficiency and GHG emission
Grid network	<ul style="list-style-type: none"> Feasibility study on portable earthing for deployment of mobile substations Economic study on optimisation network performance vs asset life cycle cost for medium voltage equipment Development of IEC 61850 Specification and Guidelines for the Implementation of Substation Protection, Automation and Control Systems for local implementation Pilot implementation of internally developed demand response mechanism for local deployment

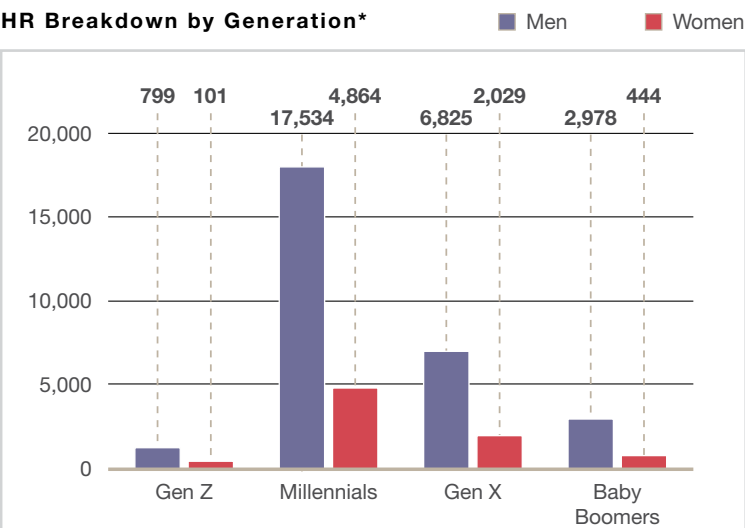


HUMAN CAPITAL

Management Approach	Key Activities In 2018	Outlook
Human resource management		
Development of a more strategic and data-driven HR function through creation of new Data Analytics functions within HR's Centre of Expertise	<ul style="list-style-type: none"> Review of critical HR processes to facilitate the operationalisation of HR shared services by TNB Global Business Solutions Successful migration of HR shared services functions from Group HR to TNB Global Business Solutions Full implementation of People-Matters Better Brighter online talent management to cater for HR services from hire to retire 	<ul style="list-style-type: none"> Developing HR mid-term and long term strategy (2020-2025) to ensure alignment to the new operating model Embark on a HR culture transformation throughout TNB
Deployment of HR Business Partners for each business line to facilitate strategic partnership between HR and the business	<ul style="list-style-type: none"> Successful migration of TNB medical benefits management from external provider to internal team Establishment of HR Analytics team 	<ul style="list-style-type: none"> Promote a Data Driven HR through analytics capability development programmes Establishing the necessary data governance framework and ICT tools as analytics enablers
Centralisation of HR shared services within TNB Global Business Solutions entity to unlock efficiency and productivity gains		
Safe and healthy work environment		
Ensure the safety of individuals at TNB facilities and areas of activities	<ul style="list-style-type: none"> Introduction of Tenaga Safety Culture which emphasises practicing safety as a way of life Strengthening the enforcement of TNB's Life Saving Rules introduced in 2017 	<ul style="list-style-type: none"> Enhancement of our internal HSE platform to enable more functions and services to be provide
Develop a health and safety generative culture that is aimed to achieve zero accident	<ul style="list-style-type: none"> Development of an internal HSE platform that will allow for centralisation of HSE monitoring and tracking Successful accreditation of eight (8) cafeterias within Company premise as "Healthy Cafeterias" by Minister of Health to ensure provision of nutritious food based on the Malaysian Dietary Guidelines and Recommended Nutrient Intake 	<ul style="list-style-type: none"> Continuous efforts to improve the safety awareness and practices amongst employees and contractors working within our premises
Foster a culture of global preventive health activities amongst employees	<ul style="list-style-type: none"> Continued promotion of corporate weekly wellness hour and annual staff wellness check-up 	<ul style="list-style-type: none"> Development of internal ergonomics guidelines
Talent management and development		
Maintain core competencies and building new capabilities in the areas of new technology and innovations	<ul style="list-style-type: none"> Recruitment of the right talents with the right values locally and globally Development of talents through numerous technical and functional training programmes attended by more than 70% of our employee in 2018 	<ul style="list-style-type: none"> Expansion of our Leadership Drive programme to include junior manager level
Building leadership capabilities at every level anchored on the TNB leadership values of 'Future, Engage, and Deliver'	<ul style="list-style-type: none"> TNB leadership talents had undergone 2,486 training hours in 2018 focused on enhancing their leadership capabilities Progress 1,300 employees through our Upward Mobility programme in which we provide employees with the opportunity to upgrade their qualification from a high school leaver to a degree or equivalent industrial certification holder Continued support for the development of Malaysian graduates through participation in SL1M internship programme. TNB enrolled 880 graduates into our SL1M development programme in FY2018 	<ul style="list-style-type: none"> Enhancement of our corporate MBA programme and expansion of our leadership development programme Enhancement of leadership development programme to help our leaders embrace global disruptions

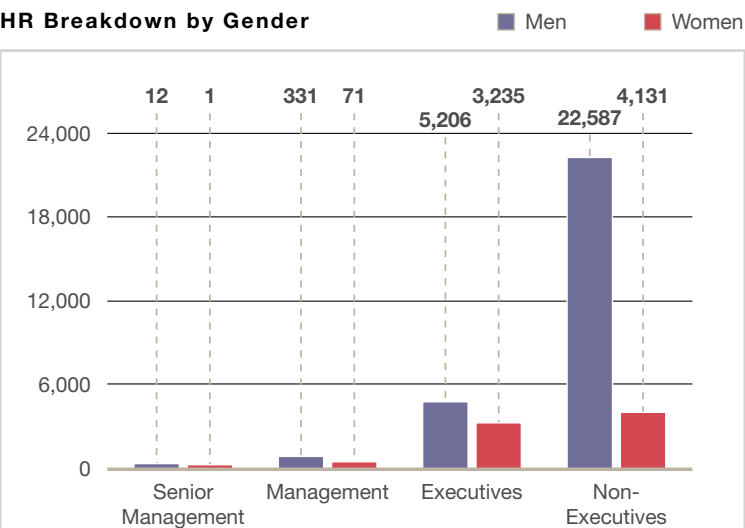
2018 Highlights

HR Breakdown by Generation*

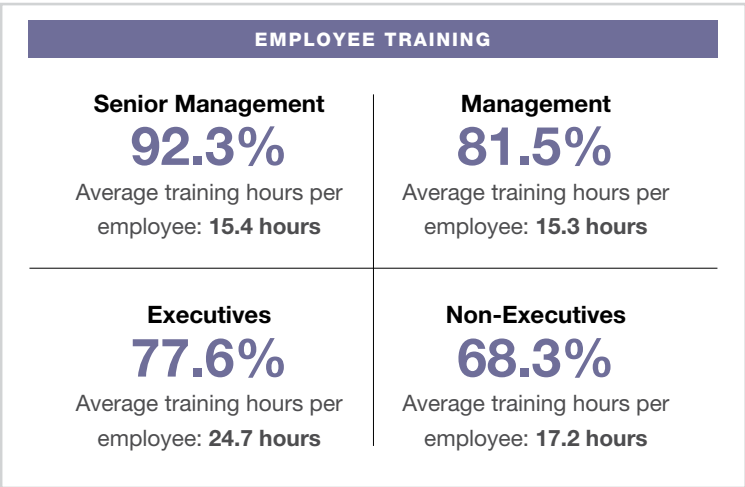


* Baby Boomers (> 55 years old), Gen X (40-55 years old), Millennials (24-39 years old) and Gen Z (<24 years old)

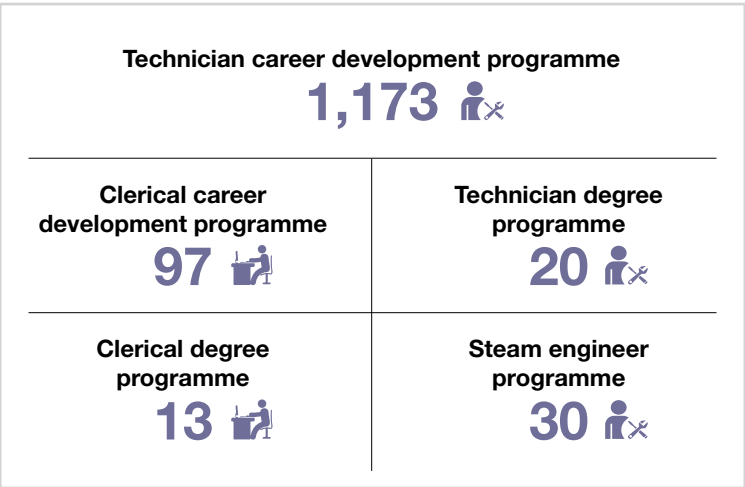
HR Breakdown by Gender



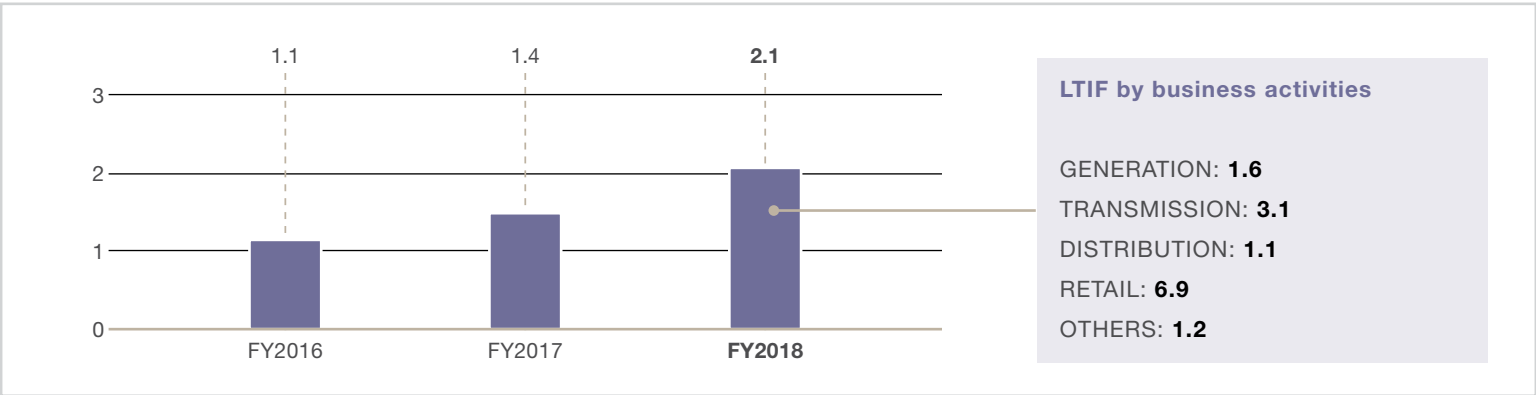
Training Hours Breakdown by Function



Upward Mobility Programmes' Graduates



Annual Lost Time Injury Frequency (LTIF)





SOCIAL AND RELATIONSHIP CAPITAL

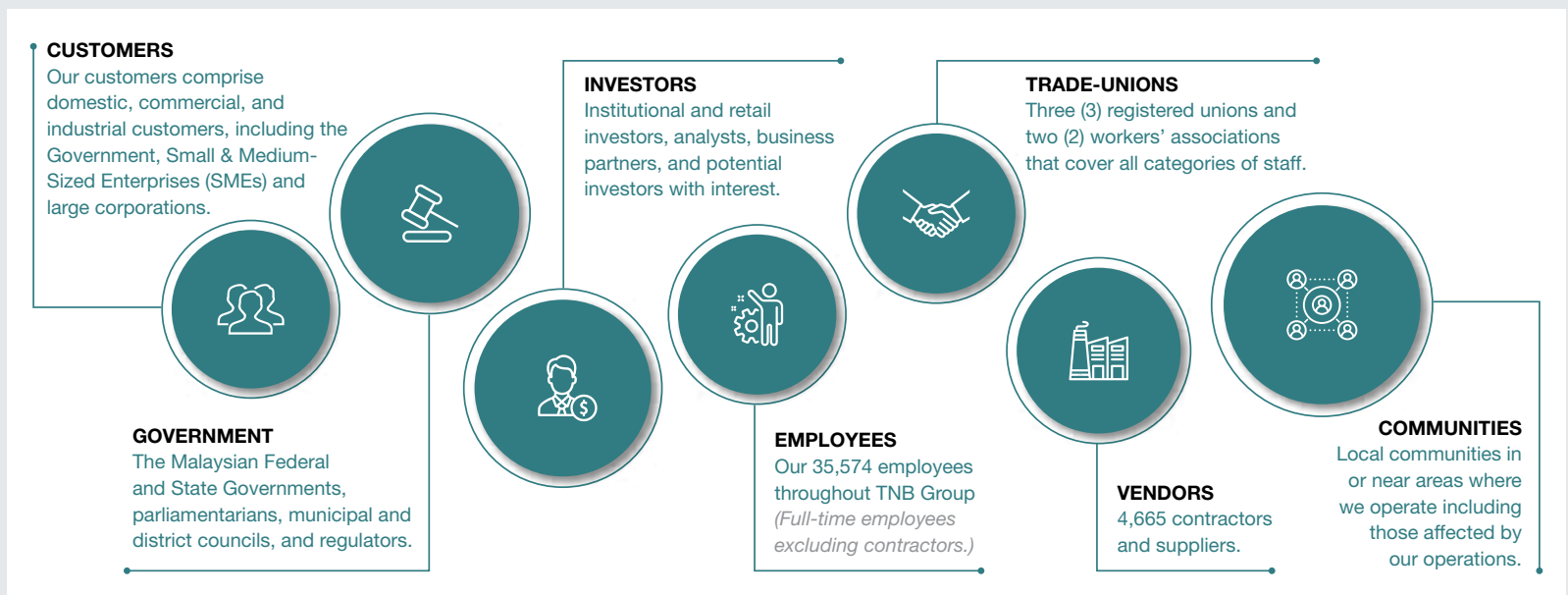
BUILDING TRUST AND CREATING VALUE

Forming strong societal connections based on shared values of trust, credibility, and reliability are core to TNB's continuous efforts in building social capital with our various stakeholders, who are at the heart of our value-creation process.

We continuously communicate, engage, and initiate outreach to our network of stakeholders – from communities residing near our power plants and our customers to the authorities and non-governmental organisations (NGOs) – to enable opportunities to collaborate, develop co-ownership, and generate shared experiences within which good faith and trust are further strengthened.

Developing strong relationship premised on shared values, concerns, and interests of all our stakeholders are central to who we are, what we do, and how we make our decisions.

STAKEHOLDER GROUPS



More information on our Stakeholder Engagement efforts and how we respond to stakeholder concerns can be found in our Sustainability Statement within this Integrated Annual Report, and our upcoming Sustainability Report 2018.

TRANSFORMING THE COMMUNITY

As a caring business that has been powering the Nation's progress for the past seven (7) decades, it is our purpose to support the sustainable development of the communities within which we operate. TNB's community-building and community investment efforts encompass the following areas:

- Education;
- Environmental protection and biodiversity conservation; and
- Sustainable economic growth and social development.

In times of rapid societal changes and unsettling disruptions caused by technological advances, shifts in economic hierarchy, and climate change, the accelerated widening of social gaps calls for strategic interventions from both the public and private sectors – to mitigate the effects of income inequality and ensure greater social mobility, while enhancing social integration.

This is what TNB has always been focusing on playing our role to help the less privileged, so they in turn can help themselves. In doing so, we aspire to create

better, brighter lives that contribute to the betterment of our society. To this end, we have set up initiatives to support youth advancement that will enable them to be more upwardly mobile, regardless of background, race, religion, or gender.

Good education can transform lives. We believe our social aspirations can be achieved by enabling more disadvantaged youths to gain access to quality education.



TNB's efforts in ensuring equitable access to quality education, especially among youths and young children from vulnerable and lower-income in line with the global sustainable development agenda, particularly, Goal Four: Quality Education, under the 2030 Agenda for Sustainable Development by the United Nations.

Through the various education support programmes, scholarships, financial assistance, and school adoption initiatives carried out by TNB, we hope that by 2030, we would have played a part in helping to ensure equal access to affordable technical, vocational and tertiary education for all young Malaysians – including persons with disabilities, indigenous people, and the underprivileged.

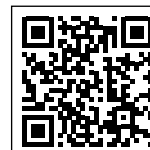
Education Programmes

- Back-to-School Programme**

- Through this programme, TNB helped B40 families prepare their children for the new schooling year by providing primary school students with the necessary school supplies such as uniforms, stationery sets and school bags.
- More than 13,000 primary students across 50 locations nationwide benefited from this programme in FY2018.

- Dermasiswa My Brighter Future (MyBF) Programme**

- A landmark programme launched in 2018 targeting B40 students that have secured placement in Science, Technology, Engineering, and Mathematics (STEM) or Technical and Vocational Education and Training (TVET) courses in Malaysian public universities.
- Sponsorship provided includes tuition fees, board and lodging, and contributions to support the students' family to ensure that they need not have to seek employment while studying to help supplement their parents' income.
- A total of 945 students were beneficiaries of the *Dermasiswa* MyBF Programme in 2018.



"This year, I received another offer from the same university and this time, it came with a TNB scholarship. The happiness I felt was just overwhelming."

Heena Niesha Bella Ravindran



"I was at a loss when I received an offer to further my studies as I knew my parents, who did not work, could not afford it. This changed when I was offered the scholarship, which really came at an opportune time."

Ken Ak Abam



"When I first received the letter, I was a little shocked and unsure of what to think as I had not applied for it. After speaking to YTN, my feelings turned to gratitude as this meant I could now focus on my studies..."

Leong Kah Yau



"My parents were surprised and thankful for this unexpected blessing. I will strive to do the best in my studies and I will not be asking for money from my family in *kampung*."

Nur Aleefah Shuhadah Azhar

- Trust School Programme**

- This programme, conducted jointly with Yayasan AMIR and the Ministry of Education is aimed at developing the quality leadership and management in participating schools.
- Each adopted school's teaching personnel are also exposed to new methods and techniques to make teaching and learning more engaging. It is the intent of this programme that by helping to improve the school's leadership, management, and teaching capabilities, the efforts will translate into a better learning experience for the students, and ultimately leading to better schooling experiences.
- Currently TNB has committed to adopt eight (8) Trust Schools with a total teacher and student population of over 500 and 6,715, respectively.

- Pintar School Programme**

- Through this programme in collaboration with PINTAR Foundation TNB helps selected school organised motivational and leadership programmes for students and teachers, and education support programmes such as tuition classes, and examination clinics for the students.
- TNB committed to adopt a new batch of 18 schools nationwide in FY2017 for the next three (3) years, bringing the total adopted schools to 58 nationwide.

- Yayasan Tenaga Nasional (TNB Foundation) Scholarships and Financial Assistance Programme**

- We have an annual commitment of RM50 million to develop the future leaders of our nation by enabling bright young Malaysians to pursue their tertiary education in local and foreign universities.
- We are proud to be able to provide 1,974 students with scholarships and financial assistance needed to pursue their aspirations in 2018.

For more information about our environmental and biodiversity, as well as community investment and social development programmes, please refer to our Sustainability Statement on pages 66 to 96 or our upcoming Sustainability Report 2018.

WIDENING OUR SOCIAL CIRCLE

The advent of information technology and development of sophisticated smart wireless devices has given rise to opportunities to use social media as a vehicle for better recognising the values, reaching out, and engaging a wider spectrum of stakeholders.

Effective social media strategy employed during the year saw TNB's social media platforms gaining further traction with sizable organic growth in the number of followers to:



+30,340 followers



+6,660 followers



+3,310 followers

Notable achievements for our festive campaigns in FY2018 include being conferred top honours in the 'Long-Form Storytelling' and 'YouTube Ad of the Year' categories, of the 'YouTube Top Ads in Malaysia 2018 Awards'.

OUR SCORECARD

	31.8.2014	31.8.2015	31.8.2016	31.8.2017	31.12.2017	31.8.2018
Return on asset	6.2%	6.6%	6.4%	5.4%	5.3% ⁽⁶⁾	3.2%
Generation market share ⁽¹⁾	47.0%	48.0%	52.3%	52.3%	50.6%	49.9%
Customer satisfaction index ⁽¹⁾	7.6	8.0	8.1	8.1	N/A ⁽⁵⁾	8.1
Corporate reputation index ⁽³⁾	74%	76%	82%	81%	N/A ⁽⁵⁾	88%
Cost per unit ⁽¹⁾	36.30 sen/kWh	35.10 sen/kWh	34.20 sen/kWh	36.60 sen/kWh	37.30 sen/kWh	39.20 sen/kWh
Equivalent availability factor ⁽²⁾	85.51%	88.76%	88.08%	88.51%	84.96%	89.92%
Equivalent unplanned outage factor ⁽²⁾	7.09%	3.85%	4.44%	2.69%	4.46%	3.24%
Transmission system minutes ⁽¹⁾	0.13 minute	0.77 minute	1.47 minute	0.23 minute	0.05 minute	0.35 minute
System average interruption duration index ⁽¹⁾ (SAIDI) minutes/customer/year	55.00	49.66	49.71	50.24	18.05	48.22
Transmission losses ⁽¹⁾	1.63%	1.47%	1.28%	1.29%	1.30%	1.43%
Distribution losses ⁽¹⁾	6.52%	6.21%	6.11%	6.21%	6.13%	6.62%
Employee engagement score ⁽⁴⁾	85%	85%	89%	89%	N/A ⁽⁵⁾	86%

⁽¹⁾ For Peninsular Malaysia only.

⁽²⁾ Including TNB's wholly-owned generating capacity in Peninsular Malaysia.

⁽³⁾ TNB did not conduct any Corporate Reputation Index prior to FY2014.

⁽⁴⁾ TNB conducts its employee engagement survey biennially. The scores for both FY2016 and FY2017 are based on survey conducted in FY2016.

⁽⁵⁾ The respective surveys was not conducted during this 4-month Annual Report period.

⁽⁶⁾ Financial Period Ended 31 December 2017 (Restated)

FINANCIAL CALENDAR

Announcement of Consolidated Results	► 25 May 2018	► 27 November 2018
	Unaudited consolidated results for the first (1 st) quarter ended 31 March 2018	Unaudited consolidated results for the third (3 rd) quarter ended 30 September 2018
	► 30 August 2018	► 28 February 2019
	Unaudited consolidated results for the second (2 nd) quarter ended 30 June 2018	Unaudited consolidated results for the fourth (4 th) quarter ended 31 December 2018
Dividends	Interim Single-Tier Dividend of 30.27 sen per ordinary share for the Financial Year ended 31 December 2018	Final Single-Tier Dividend of 23.0 sen per ordinary share for the Financial Year ended 31 December 2018
	► 28 September 2018	► 29 March 2019
	Entitlement Date	Entitlement Date
	► 11 October 2018	► 11 April 2019
	Payment Date	Payment Date
Annual General Meetings	► 17 April 2018	► 12 April 2019
	Notice of 28 th Annual General Meeting and Issuance of Integrated Annual Report 4-Month Period ended 31 December 2017	Notice of 29 th Annual General Meeting and Issuance of Integrated Annual Report for the Financial Year ended 31 December 2018
	► 15 May 2018	► 14 May 2019
	28 th Annual General Meeting	29 th Annual General Meeting

INVESTOR RELATIONS



Proactive engagement with the investment community

Our Investor Relations (IR) team strives to provide our stakeholders with timely updates on TNB's business strategy, growth direction and latest developments.

In FY2018, various engagement and communication activities were carried out to develop a positive relationship with our existing and potential investors. These activities include our quarterly and full-year financial results announcements, Investor Relation programme, as well as one-on-one and group meeting engagement sessions with investors and analysts.

To ensure that we receive appropriate feedback and sustain our excellence service to the investment community, we conduct our IR Annual Survey regularly to gauge the team's performance, as well as investors' satisfaction level towards our performance.

NUMBER OF ENGAGEMENTS HELD

461
(FY2017: 454)

IR ANNUAL SURVEY SCORE

81.6%
(FY2017: 81.7%)



Transparency in disclosing material information

We are committed to deliver timely, accurate and transparent disclosures on material corporate updates to our shareholders and the investment community. We also benchmark our processes and internal controls against global best practices in key areas, including upholding high ethical values in handling information disclosure.

This is vital in shaping investors' positive perception on the Group's accountability, transparency and efficiency. In doing so, we aim to develop a close rapport with our investment community to enable a better understanding of our business, strategy and performance.

As part of continuous improvement, we consistently strive to enhance the delivery of our material disclosures to ensure the stakeholders are well informed on the latest developments in financial performance, local and international business performance, relevant environmental, social and governance (ESG) practices and other related matters.

We maintain strong links with our 26 sell-side research analysts and four (4) credit rating agencies to ensure information outflow to the market is accurate and consistent with the Group's views and performance.



Consistently Rewarding Shareholders

The Group is dedicated to create sustainable value for our shareholders and has been consistently rewarding them through the declaration of interim and final dividend in each financial year.

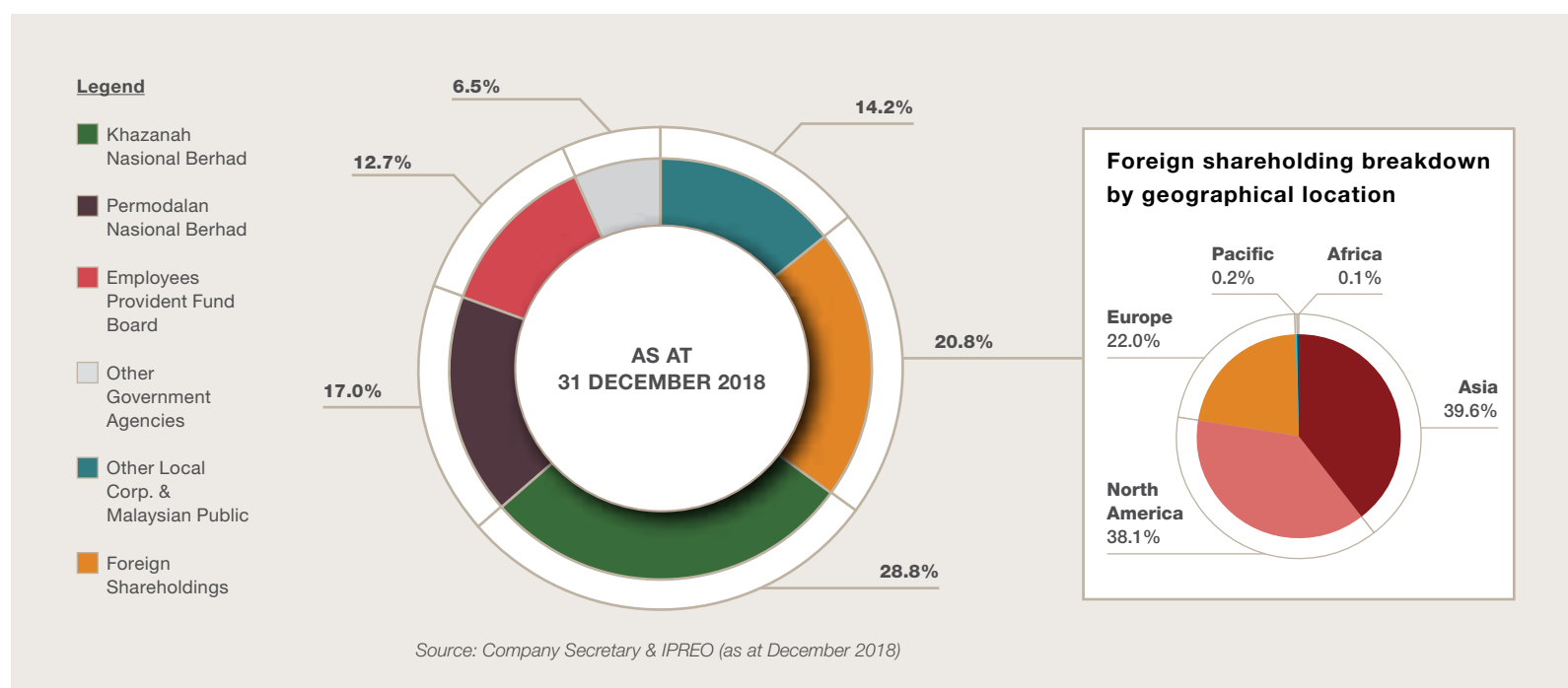
Dividends declared for FY2018:

- An interim single-tier dividend of 30.3 sen per ordinary share amounting to RM1.72 billion (paid in October 2018); and
- A single-tier final dividend of 23.0 sen per ordinary share amounting to RM1.31 billion.

The total dividend payout in FY2018 is 53.3 sen per ordinary share, representing a 56% dividend payout ratio that is consistent with our current dividend policy of between 30% and 60% of Group PATAMI.

SHAREHOLDERS INFORMATION

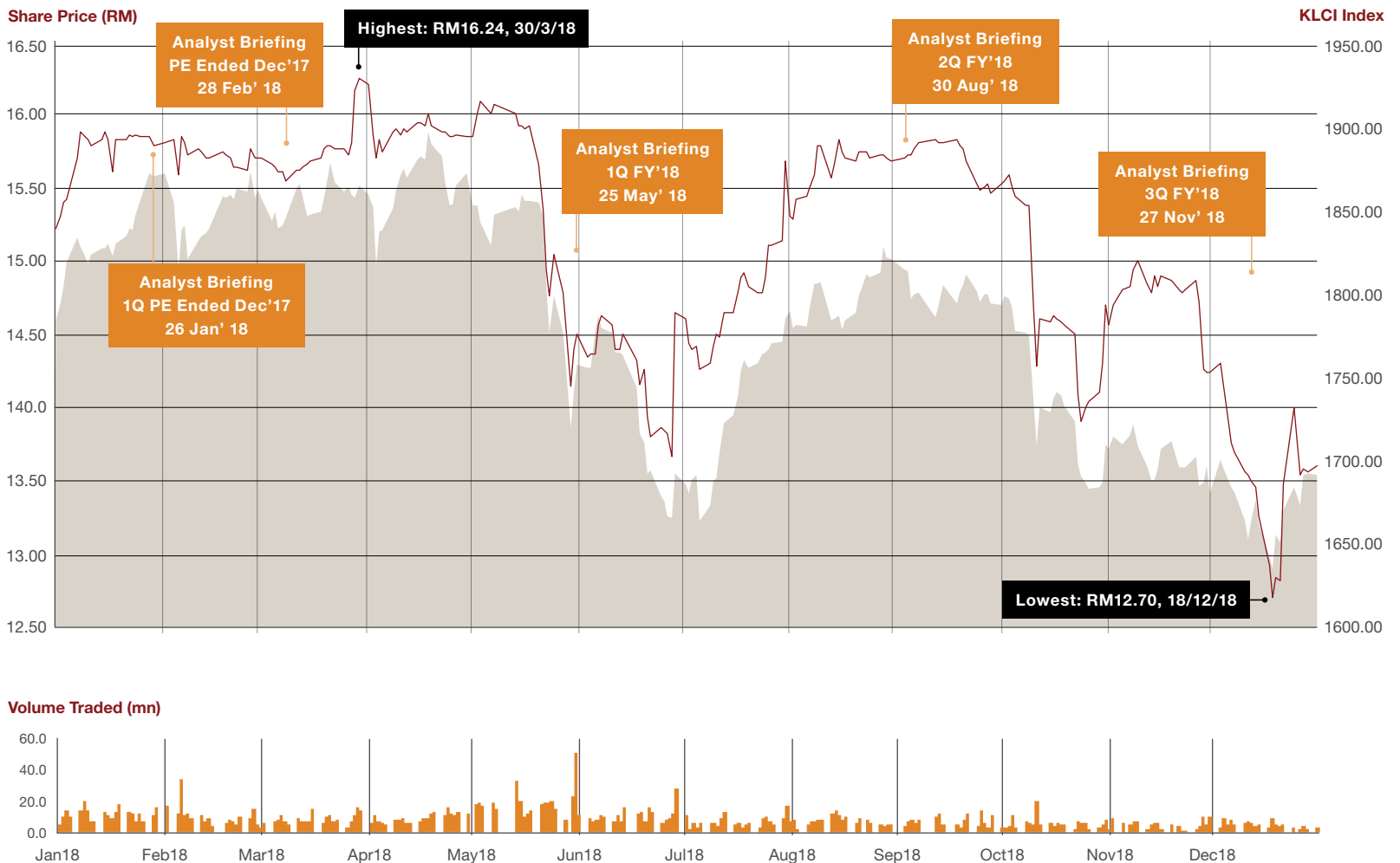
As at 31 December 2018, Khazanah Nasional Berhad remained as TNB's largest shareholder, with a total shareholding of 28.8%. Other Government-related agencies cumulatively hold around 36%, comprising Permodalan Nasional Berhad at 17%, Employees Provident Fund at 12.7% and others at 6.5%. The balance shareholding of 35% is held by other local corporations, Malaysian public and foreign shareholders.



CALENDAR OF IR EVENTS IN FY2018



TNB SHARE PRICE, FBM KLCI INDEX AND VOLUME TRADED IN FY2018



NET BOOK VALUE OF LAND AND BUILDINGS

AS AT 31 DECEMBER 2018

Property List Group	LAND						BUILDINGS					
	Leasehold			Freehold			Total		Built-Up		Total	
	No. of Lots (1)	Area (sq M) (2)	NBV (RM'000) (3)	No. of Lots (4)	Area (sq M) (5)	NBV (RM'000) (6)	No. of Lots (1+4) (7)	Area (sq M) (8)	NBV (RM'000) (9)	Area (sq M) (10)	NBV (RM'000) (11)	
LOCATION												
Perlis	50	156,976	1,833	439	88,183	11,631	489	245,159	13,464	74	11,369	21,260
Kedah	298	1,056,663	13,745	692	938,462	55,188	990	1,995,125	68,933	375	139,930	218,215
Pulau Pinang	195	719,709	63,212	676	985,302	79,670	871	1,705,011	142,882	346	135,470	859,289
Perak	795	6,164,665	334,582	667	4,432,922	311,365	1,462	10,597,587	645,947	951	691,789	2,758,940
Selangor	985	11,819,669	501,895	1,458	2,601,898	550,954	2,443	14,421,567	1,052,849	1,670	740,644	2,268,922
W. Persekutuan	384	297,326	67,716	565	630,249	191,934	949	927,575	259,650	580	274,895	719,271
Putrajaya/Cyberjaya	8	588,797	13,787	15	1,554	1,693	23	590,351	15,480	62	8,581	39,538
N. Sembilan	284	2,066,500	79,656	551	1,154,814	76,788	835	3,221,314	156,444	261	459,968	507,761
Melaka	360	640,641	23,478	460	251,696	160,530	820	892,337	184,008	90	161,746	187,241
Johor	961	3,444,031	419,804	1,153	1,005,893	207,354	2,114	4,449,924	627,158	545	260,203	809,900
Pahang	380	1,319,143	50,572	540	919,194	83,810	920	2,238,337	134,382	508	278,694	3,663,827
Terengganu	367	2,583,865	39,100	211	11,023,207	89,698	578	13,607,072	128,798	284	491,018	1,794,392
Kelantan	360	1,288,093	8,532	354	2,296,831	25,362	714	3,584,924	33,894	361	664,909	824,883
Sabah	316	6,261,621	76,641	60	4,501,754	35,488	376	10,763,375	112,129	2,587	651,954	428,414
Pakistan	1	38,141	103	1	790,344	1,532	2	828,485	1,635	1	12,713	233
Total	5,744	38,445,840	1,694,656	7,842	31,622,303	1,882,997	13,586	70,068,143	3,577,653	8,695	4,983,883	15,102,086

The land and buildings comprise power stations, mini hydros, jetties, dams, substations, residential houses, apartments, holiday bungalows, office buildings, warehouses, stores and workshops.

Shaping Energy Beyond Borders



While our roots are firmly consolidated on accomplishments within Malaysia, we have also made inroads into the international arena and our growth has already gained footholds in overseas markets which include Pakistan, India, Turkey, Saudi Arabia and the United Kingdom.

We will continue to grow, move economies and drive the energy industry by transcending borders, shaping a better brighter future for us and the generations to come.



BUSINESS CONTEXT

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CORPORATE INFORMATION

BOARD OF DIRECTORS

TAN SRI LEO MOGGIE

Chairman
Non-Independent Non-Executive Director

AMIR HAMZAH BIN AZIZAN

President/Chief Executive Officer
Non-Independent Executive Director
(Appointed w.e.f. 2 April 2019)

DATUK AHMAD BADRI BIN MOHD ZAHIR

Non-Independent Non-Executive Director
(Appointed w.e.f. 1 November 2018)

AMRAN HAFIZ BIN AFFUDIN

Non-Independent Non-Executive Director

NORAINI BINTI CHE DAN

Senior Independent Non-Executive Director
(Redesignated w.e.f. 28 February 2019)

GEE SIEW YOONG

Independent Non-Executive Director

JUNIWATI RAHMAT HUSSIN

Independent Non-Executive Director

GOPALA KRISHNAN K.SUNDARAM

Independent Non-Executive Director
(Appointed w.e.f. 4 July 2018)

ONG AI LIN

Independent Non-Executive Director
(Appointed w.e.f. 1 August 2018)

DATO' ROSLINA BINTI ZAINAL

Non-Independent Non-Executive Director
(Appointed w.e.f. 15 March 2019)

DATUK SERI HASHMUDDIN

BIN MOHAMMAD
Non-Independent Non-Executive Director
(Resigned w.e.f. 1 April 2018)

DATO' ABD MANAF BIN HASHIM

Senior Independent Non-Executive Director
(Cessation of Office as Director w.e.f. 15 May 2018)

DATUK SAKTHIVEL ALAGAPPAN

Independent Non-Executive Director
(Cessation of Office as Director w.e.f. 15 May 2018)

TAN SRI DATO' SERI CHOR CHEE HEUNG

Independent Non-Executive Director
(Resigned w.e.f. 30 June 2018)

BADRUL ILAHAN BIN ABD JABBAR

Independent Non-Executive Director
(Resigned w.e.f. 30 June 2018)

DATUK SERI IR. AZMAN BIN MOHD

President/Chief Executive Officer
Non-Independent Executive Director
(Resigned w.e.f. 31 March 2019)

SENIOR INDEPENDENT NON-EXECUTIVE DIRECTOR

Noraini binti Che Dan

Email : norainicd.integrity@tnb.com.my

COMPANY SECRETARY

Norazni binti Mohd Isa (LS 0009635)

SHARE REGISTRAR

Boardroom Share Registrars Sdn. Bhd. (378993-D)

(formerly known as Symphony Share Registrars Sdn. Bhd.)
Level 6, Symphony House
Pusat Dagangan Dana 1
Jalan PJU 1A/46
47301 Petaling Jaya
Selangor Darul Ehsan
Malaysia

Telephone : +603-7849 0777 (Help Desk)

Facsimile : +603-7841 8151/8152

DIVIDEND SERVICE PROVIDER

Bursa Malaysia Depository Sdn. Bhd. (165570-W)

10th Floor, Exchange Square
Bukit Kewangan
50200 Kuala Lumpur
Malaysia

Telephone : +603-2034 7751

Facsimile : +603-2026 3712

PRINCIPAL BANKERS

Malayan Banking Berhad (3813-K)

EXTERNAL AUDITORS

Messrs PricewaterhouseCoopers PLT

(LLP0014401-LCA & AF 1146)
Chartered Accountants
Level 10, 1 Sentral
Jalan Rakyat
Kuala Lumpur Sentral
P.O. Box 10192
50706 Kuala Lumpur
Malaysia

Telephone : +603-2173 1188

Facsimile : +603-2173 1288

REGISTERED OFFICE

Tenaga Nasional Berhad (200866-W)

Pejabat Setiausaha Syarikat, Tingkat 2
Ibu Pejabat Tenaga Nasional Berhad
No. 129, Jalan Bangsar
59200 Kuala Lumpur
Malaysia

Telephone : +603-2296 5566

Facsimile : +603-2283 3686

Website : www.tnb.com.my

TNB Careline : 15454

(for power outage or TNB
street light malfunction)

: 1-300-88-5454

(for billing and account enquiries)

Whistle : wbis.tnb.com.my

Blowing

Information

System

Toll Free : 1-800-888-862

AGM HELP DESK

Telephone : +603-2180 4586/4587/4590
(Share Administration Section
Company Secretary's Office
Tenaga Nasional Berhad)

INVESTOR RELATIONS

Investor Relations Department

Tingkat 4, Ibu Pejabat
Tenaga Nasional Berhad
No. 129, Jalan Bangsar
59200 Kuala Lumpur
Malaysia

Telephone : +603-2296 6748

Facsimile : +603-2284 0095

Email : tenaga_ird@tnb.com.my

STOCK EXCHANGE LISTING

Main Market of Bursa Malaysia Securities Berhad
(Listed since 28 May 1992)

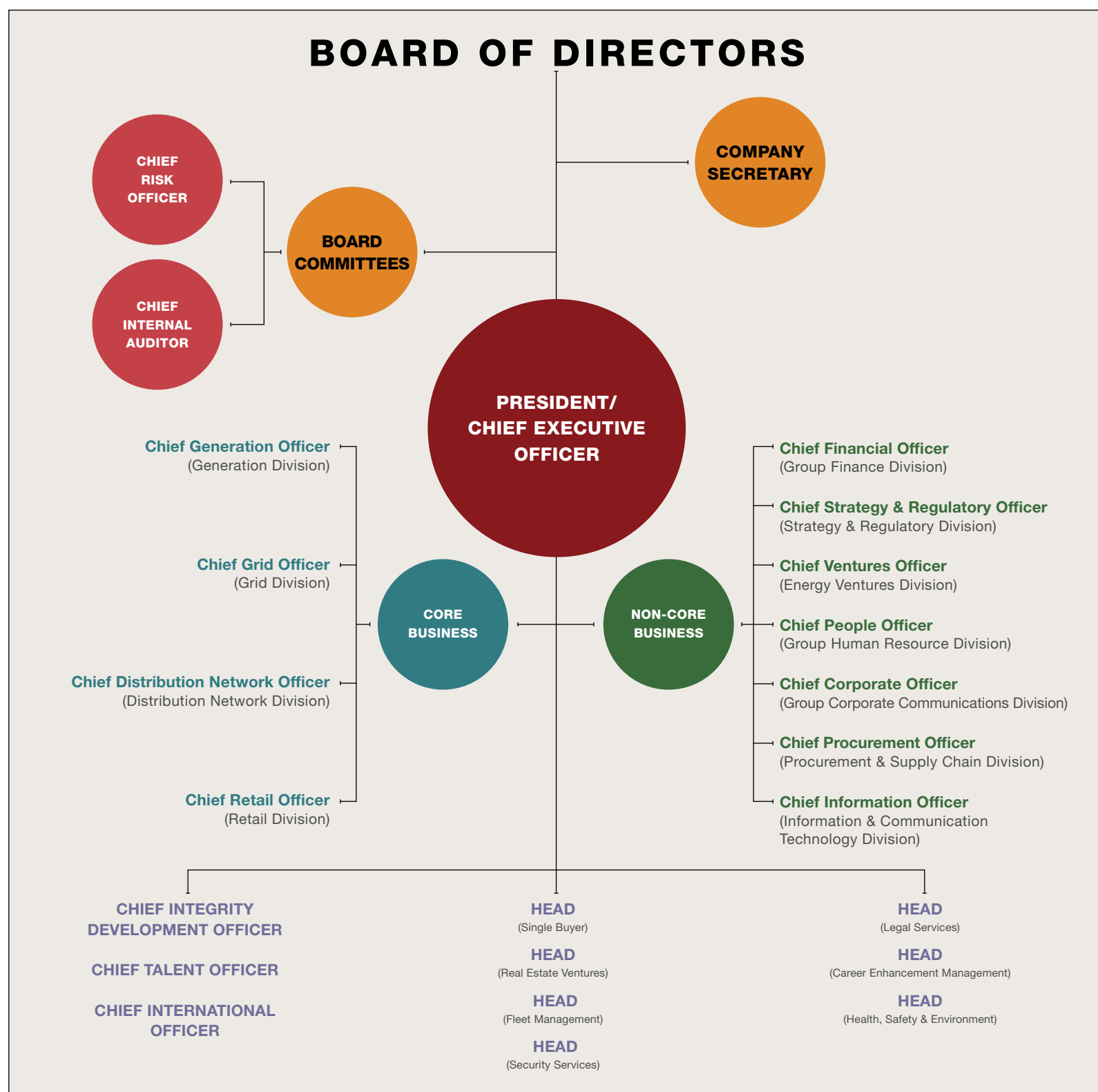
CREDIT RATINGS

Local Rating Agency		International Rating Agency	
Issuer Rating		Issuer Rating	
RAM Rating Services Berhad (RAM)	AAA Stable	Standard & Poor's Ratings Services (S&P)	BBB+ Stable
Malaysian Rating Corporation Berhad (MARC)	AAA_{IS} AAA Stable	Moody's Investors Service (Moody's)	A3 Stable

AMERICAN DEPOSITORY RECEIPTS PROGRAMME (ADR)

ADR Level 1

ORGANISATIONAL STRUCTURE



GROUP CORPORATE STRUCTURE

100%	MALAYSIA TRANSFORMER MANUFACTURING SDN. BHD.
100%	TNB INTEGRATED LEARNING SOLUTION SDN. BHD.
100%	TNB PASIR GUDANG ENERGY SDN. BHD.
100%	TNB JANAMANJUNG SDN. BHD.
100%	TNB FUEL SERVICES SDN. BHD.
100%	TNB CONNAUGHT BRIDGE SDN. BHD.
100%	TNB-IT SDN. BHD.
100%	TNB GLOBAL VENTURES CAPITAL BERHAD
100%	TNB SEPANG SOLAR SDN. BHD.
100%	TNBX SDN. BHD.
100%	ALLO TECHNOLOGY SDN. BHD. (Formerly known as Setia Haruman Technology Sdn. Bhd.)
100%	TNB TOPAZ ENERGY SDN. BHD.
100%	TNB GLOBAL CAPTIVE (L) LTD
100%	TNB POWER DAHARKI LTD.
100%	TNB LIBERTY POWER LIMITED
100%	TNB MANJUNG FIVE SDN. BHD.
100%	TNB WESTERN ENERGY BERHAD
100%	TNB PRAI SDN. BHD.
100%	TNB NORTHERN ENERGY BERHAD
100%	TNB ENGINEERING CORPORATION SDN. BHD.
100%	TNEC CONSTRUCTION SDN. BHD. (Dormant)
100%	BANGSAR ENERGY SYSTEMS SDN. BHD.
70%	SELESA ENERGY SYSTEMS SDN. BHD. (Dormant)
100%	TNEC OPERATIONS AND MAINTENANCE SDN. BHD.
51%	TOMEST ENERGY MANAGEMENT SDN. BHD. (In Members' Voluntary Winding Up)
77%	AIRPORT COOLING ENERGY SUPPLY SDN. BHD.
49%	ABRAJ COOLING LLC
100%	TNB RESEARCH SDN. BHD.
100%	TNB LABS SDN. BHD. (Formerly known as TNBR QATS Sdn. Bhd.)
40%	GUNUNG TENAGA SDN. BHD.
100%	TNB ENERGY SERVICES SDN. BHD.
100%	TENAGA E MOBILITY SOLUTIONS SDN. BHD.
70%	MAEVI SDN. BHD.
49%	METROSPHERE HYDRO TERSAT SDN. BHD.
40%	FTJ BIO POWER SDN. BHD.
49%	SIME DARBY TNBES RENEWABLE ENERGY SDN. BHD.
20%	JANA LANDFILL SDN. BHD.
100%	TNB INTERNATIONAL SDN. BHD.
50%	VORTEX SOLAR INVESTMENTS S.A.R.L.
100%	VORTEX SOLAR UK LIMITED
100%	TENAGA INVESTMENTS UK LTD
100%	TENAGA WIND VENTURES UK LTD
80%	GVO WIND LIMITED*
80%	BLUEMERANG CAPITAL LIMITED*
100%	INTEGRAX BERHAD
100%	SEGMENT KEMBARA SDN. BHD. (Dormant)
100%	TREK KEMBARA SDN. BHD. (Dormant)
100%	LBT TWO SDN. BHD. (Dormant)
100%	PELABUHAN LUMUT SDN. BHD.
100%	LEKIR BULK TERMINAL SDN. BHD.
50%	LESS 1 SHARE LUMUT MARITIME TERMINAL SDN. BHD.
100%	LMT CAPITAL SDN. BHD. (Dormant)
100%	UNIVERSITI TENAGA NASIONAL SDN. BHD.
100%	UNITEN R&D SDN. BHD.
	YAYASAN CANSOLOR UNIVERSITI TENAGA NASIONAL
100%	TNB RENEWABLES SDN. BHD.
100%	TNB BUKIT SELAMBAU SOLAR SDN. BHD.
100%	GSPARX SDN. BHD.

* % of holdings are based on equity structure. The economic interest is 100%. List of subsidiaries for GVO Wind Limited and Bluemerang Capital Limited are detailed out on pages 203 to 205 of this Integrated Annual Report.

Group Corporate Structure

LEGEND:

Subsidiaries	Associates	Joint Ventures	Simple Investments	Trust Foundations
----------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

100%	TNB VENTURES SDN. BHD.
76%	TENAGA CABLE INDUSTRIES SDN. BHD.
100%	POWER AND ENERGY INTERNATIONAL (MAURITIUS) LTD.
100%	INDEPENDENT POWER INTERNATIONAL LTD.
20%	MALAYSIAN SHOAIBA CONSORTIUM SDN. BHD.
50%	SAUDI-MALAYSIA WATER & ELECTRICITY CO. LTD.
30%	GMR ENERGY LIMITED
100%	ARUNA SERVICIOS INTEGRALES S.L.U.
100%	GLOBAL POWER ENERJİ SANAYİ VE TİCARET ANONİM ŞİRKETİ
30%	GAMA ENERJİ ANONİM ŞİRKETİ
100%	TNB REPAIR AND MAINTENANCE SDN. BHD.
100%	TENAGA WHR 1 SDN. BHD.
100%	TNB REMACO PAKISTAN (PRIVATE) LIMITED
100%	TRICHY ENERGY LIMITED <i>(Dormant)</i>
100%	TRICHY POWER LIMITED <i>(Dormant)</i>
100%	TNB OPERATIONS & MAINTENANCE INTERNATIONAL LTD.
100%	OASIS PARADE SDN. BHD.
30%	SAUDI MALAYSIA OPERATION AND MAINTENANCE SERVICES CO. LTD.
10%	ALIMTIAZ OPERATION & MAINTENANCE COMPANY LIMITED
83%	SABAH ELECTRICITY SDN. BHD.
100%	ELOPURA POWER SDN. BHD.
70%	JIMAH EAST POWER SDN. BHD.
60%	KAPAR ENERGY VENTURES SDN. BHD.
60%	TENAGA SWITCHGEAR SDN. BHD.
60%	TSG ORMAZABAL SDN. BHD.
95%	PT. TENAGA NUSA BAKTI <i>(Dormant)</i>
34%	TENAGA MIDDLE EAST ELECTRIC CONTRACTING L.L.C
51%	SOUTHERN POWER GENERATION SDN. BHD.

ASSOCIATES

49%	FIBRECOMM NETWORK (M) SDN. BHD.
20%	TEKNOLOGI TENAGA PERLIS CONSORTIUM SDN. BHD.
20%	GB3 SDN. BHD.
20%	JIMAH ENERGY VENTURES HOLDINGS SDN. BHD.
100%	JIMAH ENERGY VENTURES SDN. BHD.

JOINT VENTURE

50%	SEATRAC SDN. BHD. <i>(Dormant)</i>
------------	------------------------------------

SIMPLE INVESTMENTS

20%	PERUSAHAAN OTOMOBIL ELEKTRIK (MALAYSIA) SDN. BHD. <i>(In Winding Up)</i>
10%	LABUAN REINSURANCE (L) LTD.
8.91%	FEDERAL POWER SDN. BHD.

TRUST FOUNDATIONS

	YAYASAN TENAGA NASIONAL
	RETIREMENT BENEFIT TRUST FUND

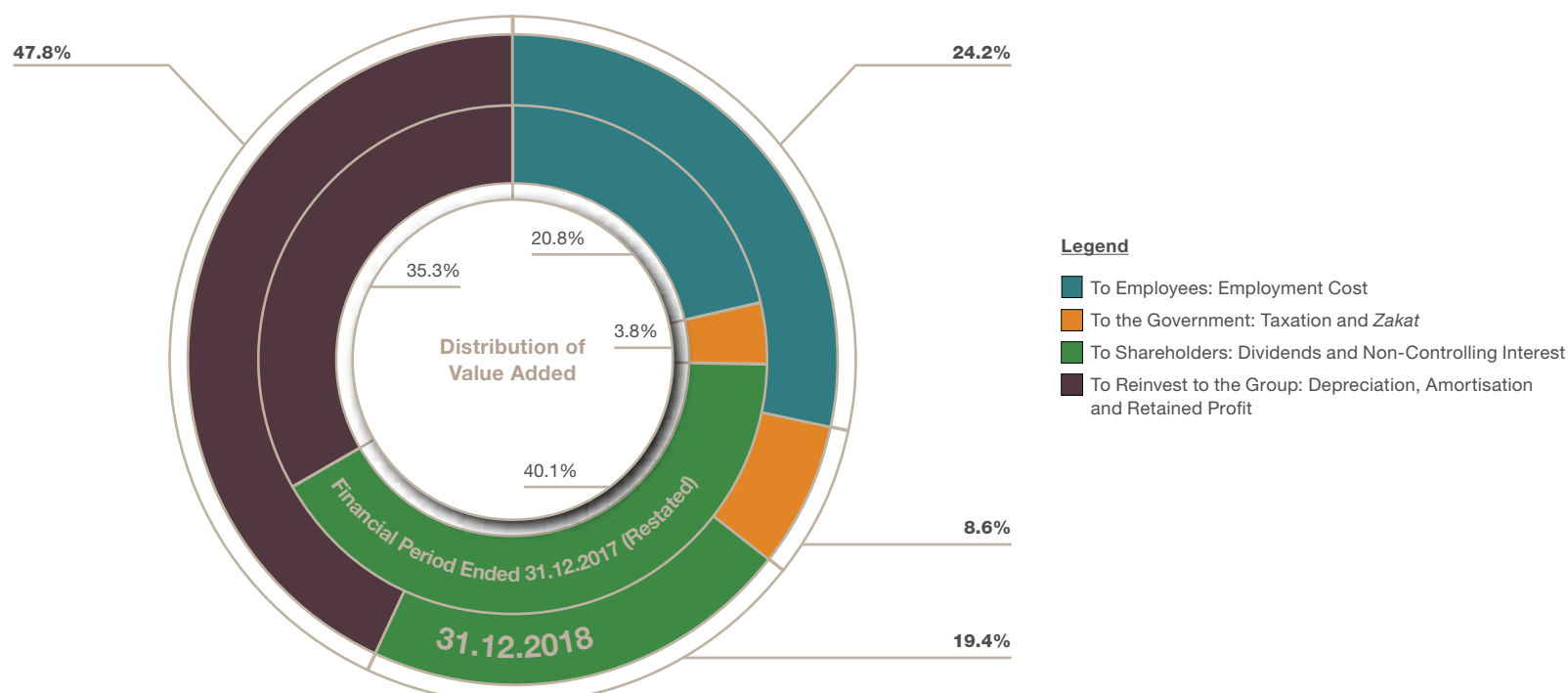
DORMANT COMPANIES

100%	TNB CAPITAL (L) LTD.
100%	TNB RISK MANAGEMENT SDN. BHD.
100%	TNB HIDRO SDN. BHD.
100%	TNB TRANSMISSION NETWORK SDN. BHD.
100%	TNB GENERATION SDN. BHD.
100%	TNB DISTRIBUTION SDN. BHD.
100%	TNB ENGINEERS SDN. BHD.
100%	TNB COAL INTERNATIONAL LIMITED
100%	TNB PROPERTIES SDN. BHD.
100%	TNP CONSTRUCTION SDN. BHD.
40%	KM METRO-TNB PROPERTIES SDN. BHD.
100%	ORION MISSION SDN. BHD.
100%	LAHAD DATU HOLDINGS SDN. BHD.
100%	LAHAD DATU ENERGY SDN. BHD.
50%	EASTERN SABAH POWER CONSORTIUM SDN. BHD.
70%	SEPANG POWER SDN. BHD.

MANJUNG ISLAND ENERGY BERHAD *(Subsidiary as defined by MFRS 10, 11 and 12)*

DIRECT VALUE ADDED TO MALAYSIA

	31.12.2018	31.12.2017 (Restated)	31.08.2017
VALUE ADDED (RM Million)			
Revenue	50,392.5	15,692.2	47,416.9
Operating expenses excluding staff costs, depreciation and amortisation	(33,677.6)	(9,689.0)	(29,218.1)
Net loss on impairment of financial instruments	(487.3)	(163.4)	-
Other operating income	825.1	512.6	1,021.3
Finance income	423.8	94.9	237.6
Finance cost	(1,688.5)	(531.4)	(1,456.0)
Fair value of financial instruments	36.7	(7.2)	-
Foreign exchange gain/(loss)	(418.3)	310.2	7.9
Share of results of associates and joint ventures	(182.7)	(37.0)	128.3
Value added available for distribution	15,223.7	6,181.9	18,137.9
DISTRIBUTION (RM Million)			
To employees:			
Employment cost	3,685.8	1,288.5	3,751.1
To the Government:			
Taxation and zakat	1,301.6	235.0	1,369.7
To shareholders:			
Dividends	2,931.9	2,493.0	2,205.5
Non-controlling interest	21.3	(13.8)	8.1
To reinvest to the Group:			
Depreciation and amortisation	6,491.3	2,049.9	6,105.0
Retained profit	791.8	129.3	4,698.5
Total distributed	15,223.7	6,181.9	18,137.9

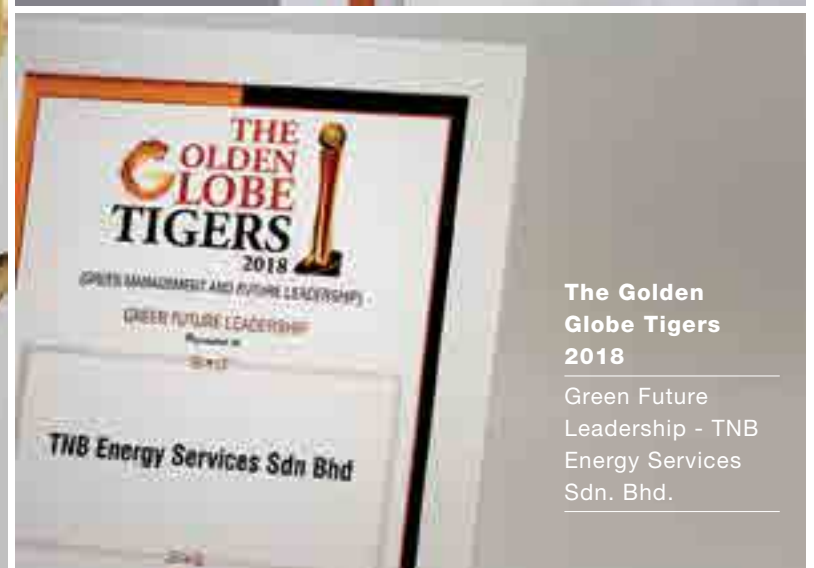
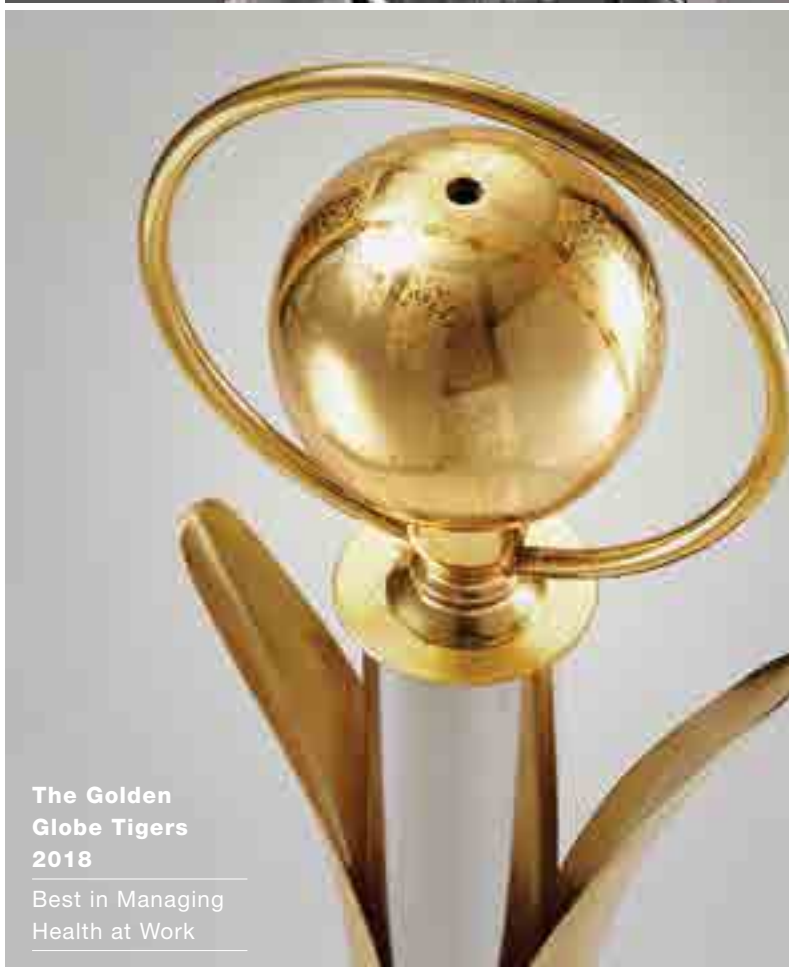


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AWARDS & RECOGNITION

In keeping with the vision of Reimagining TNB, our Company's business performance par excellence is reflected by the prestigious accolades we garnered locally, regionally, and internationally during the financial year.



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Awards & Recognition



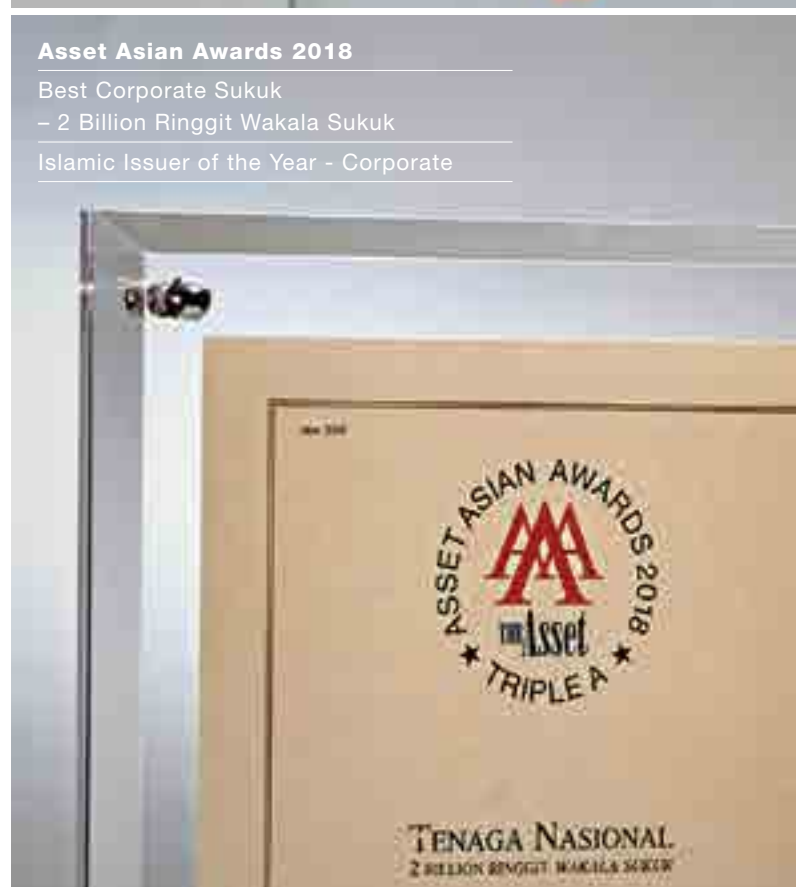
Employers' Federation of Pakistan

Best Practices Award on OSH 2017 – Power & Utility Sector
- TNB Repair & Maintenance



The Asiamoney Awards 2018

Overall Most Outstanding Company in Malaysia
Most Outstanding Company in Malaysia – Utilities Sector



Asset Asian Awards 2018

Best Corporate Sukuk
– 2 Billion Ringgit Wakala Sukuk
Islamic Issuer of the Year - Corporate



YouTube Malaysia Ad Awards 2018

Ad of the Year
Top Ad in Long-Form Storytelling

Awards & Recognition



Global Business Services Asia Awards 2018

Best Practices Business Process Transformation



Human Resources Minister Award 2018

Large Service Sector - TNB Janamanjung Sdn. Bhd.



Share Guide Association Malaysia (SGAM) ICT Awards 2018

TNB Android Billing Project



HRDF Conference & Exhibition 2018

Innovation & Creativity Award - TNB Janamanjung Sdn. Bhd.



World Branding Awards 2018 - 2019

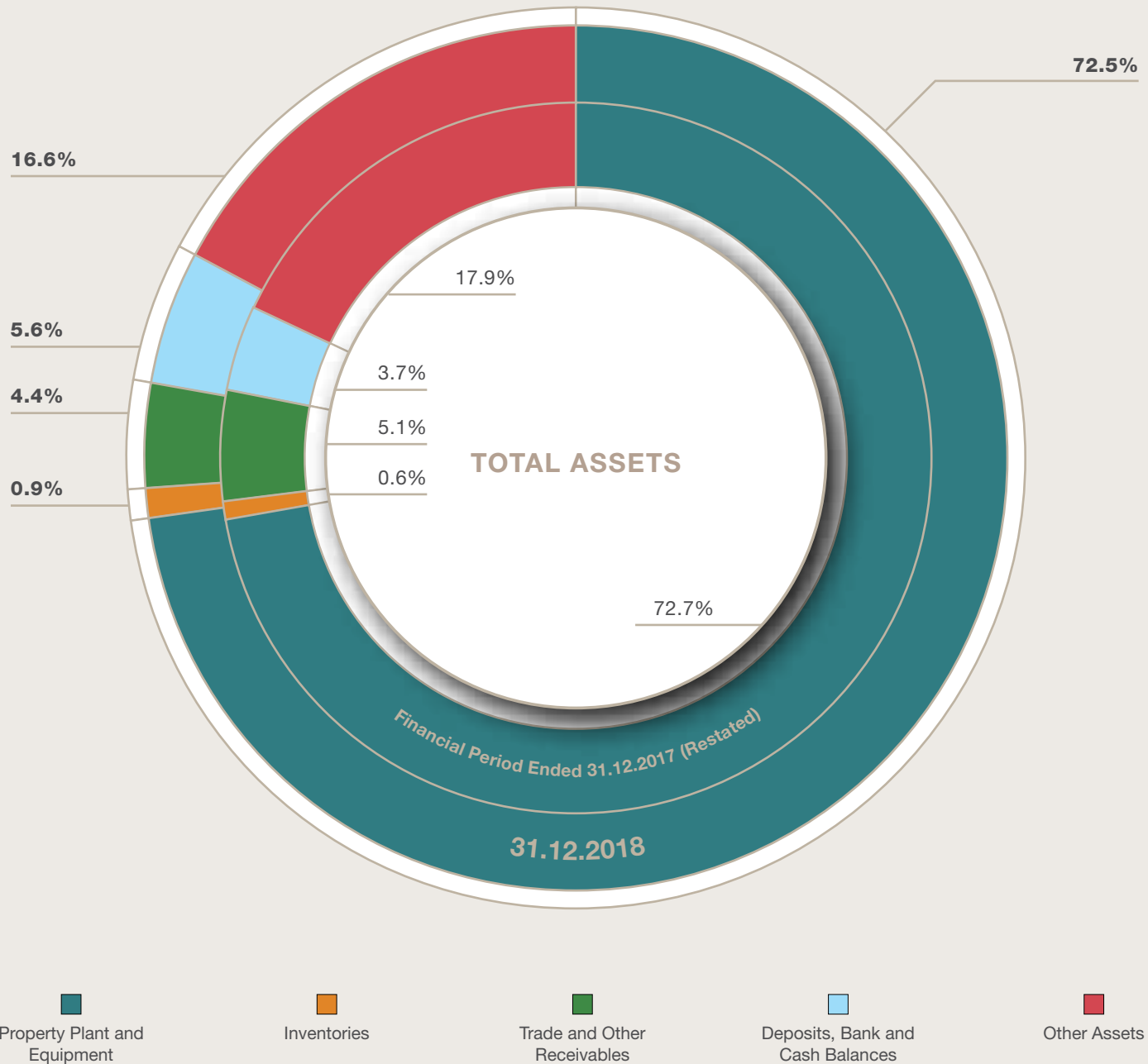
Brand of the Year - Energy - Power



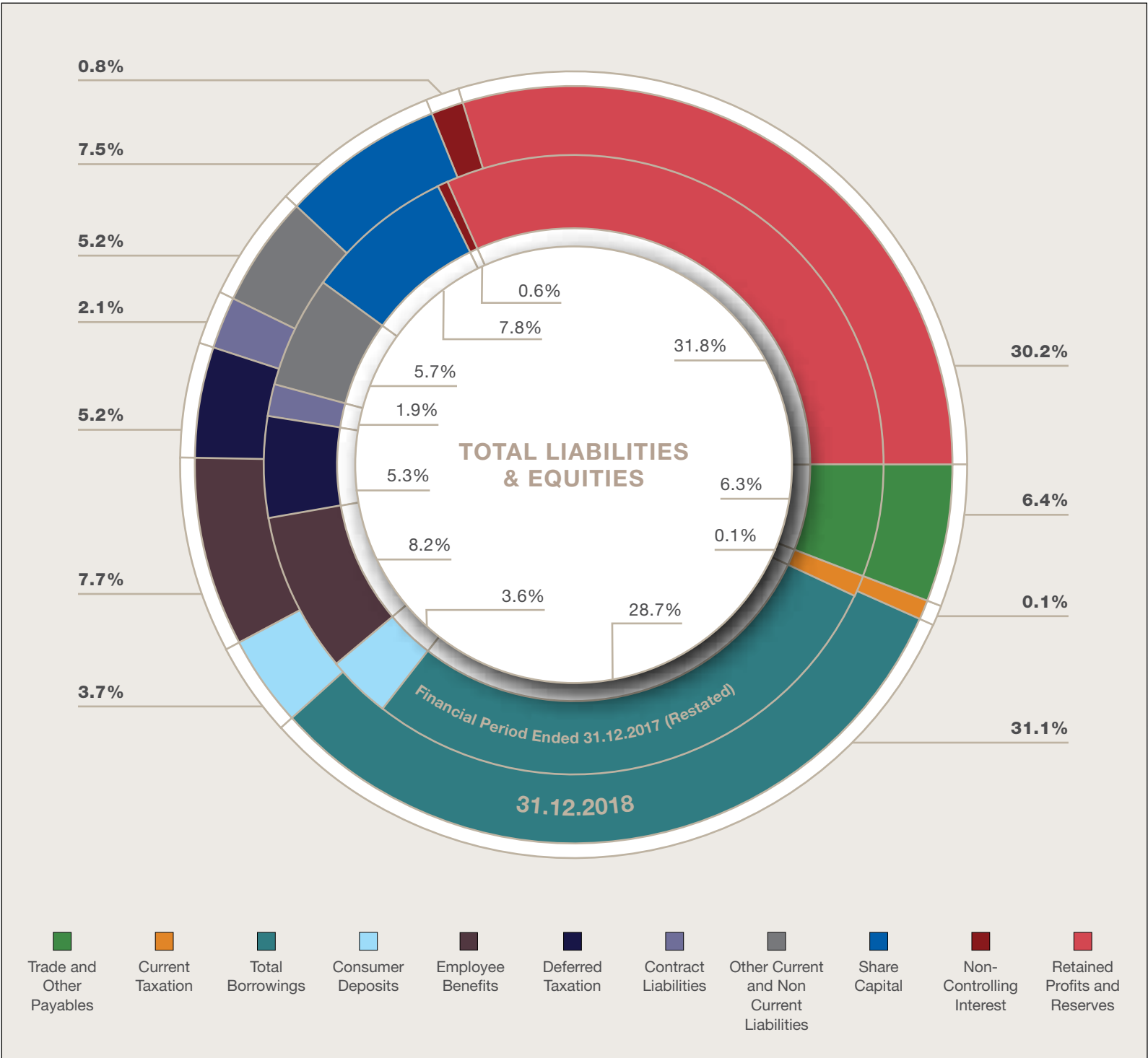
PERFORMANCE REVIEW

- 62** Simplified Group Statement of Financial Position
- 64** Core Revenue Financial Year Ended 31 December 2018

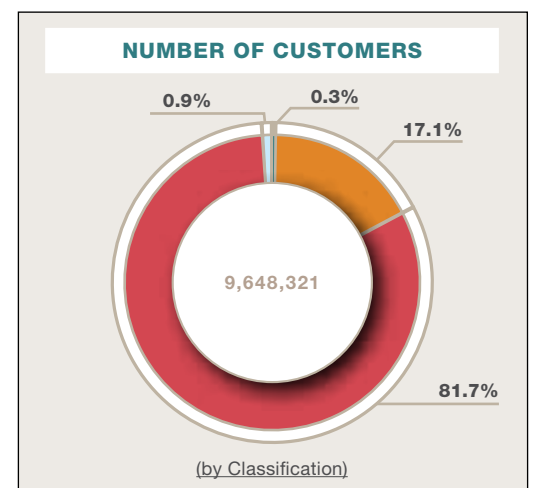
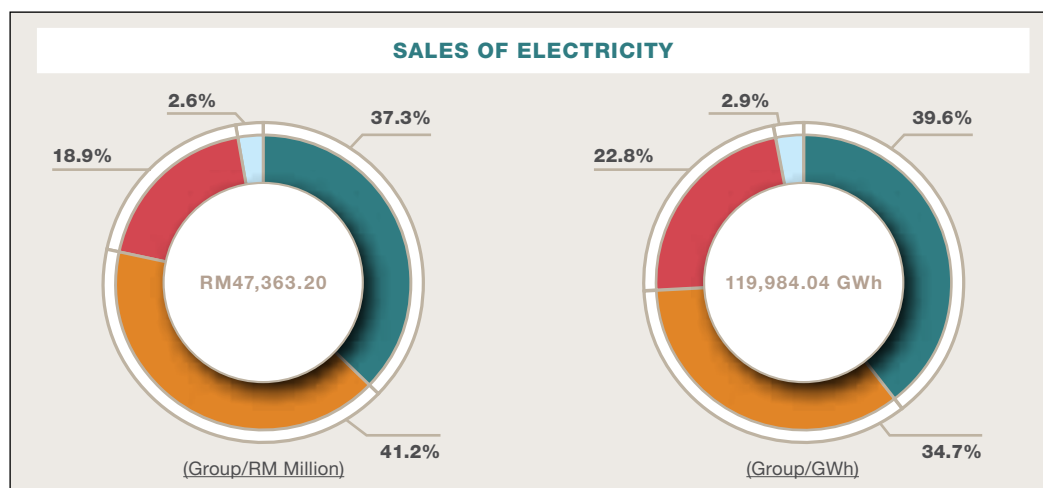
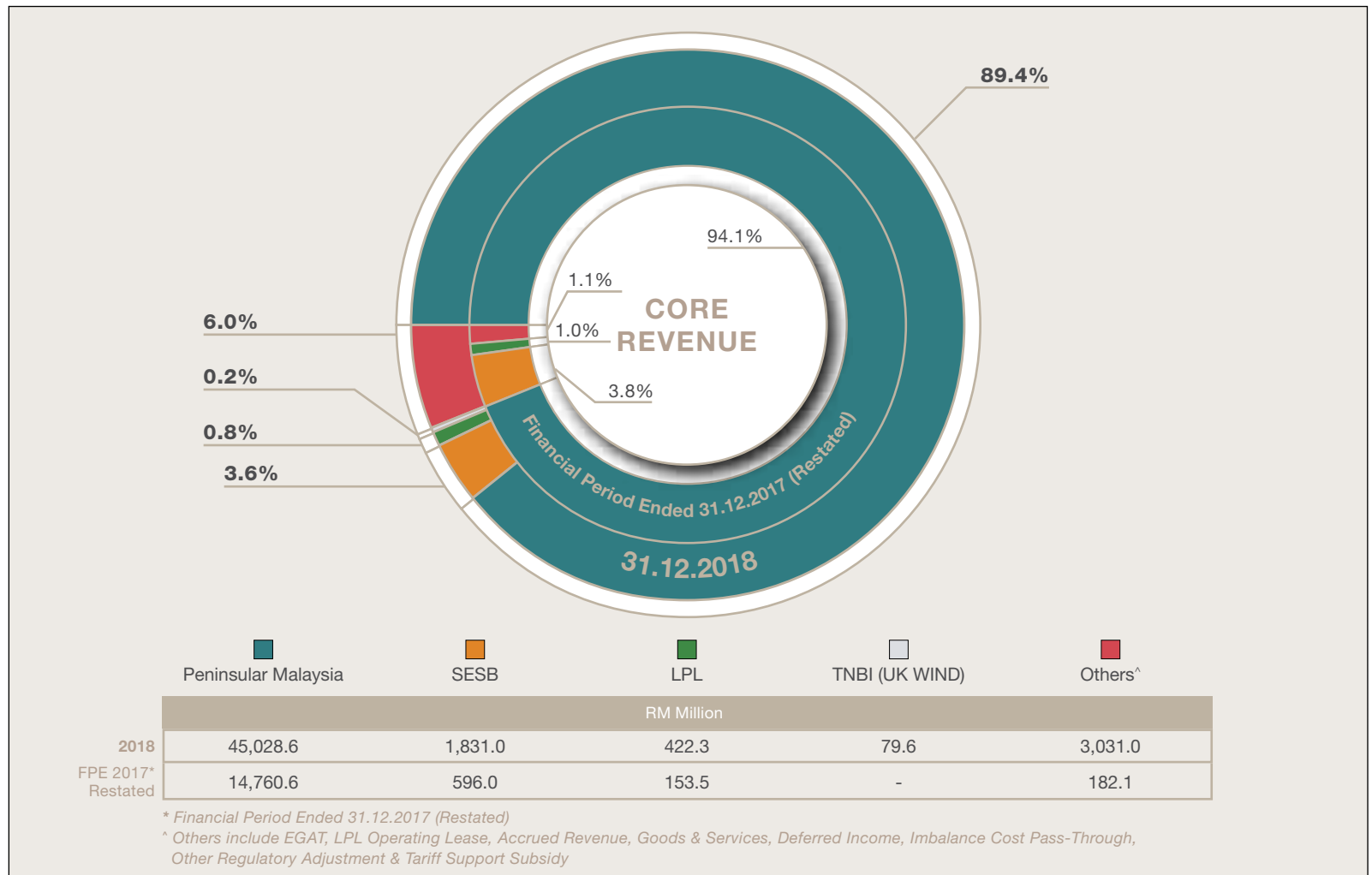
SIMPLIFIED GROUP STATEMENT OF FINANCIAL POSITION



Simplified Group Statement of Financial Position



CORE REVENUE FINANCIAL YEAR ENDED 31 DECEMBER 2018



SUSTAINABILITY STATEMENT

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- 68 Sustainability Governance
- 68 Supporting The United Nations Sustainable Development Goals (UN SDGs)
- 70 Engaging Stakeholders
- 71 What Matters to Us
- 72 **Spirit of Responsibility**
 - Our Governing Principles
- 74 **Delivering With Purpose**
 - The Future of Energy
 - Customer Centricity
- 81 **Environmental Stewardship**
 - Minimising Environmental Impact
 - Climate Change
- 84 **Embracing Relationship**
 - Unlocking People Value
 - Generative Safety Culture
 - Brightening Surrounding Communities
 - Transforming Lives Through Education

SUSTAINABILITY STATEMENT

At TNB, we prioritise business operations that cater to the needs and interests of our various stakeholders and also the environment we live in. We aim to provide clear, transparent and comprehensive information on all our efforts that highlight our commitment to sustainability, while identifying areas for improvement.

Governance

Marks our commitment, driven by our Board to reinforce ethical business practices and forward-looking culture under the theme 'Spirit of Responsibility'.

Economic

Defines our continued aspiration to provide reliable and efficient energy in the local and international Energy Supply Industry (ESI) for a better and brighter future under the theme 'Delivering with Purpose'.

Environmental

Defines our commitment to minimise our environmental impact wherever we operate under the theme 'Environmental Stewardship'.

Social

Revolves around how we develop long-term and meaningful relationships with our customers, employees and communities to enhance their trusts under the theme 'Embracing Relationships'.

ABOUT THIS STATEMENT

We continue to share our sustainability performance and initiatives in relation to our journey of creating value for our stakeholders. We also disclose targets for certain material matters, which are aligned to our corporate strategy and also the United Nations Sustainable Development Goals (UN SDGs).

Statement Framework, Scope & Boundary

The statement is prepared in accordance to Bursa Malaysia Securities Berhad's (Bursa Malaysia) Main Market Listing Requirements for Sustainability Statement. This statement is guided also by the Global Reporting Initiative (GRI) Standards. Various qualitative and quantitative data have been provided in this statement for the material matters pertaining to TNB's economic, environmental and social performance.

The scope of this statement is mainly centered on TNB Company's operations in Peninsular Malaysia, with selected highlights on our subsidiaries. This statement excludes any kind of outsourced, joint venture or suppliers' activities unless otherwise stated.

Statement Period

The statement period covers our Financial Year 2018 (FY2018), which is from 1 January to 31 December. Where data for FY2018 is not available, the most recent data is provided.

MANAGING SUSTAINABILITY

Our strategic plan for 2017-2025, Reimagining TNB, was developed to help transform the organisation to be amongst the leading corporations in energy and related business globally. In tandem with this, our economic, environmental and social commitments are fully aligned with our Reimagining TNB strategy.

It is important to note that sustainability is a continuous and progressive journey. With this in mind, in 2018, we are aligning our aspirations and sustainability commitments to the United Nations Sustainable Development

Goals (SDGs). In this regard, the TNB Sustainability Strategy includes our impactful contributions to four (4) SDGs namely; Goal 7 (Affordable and Clean Energy), Goal 8 (Decent Work and Economic Growth), Goal 13 (Climate Action), and Goal 17 (Partnerships for the Goals) as illustrated in the diagram below.

This section will provide an overview of our governance structure, stakeholder engagement process, identification and management of material areas, commitment to the SDGs and our sustainability initiatives.

The diagram below shows the linkages and alignment between Reimagining TNB and our sustainability commitments.



We are taking progressive steps toward ensuring sustainability principles are embedded into our decision-making process and also throughout our operations

SUSTAINABILITY GOVERNANCE

Sustainability is embedded in our company policies and is inextricably linked with our business strategy and decisions. It influences our investments, operational efficiency programmes, stakeholder engagements and climate risk mitigation efforts, among others.

TNB Board of Directors is cognisant of the importance of ensuring sustainability is integrated in the strategic direction of the organisation, decision-making processes and operational performance.

TNB's sustainability initiatives fall under the purview of the respective committees – including Sustainability Development Committee (SDC), chaired by the President/Chief Executive Officer (CEO).

The SDC's role is to review, evaluate and advise on Sustainability and Green Energy related initiatives prior to further review from other relevant committees including the Board. Decisions to escalate issues to higher approving authorities are subject to our Procurement & Supply Chain Policy and Procedures, and Limits of Authority (LOA) guidelines.

Sustainability initiatives and their implementation are cascaded down to divisions and subsidiaries for incorporation into their respective business and operational areas. Periodically, they will report on sustainability performance.

SUPPORTING THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UN SDGs)

In 2015, as part of the United Nations (UN) 2030 Agenda for Sustainable Development, 17 Sustainable Development Goals (SDGs) were adopted by 193 countries of the UN General Assembly.

As a signatory to the UN SDGs, Malaysia is committed to aligning the Nation's sustainability commitments towards the UN SDGs through partnership and collaboration. At TNB, we continuously contribute towards Malaysia's sustainability commitments and goals.

At TNB, we currently focus our contributions on four (4) UN SDGs, namely SDG 7, 8, 13 and 17. Our approach to the selection of these four (4) SDGs was based on what is most material to us as an organisation, and the areas that are most relevant to our business and operations.

TNB's contributions to the UN SDGs were not limited to the four (4) SDGs mentioned as various initiatives taken also address the other SDGs indirectly. These are further showcased in the following section (What Matters to Us, page 71). Looking ahead, we will further enhance formulation and development of relevant strategies, action plans and targets with regards to SDGs.

SUSTAINABLE DEVELOPMENT GOALS



TNB'S CONTRIBUTIONS TO UN SDGs

07 AFFORDABLE AND CLEAN ENERGY



Ensure access to affordable, reliable, sustainable and modern energy for all

Achieving this goal will contribute to economic, environmental, social development and well-being. We are focused on this goal by prioritising energy efficiency, clean energy technology and related infrastructure.

08 DECENT WORK AND ECONOMIC GROWTH



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

We have always placed great importance in creating employment opportunities that value and respect human rights. This goes well beyond legal compliance or upholding our reputation, as we also strongly believe that this is the backbone of positive business performances across our value chain.

13 CLIMATE ACTION



Take urgent action to combat climate change and its impacts

We support Malaysia's commitment to the Paris Climate Change Agreement signed at COP 21, recognising the increasing importance of mitigating and adapting to climate change. In this regard, we seek to reduce our Greenhouse Gas (GHG) emission intensity and the environmental impacts resulting from our operations.

17 PARTNERSHIPS FOR THE GOALS



Strengthen the means of implementation and revitalise the global partnership for sustainable development

We will continue to form partnerships with all stakeholders including government agencies, industry experts, businesses and NGOs, both within and outside the energy sector. This is to meet future electricity demands in a sustainable manner, as well as to give back to the community.

ENGAGING STAKEHOLDERS

Stakeholder engagement process is an important component in sustainability. The purpose of this engagement is for fostering better relationships and also for understanding their respective needs and concerns to continuously improve ourselves. At TNB, we engage with various stakeholders on a regular basis, and when required.



CUSTOMERS

Our customers comprise of domestic, commercial and industrial customers including Government, Small & Medium-Sized Enterprises (SMEs) and large corporations

- Customer service outlets
- Call centre
- myTNB application & online portals
- Customer surveys
- Social networks
- Roadshows
- Campaigns



INVESTORS

Institutional and retail investors, analysts and potential investors with interest

- Financial results announcements
- Investor relation conferences and roadshows
- One-to-one engagements
- Site visits



TRADE-UNIONS

Three (3) registered unions and two (2) workers associations that cover all categories of staff

- Joint meetings and engagement sessions
- Negotiation
- Collective Agreements
- Direct contact



COMMUNITIES

Local communities in or near areas where we operate including those affected by our operations

- Outreach programmes
- Corporate Social Responsibility (CSR) programmes
- Town halls
- Dialogue sessions
- Sporting events



GOVERNMENT

The Malaysian Federal and State Governments, parliamentarians, municipal councils and regulators

- Meetings and briefings
- Site visits
- Round table sessions
- Direct contact
- Outreach programmes



EMPLOYEES

Our 35,574 employees throughout TNB Group

Only full time employees excluding contractors

- Direct contact
- Townhalls, *turun padang* & other outreach programmes
- Online portal (intranet), newsletters, emails
- Employee surveys
- CSR events



VENDORS

4,665 contractors and suppliers

- Direct contact
- Training and workshops
- TNB Vendors Day
- Outreach programmes



NON-GOVERNMENTAL ORGANISATIONS (NGOS)

Customer/human rights groups, environmental groups and chambers of commerce

- Direct contact
- Outreach programmes
- Seminars and knowledge sharing sessions












Who are our stakeholders?

How do we engage our stakeholders?

WHAT MATTERS TO US

In FY2017 (ending 31 August 2017), we have conducted a comprehensive materiality assessment to identify matters which could have significant economic, environmental and/or social impacts on our business and stakeholders. Subsequently, we have reviewed the material matters for FY2018 and concluded that matters reported previously remained our priorities. We have also expanded our reporting scope by adding three (3) more material matters as endorsed by the Sustainability Development Committee. They are Sustainable Supply Chain, Asset Optimisation, and Waste Management.

Measures taken to manage these material matters are categorised into eight (8) thematic topics across our four (4) sustainability reporting themes – Spirit of Responsibility, Delivering with Purpose, Environmental Stewardship and Embracing Relationships. In line with our aspiration to highlight our contribution to the SDGs, we have mapped our committed SDGs to focus on our material matters while illustrating the other SDGs that our business also contributes to.

Section	Topic	Material Matters	Contribution to SDGs
Spirit Of Responsibility 	Our governing principles Promoting ethical and safe practices is driven by the TNB Board and shared by our management with all employees to reinforce sound business and forward-looking culture	<ul style="list-style-type: none"> Responsible and Ethical Business Practices 	
	Future of Energy TNB's strategic plan for 2017-2025, Reimagining TNB is anchored on maintaining our growth trajectory to emerge as one of the top 10 global utilities by 2025	<ul style="list-style-type: none"> Business and Financial Performance Energy Efficiency Fuel Mix Policy Efficient Technology and Innovation Asset Optimisation Cyber Security Management Sustainable Supply Chain Reliable Energy and Fair Tariffs Renewable Energy 	
Delivering With Purpose 	Customer Centricity We seek to win customer trust and loyalty over the long-term through effective engagement, quality service and exceptional customer experience	<ul style="list-style-type: none"> Customer Experience Energy Efficiency 	
	Minimising Environmental Impact TNB strives to protect and conserve the environment in our operations and decision-making in line with our commitment for continuous improvement of environmental performance	<ul style="list-style-type: none"> Environment Management Biodiversity Management Natural Resource Consumption Waste Management 	
Environmental Stewardship 	Climate Change We are committed towards a low-carbon economy by embracing and supporting renewable energy generation and energy efficiency to reduce greenhouse gas emissions	<ul style="list-style-type: none"> Greenhouse Gas Emissions Renewable Energy Energy Efficiency 	
	Unlocking People Value In line with designating 2018 as the Year of The People, TNB's management invested even more effort on employee engagement, and inspiring our people to embrace an "adaptive culture". The idea is to remain agile in the way we work, and be open to new ways of doing things	<ul style="list-style-type: none"> Diversity and Inclusion Workplace Culture Employee Engagement Capability Development 	
Embracing Relationships 	Generative Safety Culture We seek to create a generative safety culture in which everyone is concerned not only with his or her own safety, but also the safety of their colleagues to achieve zero accidents and fatalities	<ul style="list-style-type: none"> Safety and Emergency Preparedness Health and Well-being 	
	Brightening Surrounding Communities We strive to make people's lives better and brighter through our conviction in sustainability, and commitment towards people and the environment. We do this by supporting them with skill, sustaining the environment and enhancing their livelihood. We engage in a wide range of programmes that seek to leave a long-lasting positive impact to people and communities	<ul style="list-style-type: none"> Community Development Education 	



Spirit of Responsibility

Our Governing Principles



TNB is committed in championing good governance and ethical practices throughout the Company.

KEY HIGHLIGHTS

Obtained **ISO 37001:2016**
Anti Bribery Management
System certification

Signing of **Integrity Pledge** by
all employees

Launched
TNB Corporate Integrity
Management System (TCIMS)
Handbook

MATERIAL MATTERS

- Responsible and Ethical
Business Practices

Promoting ethical and safe practices is driven by the TNB Board and shared by our management with all our employees to reinforce sound business and a forward-looking culture

OUR GOVERNING PRINCIPLES

Integrity is at the forefront of everything we do. It is one of our Shared Values and is driven by our Board and top management. We aspire every employee upholds the highest standards of ethics in all our dealings.

We comply with all relevant regulations to ensure integrity and good governance. These include the Companies Act 2016, Bursa Malaysia Securities Berhad's Main Market Listing Requirements and the Securities Commission's Malaysian Code on Corporate Governance 2017 (MCCG). Going beyond regulatory requirements, we strive to create a culture of ethics in which integrity is paramount to everyone.

CORPORATE GOVERNANCE AT TNB

We have in place a robust Corporate Governance Model which defines the boundaries within which our employees and external parties are expected to work, and a common approach to how we conduct our business across the organisation. To read more, please refer to The Strength of Our Governance section, which can be found on pages 98 to 143 of our Integrated Annual Report (IAR).

RISK MANAGEMENT AND INTERNAL CONTROL

At TNB, we believe in the importance of integrating risk management into our processes and decision-making to enable the achievement

of our business objectives. The design and implementation of the TNB Risk Management Framework is based on the principles and guidelines expressed in ISO 31000:2009 Risk Management – Principles and Guidelines.

This is supported by our internal control framework to manage risks within tolerable levels. Group policies, codes and procedures are regularly reviewed and approved by Management and the Board. The effectiveness of implementation is consistently assessed and monitored for continual improvement.

For more information please refer to the Statement of Risk Management and Internal Control in pages 144 to 146 of our IAR.



Deputy Minister of Energy, Science, Technology, Environment and Climate Change, YB Isnaraissah Munirah Majilis launched TNB Corporate Integrity Management System (TCIMS) handbook in conjunction with TNB Integrity Day.

HEIGHTENING AWARENESS

In 2017, TNB was one of the first corporations in Malaysia to embark on the ISO 37001:2016 Anti-Bribery Management System certification. Towards achieving the certification, we launched TNB Corporate Integrity Management System (TCIMS) to drive an integrity-based culture and a high level of compliance with local and international anti-bribery standards. On 15 November 2018, we obtained the certification from Standard and Industrial Research Institute of Malaysia (SIRIM), and TCIMS is expected to be completed by late January 2019.

Further reinforcing a culture of integrity, the TCIMS handbook was launched on 19 December 2018 in conjunction with TNB Integrity Day. The handbook covers TCIMS policies on anti-bribery, gifts, hospitality & related benefits, conflicts of interest, whistleblowing, and Integrity Pact & Committee Integrity Pledges Policy.

A key highlight for this year was the signing of Integrity Pledge by all employees annually for the purpose of awareness and accountability of their respective assignments or works.

Our employees receive continuous training and awareness sessions to reinforce and instil a culture of integrity. In FY2018, 1,728 of our employees attended Integrity Engagement Programmes that were conducted nationwide. Our goal is for all companies within the Group to adopt the ISO 37001 standard. Towards this end, we will continue with various activities and programmes to inculcate integrity as part of our corporate DNA.

Direct Contribution



Delivering With Purpose

The Future of Energy



TNB gained a foothold in the country's first Large Scale Solar (LSS) through a 50MW project in Sepang, Selangor.

KEY HIGHLIGHTS

73.2MW TNB Total Renewable Energy Generation Capacity*
* Local

EAf has increased to **89.92%** above our target of **89.87%**

50MW LSS in Sepang, Selangor started operating

MATERIAL MATTERS

- Business & Financial Performance
- Energy Efficiency
- Fuel Mix Policy
- Efficient Technology & Innovation
- Asset Optimisation
- Reliable Energy & Fair Tariffs
- Sustainable Supply Chain
- Renewable Energy

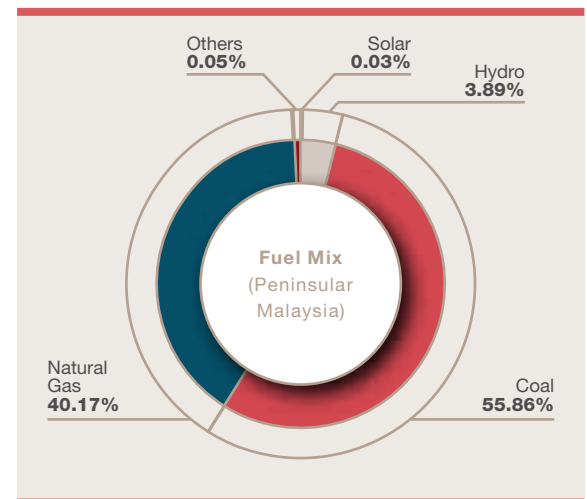
TNB's strategic plan for 2017-2025, Reimagining TNB is anchored on maintaining our growth trajectory to emerge as one of the world's top 10 global utility by 2025

DELIVERING SUSTAINABLE VALUE

For FY2018, we have seen continued stable and sustainable growth whilst creating stakeholder value. To read more on Our Business performance, kindly refer to pages 12 to 49.

Energy Industry Landscape We Operate

Our diversified generation fuel mix for Peninsular Malaysia is based on the optimal generation capacity development plan established by the Planning & Implementation Committee for Electricity Supply and Tariff (JPPPET) helmed by Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC). This plan takes into consideration the economic, environmental and energy security factors. Based on this plan, in the medium term, gas and coal will continue to be the main fuel for power generation while renewables such as solar energy will grow in importance in line with global trends.

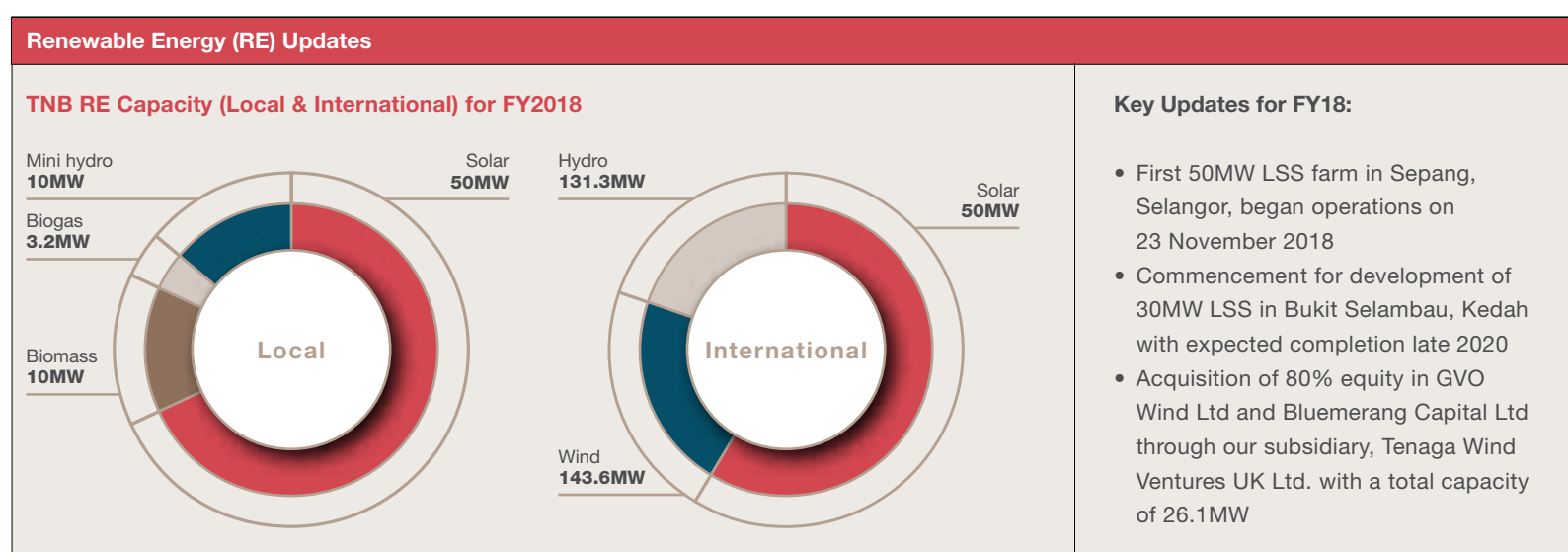


Renewable and Green Energy

MESTECC has set a target to grow renewables' proportion of the total generation capacity mix from 2% currently to 20% by 2025.

TNB seeks to be part of this growth, and has been making significant investments into various renewable sources of energy in the country. While we see conventional assets as being relatively more economical in the short term, we recognise the need to invest in renewables to help address climate change issues as well as to prepare for gradual depletion of carbon-based fuels.

TNB's target is to grow our renewable capacity to 1,700MW - domestically and internationally by 2025. In January 2018, we established TNB Renewables Sdn. Bhd. (TRe) to spearhead and accelerate our renewables business growth in Malaysia. This year also saw our 50MW LSS in Sepang, Selangor began its operations.



PROVIDING EXCELLENT OPERATIONAL PERFORMANCE

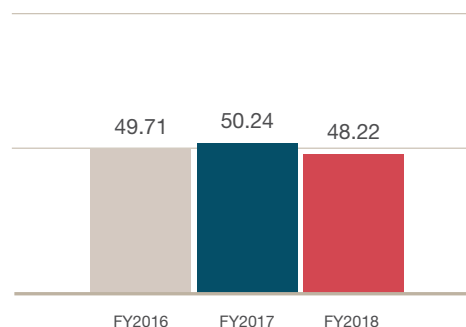
Together, our Business Continuity Management (BCM) Framework, innovation and asset optimisation plans, enable us to improve on our operational performance. In tandem with the expansion of our generation operations, our domestic wholly-owned generation plants continued to demonstrate high reliability with an increased Equivalent Availability Factor (EAF) of 89.92%, which is above our target. We also recorded a 99.79% Transmission System Availability, as well as 0.35 Transmission System Minutes in FY2018. We will continue to improve our operational performance as our commitment to our stakeholders.

Today, TNB has attained service reliability standards on par with leading power and utilities players. This is reflected in two (2) key supply parameters, namely our System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).

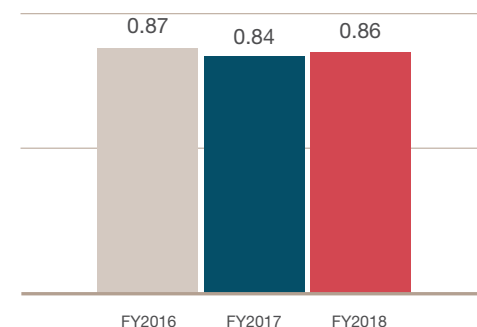
TNB's SAIDI has improved from 50.24 in FY2017 to 48.22 due to the reduction of breakdowns and forced outages in 2018 whereas the SAIFI is recorded at 0.86 in 2018.

To read more on our performance and initiatives, please refer to our 2018 Year in Review where we share our efforts towards improving our performance on pages 21 to 43.

System Average Interruption Duration Index (SAIDI)* Minutes/Customer/Year



System Average Interruption Frequency Index (SAIFI)* Frequency/Customer/Year



* For Peninsular Malaysia

Asset Optimisation through Integrated Management

Our Asset Management Plan represents an integrated enterprise solution that enables TNB to achieve optimal asset performance at a sustainable cost. Using this integrated plan, our key business units have attained ISO 55001 Asset Management certification. We have also implemented our Asset Performance Management System (APMS) that would enable us to establish a holistic view of asset management through its life cycle.

Asset management and optimisation initiatives for FY2018	<ul style="list-style-type: none"> • Preventive Maintenance (PM) and Condition-Based Maintenance (CBM) – ensures high reliability of electricity supply to the customers • SAIDI 50 Initiatives – early detection for defects, asset replacement and introduction of new technologies • Business Turnaround Programme – aimed to unlock asset potential and enhance performance of TNB's generation power plants • Intelligent Predictive and Diagnostic Monitoring (IPDM) System – system that enables plant operators to detect anomalies from operating parameters of major assets • Asset Mid-life Overhaul – introduced to prolong asset life, optimise resources and asset-reliability, reduce equipment failures, decrease maintenance requirement and reduce loss of services
Innovation initiatives for FY2018	<ul style="list-style-type: none"> • Drones – used to enhance land planning functions with drones and improve Geospatial Information System (GIS) data. 34 drones were purchased, while 34 personnel were certified as drone pilots by the Civil Aviation Authority of Malaysia (previously DCA) • Online Monitoring System for Gas Analysis – used in transformer bushing and gas insulated switchgears • “Automatic Fault Analysis and Fault Location Identification System” Project – to assist system operator and maintenance team for decision making during restoration processes – pilot project is in progress

Efficient & Advanced Technology

Innovation lies at the forefront of transforming the energy supply industry, contributing to greater efficiencies. We also invest in advanced technology and upgrade our infrastructure.

Infrastructure investment: Grid Superhighway

As electricity demand continues to increase in Peninsular Malaysia, we are safeguarding our ability to meet customers' needs by building a 500kV Grid Superhighway. Construction of the RM2 billion Grid Superhighway began in 2015 and is expected to be completed by 2020. The 500kV Grid Superhighway, dubbed as the Backbone, will enable adequate and safe power transfer from other regions into Central Area. At present, Central Area accounts for about 45% of Peninsular Malaysia's electricity demand.

GRID OF THE FUTURE – INNOVATION & SMART GRID

Under Reimagining TNB's Grid of the Future, we aim to introduce Smart Grid to customers - through modernising and digitalising our grid to cater for emerging demands and services. TNB is currently improving its grid infrastructure and has embarked on several innovative projects that will improve reliability, service quality and operational efficiency.

Projects	
① Advanced Metering Infrastructure (AMI) enhance meter reading by introducing remote automated readings and detailed load profile information which enable better load management, profiling and future tariff options	Installed 160,000 smart meters in Melaka. The installation programme will continue in Melaka and also be expanded to Klang Valley in 2019 For more information, please see page 78 under Customer Centricity
② Mobility Solutions provide a platform for increased work efficiency amongst field staff	Successfully rolled out Mobility Solution applications for smart meter installation (AMI project) - 3MS and I-nett, a tool to automate the load forecast and disaggregation process during Distribution Network Annual Planning cycle programme
③ Volt-VAr Optimisation improves electricity supply quality by optimising the network power factor which in the long run will optimise the investment of new feeders and substations	Planted up 113 MVar capacitor bank
④ Geospatial Information System (GIS) provides accurate location information to manage, operate and analyse TNB's network assets	GIS function successfully rolled out to various stations in Putrajaya, Cyberjaya and Kuala Selangor stations as per GIS Roadmap for 2018
⑤ Distribution Automation provides real-time management of network operations	For this year, 3,672 substations were converted into Supervisory Control and Data Acquisition (SCADA) enabled substations

Cyber security management – Securing our Assets through Proactive Security

We have strengthened our cyber resilience and readiness to respond to any potential attack, using our existing Cyber Security Operating Model (CSOM). Cyber security governance committees across the different lines of business also keep a firm eye on initiatives, mitigation actions, incidence response and policies to keep strengthening our barriers against ever-evolving cyber threats.

As a measure of our cyber resilience, TNB is ISO 27001:2013 Information Security Management System (ISMS) certified – and audits for the National Load Despatch Centre and critical infrastructure are conducted regularly. The year also saw us organise cyber drills and cyber-attack simulations as well as security awareness and training programmes.



Cyber drills

2 FY2016 **3** FY2017 **3** FY2018

SUSTAINABLE SUPPLY CHAIN

We recognise the need to manage our supply chain sustainably given the volume and value of our annual purchases. As far as possible, we support local suppliers in order to stimulate the local economy. We treat all our suppliers fairly and with integrity, as we seek to establish strong working relationships based on mutual respect. Towards this end, we are guided by TNB's Procurement & Supply Chain Policy and Procedures which include a Procurement Code of Conduct. Procurement at TNB is governed by our Board Tender Committee (BTC) and management tender committees.

Various initiatives have been done to enhance our technological ability to implement best procurement practices such as implementation of P&SC e-Approval (PSAS), Electronic Processes, LAPASAR (internal online purchasing channel) and Robotic Process Automation (RPA).

	FY2016	FY2017	FPE 31.12.2017	FY2018
PROCUREMENT PRACTICES				
Total spent on procurement (RM billion)	8.1	7.18	2.45	7.2
Total number of suppliers	4,685	4,514	3,206	4,665
LOCAL SUPPLIERS SUPPORTED				
Total number of local suppliers	4,550	3,281	3,132	4,514
Total spent on local procurement (RM billion)	7.44	6.64	2.28	6.80
Percentage of local suppliers (%)	97	73	98	97

Notes: • All data provided excludes fuel and energy procurement
• FPE 31.12.2017 denotes 1 September to 31 December 2017



TNB is continuously engaging and winning the customers through delivery of high quality services standards.

Direct Contribution



07 AFFORDABLE AND CLEAN ENERGY



08 DECENT WORK AND ECONOMIC GROWTH



13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS

Delivering With Purpose
Customer Centricity

KEY HIGHLIGHTS

Top quartile of CSI at **81%**

160,000 customers experienced smart meters

47,792MWh energy saving from Home Energy Report Phase 2

MATERIAL MATTERS

- Customer Experience
- Energy Efficiency

We seek to win customer trust and loyalty over the long term through effective engagement, quality service and exceptional customer experience

In line with Reimagining TNB, we strive to win our customers by building long-term and meaningful relationship through our ongoing customer-centric approaches. To date, we serve a total of 9,029,385 customers in the domestic (residential), commercial and industrial segments.

As part of efforts to enhance our customer experience, on 1 August 2018 we separated our Distribution Network and Retail Divisions. Our customer-centric Retail Division has been entrusted with further entrenching our presence in the retail space through the levers of quality customer service, innovative solutions together with customer and stakeholder communications.

We are continuously engaging the customers via various methods encompassing click, call and come over channels as part of our efforts to reach out to all walks of customers, through outreach programmes, personal engagements and meet-ups with associations, consumer groups and all related stakeholders.

TNB customers in Peninsular Malaysia FY2018	
7,362,967	Domestic
1,552,709	Commercial
29,687	Industrial
84,022*	Others
9,029,385	TOTAL CUSTOMERS

Note:

* Others consist of mining, street lighting, agriculture, RE generators and free units

Deployment of Smart Meters - Our Advanced Metering Infrastructure

TNB is currently improving its grid infrastructure in transition towards Smart Grid, where Advanced Metering Infrastructure (AMI) is being installed rapidly. This will provide customers with more detailed and near real-time information on their energy consumption as well as promote energy efficiency practices and related services.

We have installed 160,000 smart meters in Melaka as of December 2018, with a further 180,000 smart meters to be installed. Moving forward, we will roll out smart meter in urban areas of Klang Valley.

SOLUTIONS BEYOND kWh

We are continuously working on winning the customers through delivery of personalised solutions, targeted to enrich their lifestyles and improve their experience in better, brighter ways.

Energy Efficiency - Empowering Smarter Choices for Our Customers

In 2018, 40 Energy Efficiency sessions were conducted by Retail Division targeting Government agencies, NGOs, community leaders, universities, schools, as well as TNB staff. We are not only equipping our customers with the knowledge to be energy efficient, but aim to empowering them to manage energy efficiently through customer offerings and solutions.

ENERGY EFFICIENCY SOLUTIONS FOR CUSTOMERS

Home Energy Report (HER)

Using analytics, HER provides customers personalised energy usage reports. Customers can also access the HER online for tips on how to save energy in their home.

During the implementation period of October 2017 to September 2018, HER Phase II programme saved a total of 47,792MWh of electricity. This is more than triple the total energy savings achieved during the Phase I Pilot. The total of carbon emission avoidance is estimated at more than 33,168 tonnes CO₂ emissions.

Making Electricity Visible (MaEVI)

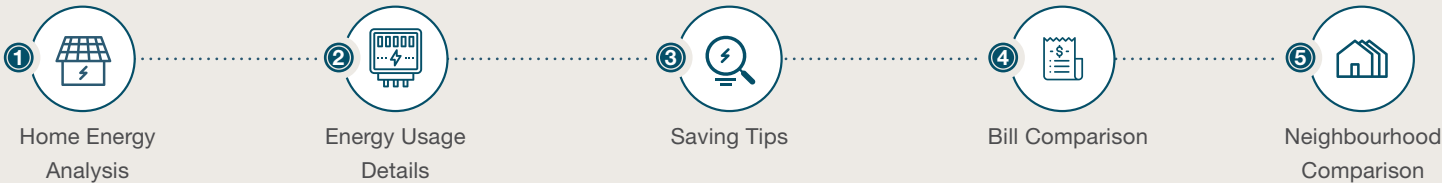
This Home Energy Management System (HEMS) helps domestic customers monitor their electricity consumption, automate their home appliances and improve their home security, through downloadable app. TNB Energy Services (TNBES) has formed MaEVI Sdn. Bhd. as a subsidiary to manage the business. To learn more, please refer to <https://maevi.my/>.

Energy Performance Contracts (EPCs)

EPCs are formed between energy services companies and facility owners with the primary purpose of improving energy efficiency through investment in energy efficient equipment.

This year, TNBES has entered into an EPC with Universiti Putra Malaysia (UPM) under which it will replace existing fluorescent light fixtures with energy-saving LED tubes. This will help UPM to reduce its electricity consumption by about 890,000kWh a year, saving about RM453,000.

HER Features



Encouraging Local RE Energy Market

We collaborate with the Sustainable Energy Development Authority (SEDA) to manage the Feed-in Tariff (FiT) programme, under which owners of solar photovoltaic (PV) systems with Feed-in Approvals are able to supply electricity to the grid for a fixed price. To date, 9,354 FiT projects have been commissioned with an installed capacity of 527.63 MW.

A new Net Energy Metering (NEM) Scheme and Supply Agreement for Renewable Energy (SARE) were announced in November 2018 to grow the solar industry by opening the market and subsequently spur local players to become regional solutions providers. Through GSPARX Sdn. Bhd., TNB is able to support the country to meet its new RE target of 20% by 2025 by assisting in the implementation of NEM and SARE. GSPARX Sdn. Bhd. provides a platform through which TNB can implement beyond-the-meter transactions for SARE such as solar leasing, Power Purchase Agreement (PPA) or a hybrid of both, as alternatives to direct purchases by customers. For more information on GSPARX Sdn. Bhd., please visit www.gsparx.com.

UNLOCKING VALUE IN LOCAL SOLAR ENERGY MARKET

GSPARX Sdn. Bhd., a fully-owned subsidiary of TNB Renewables Sdn. Bhd. (TRe), was incorporated in 2018 to grow self generation/ self consumption business. Its target is to co-invest 500MW of solar energy by 2020 with TNB's customers by offering attractive packages with flexible payment modes to make solar energy more affordable and accessible.

Benefits					
Zero upfront cost	End-to end hassle-free services	Electricity cost reduction	Minimum of 10% savings of electricity rate	Personalised energy solution	Efficient electricity management



Minister of Energy, Science, Technology, Environment and Climate Change, YB Yeo Bee Yin visited TNB's Booth during the 'International Greentech & Eco Products (IGEM 2018)'.

CUSTOMER ENGAGEMENT & SATISFACTION

We engage with our customers constantly in order to build trust, gather invaluable feedback to understand gaps in our systems, and subsequently to take corrective action when necessary.

We are currently using the annual Customer Satisfaction Index (CSI) as a measurement to gauge customer satisfaction levels with our service delivery, and how satisfied our customers are with our solutions. In addition, we also measure customer experience via the various touch points at the Kedai Tenaga outlets, TNB CareLine, myTNB application and online portal.

As a testament for our high quality products and services, we have scored 8.1 in our 2018 CSI for the third year in a row. We have also won the “Brand

of the Year” award for 2018-2019, under the power category in the national tier at the prestigious World Branding Awards.

Customer Data Privacy

As a responsible organisation, we take our duty to protect the data of our customers as a matter of priority and make every effort to comply with the Personal Data Protection Act (PDPA) 2010. Meanwhile, greater digitalisation of our services has increased the need for cyber security. To date, we have implemented over 100 security controls as part of initiatives to beef up our online payment security through the Payment Card Industry Data Security Standard (PCI DSS).



TNB CUSTOMERS' INTERACTION CHANNELS



Social Media
@TNBCareLine



Write-in (email)
tnbcareline@tnb.com.my



Web Chat



Kedai Tenaga



Kiosk



**Contact Centre &
Interactive Voice
Response (IVR)**



3rd Party Services



**Key Account
Managers**



myTNB Mobile App



Web & Self-Service



**Short Message
Service (SMS)**

myTNB Portal Features

One-stop self-service portal that integrates existing web services for greater convenience and flexibility

Remote Meter Reading Portal

Home Energy Calculator

Home Energy Report

Account Management

TNB Payment Gateway

Contractor Management

Renewable Energy Application

Supply Application

Bulk Payment

Smart Billing Portal

Environmental Stewardship

Minimising Environmental Impact

Direct Contribution

08

RECENT WORK AND ECONOMIC GROWTH

TNB carried out various initiatives to protect a number of identified endangered species of fish and terrestrial at their hydro stations.

KEY HIGHLIGHTS

Signed Memorandum of Understanding (MoU) with the Department of Environment (DOE) to embrace the Guided Self-Regulation (GSR)

Received certificate of appreciation from the DOE for the environmental sustainability efforts at National Environment Day

A total of **RM7.4 million** budgeted for fish biodiversity programmes to date

MATERIAL MATTERS

Environment Management

Water Management

Waste Management

Biodiversity Management

TNB strives to protect and conserve the environment in our operations and decision-making as our commitment to continuous improvement of environmental performance

OUR ENVIRONMENTAL POLICIES AND GOVERNANCE

Our Environmental Policy complemented by our Green objectives underlines our environmental commitment through sustainable practice. All our power plants and the Grid Maintenance Department have been ISO 14001:2015 Environmental Management Systems (EMS) certified.

We adopt best environmental practices and have embarked on a journey to implement the Guided Self-Regulation (GSR) programme encompassing all our activities and subsidiaries.

GSR was launched by the Department of Environment (DOE) on 16 October 2017 to transform regulation enforcement under the Environmental Quality Act 1974 and enhance environmental awareness and management. It is accompanied by a set of environmental mainstreaming tools for organisations to achieve self-regulation.

WATER AND WASTE MANAGEMENT

Our power plants track water consumption on a monthly basis under a plant optimisation and waste minimisation programme in compliance with ISO 14001. Any deviation from the norm is investigated and accompanied by corrective actions to stop unnecessary water loss.

We also monitor the consumption of materials such as fuel and the discharge of effluents and compare these against baseline data on regular basis.

Optimisation programmes are implemented to identify and manage any discrepancies in consumption. Industrial waste produced at TNB is handled according to the relevant regulations. Best practices have been incorporated into our Health, Safety and Environment (HSE) Department's Guidelines on Scheduled Waste Management.

BIODIVERSITY MANAGEMENT

We take responsibility in protecting and preserving the flora and fauna in our operating areas.

Our initiatives are based on local contexts and in some cases, on the International Union for Conservation of Nature (IUCN)'s Red List. The Red List guides us in monitoring and protecting the biodiversity at two (2) of our sites - the Hulu Terengganu Hydroelectric Station and Pergau Hydroelectric Station.

At Hulu Terengganu Hydroelectric Station, a total of 18 biodiversity programmes were carried out in FY2018, 9 for fish and 9 for terrestrial, with a total budgeted amount of RM3.15 million and RM2.52 million respectively. Ikan Kelah (Tor tambra) has been identified as protected species in this site, with a total count of 473 fishes as of FY2016. We also carried out various initiatives at other sites to protect this species of fish.

For the Sungai Perak Hydroelectric Station, specifically at the Temenggor Dam, a total of 11 biodiversity programmes were carried out in FY2018, 8 for fish and 3 for terrestrial, with a total budgeted amount of RM1.13 million and RM2.40 million in FY2018 respectively. There are other study initiatives other than the Kelah Sanctuary, at other sites such as the Rafflesia at X-Ray trail and the Saltlick at Sungai Papan. TNB partners with National Hydraulic Research Institute of Malaysia (NAHRIM) to study the enhancement of water management at Sungai Perak and Cameron Highlands. We also launched the “Pengurusan Lestari Sumber Asli Taman Negeri Royal Belum” programme to improve fish resource management and Rafflesia protection in Royal Belum State Park (RBSP).

IUCN Red List

Site	Key Findings							
Hulu Terengganu Hydroelectric station	Species Group		Number of Species					
	Fish					24	1	4
	Terrestrial	1	9	19	44	209		
Sungai Perak Hydroelectric station	Species Group		Number of Species					
	Fish					22	2	1
	Terrestrial		5	4	5	30		

Critically Endangered (CR)

Least Concern (LC)

Endangered (EN)

Data Deficient

Vulnerable (VU)

Not Evaluated

Near Threatened (NT)



Environmental Stewardship

Climate Change

Direct Contribution

07 AFFORDABLE AND CLEAN ENERGY



13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS





The 250MW Hulu Terengganu hydroelectric station has further boosted TNB's hydro installed capacity.

KEY HIGHLIGHTS

Reduction in **GHG emissions intensity to 0.54 tCO₂e/MWh***

Total **GHG emissions mitigation 5,030,079 tCO₂e**

Our **50MW Large Scale Solar**, cut emissions by approximately **64,000 tCO₂e/year**

* Emissions intensity in FY2017. FY2018 figures is still in progress and will be disclosed in the next financial year

MATERIAL MATTERS

- Greenhouse Gas Emissions
- Renewable Energy
- Energy Efficiency

We are committed towards a low-carbon economy by embracing and supporting renewable energy generation and energy efficiency

Under the Paris Agreement, Malaysia has committed to reduce its greenhouse gas (GHG) emissions intensity of GDP by 45% by 2030 relative to the emissions intensity of GDP in 2005. This consist of 35% on an unconditional basis and a further 10% upon receipt of climate finance, technology transfer and capacity building from developed countries. As the largest electricity supplier in Malaysia, TNB recognises that we have a significant role to play in assisting the government to achieve this goal by aligning our business activities and decisions with a carbon mitigation agenda.

Additionally, we are cognisant of growing stakeholder expectations and the latest recommendation by Bursa Malaysia's Listing Requirements on climate-related financial disclosures, based on the Task Force on Climate-related Financial Disclosure (TCFD). Looking ahead, we will ensure our alignment to the aforementioned expectations and recommendations, and will provide further disclosure on our position and approach in the future.

Guided by our Environmental Policy and Green Policy, we are also adopting more sustainable practices along our entire value chain to reduce our carbon footprint. This is accomplished through greater focus on renewable generation sources, clean power assets, and more efficient, digitalised operations.

Carbon Mitigation Initiatives

Our GHG emissions has increased to 33.50 million tCO₂e in FY2017 due to widening scope covering TNB Pasir Gudang Energy (TNB PGE) and Kapar Energy Venture (KEV). TNB's GHG emissions intensity was in the range of 0.55 tCO₂e/MWh in FY2016 to 0.54 tCO₂e/MWh in FY2017 which depends on GHG emissions per unit of electricity generation output of each particular year. To better monitor and report on our GHG emissions data, we have developed an internal online GHG Emissions Management System (GEMS), which will be rolled out in 2019.

We have been mitigating substantial emissions through an expansion of our low-carbon generation portfolio which includes large hydro, renewables (solar, mini hydro, biogas and biomass) and cleaner power assets. For instance, in November 2018, the highly anticipated Large Scale Solar (LSS) plant in Sepang, Selangor – Malaysia's first LSS – was commissioned. The 50MWac will reduce our emissions by approximately 64,000 tCO₂e/year and boost development in the surrounding areas.

Hydro projects are our major emissions mitigation contributor, with a total of 3,597,007 tCO₂e emissions mitigation in 2017. The latest coal generation plants using ultra-supercritical technology consume less fuel per MWh electricity produced in comparison to conventional coal power plant further contributing to lower carbon emissions.

TNB's GHG Emissions (tCO ₂ e)	Unit	FY2016	FY2017*
Scope 1**	tCO ₂ e	28,492,111.00	33,108,297.42
Scope 2** (Electricity Consumption)	tCO ₂ e	569,079.00	395,506.80
Total GHG Emissions Mitigation***	tCO ₂ e	2,359,770.65	5,030,079.70
GHG Emissions Intensity	tCO ₂ e/MWh	0.55	0.54

Note: Figures for FY2018 are in progress.

* Extended scope to include TNB Energy Ventures, TNB Non-Cores (Corporates) and TNB Generation subsidiaries which are TNB Pasir Gudang Energy (TNB PGE) and Kapar Energy Ventures (KEV).

** Scope 1 refers to direct emissions from owned or controlled sources, while Scope 2 emissions are indirect emissions from the generation of purchased energy.

*** Generation source/technology used include Hydro, RE and efficient technology power plant.

ENERGY CONSUMPTION AND EFFICIENCY

Through the years, we have been retrofitting facilities across our office buildings. This initiative is very much aligned and in support of the Government emphasis on energy efficiency in buildings. The total energy consumption for TNB buildings in Peninsular Malaysia for FY2018 is 322,025,722kWh.

In 2018, under Phase 2 of our Energy Efficiency Rewards Programme, we undertook five (5) Energy Efficiency Retrofitting projects across seven (7) TNB buildings nationwide:


- Centralised Energy Efficiency Monitoring System (CEEMOS)
- Energy Efficient Lighting (LED)
- Power Factor Improvement
- Chiller Optimiser
- Variable Speed Drive (VSD) for centralised AC system motors

INTERNAL AWARENESS

In 2018, a series of knowledge sharing sessions on Carbon Footprint and Mitigation Assessment to TNB Divisions were conducted in raising the awareness in greenhouse gas emissions reporting and management.




Our Wisma TNB Jalan Timur won the Energy Management for Buildings and Industries Award under the Large Building Category.




Embracing Relationship


Unlocking People Value

08 PEOPLE, ENVIRONMENT AND ECONOMIC CONTRIBUTION






KEY HIGHLIGHTS



**Malaysia Best Employer
Brand Award 2018**

by World HRD Congress



Investment up to **RM142 million** on training and development

677,960 training hours for TNB Company

MATERIAL MATTERS

- Diversity and Inclusion
- Workplace Culture
- Employee Engagement
- Capability Development

We focused in maximising the potential of human capital across the organisation in order to inspire TNB to greater heights.

In line with designating 2018 as the Year of The People, TNB's management invested even more effort on employee engagement, and inspiring our people to embrace an "adaptive culture". The idea is to remain agile in the way we work and be open to new ways of doing things

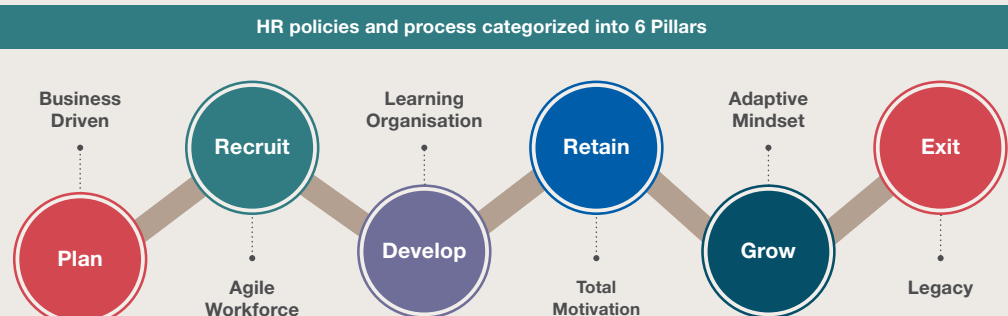
EMPLOYER OF CHOICE

As we believe our people are our most important asset, we seek to attract and retain the best talents. This, in turn, rests on being an "Employer of Choice".

HR previously launched, the "HR Guiding Principles - Focused on People with Care; Clarify of Actions with Knowledge; Simplicity of Processes with Trust." To implement and embed this throughout the organisation, we introduced the HR Leap 6 Project. Through HR Leap 6, we will continue driving towards a high-performing culture, in line with Reimagining TNB.

HUMAN RESOURCES LEAP 6

HR Leap 6 project is a strategy to support TNB towards its Reimagining TNB aspirations. HR Policies and Processes are established and reviewed in light of the Leap 6 Pillars. The objective is to transform our HR culture into an adaptive and high-performing culture. Each of the 6 pillars have an identified North Star to guide its implementation:



Through Leap 6 initiatives, we have been able to enhance HR policies and processes throughout our system for a better employee experience.

TALENT ATTRACTION

We believe in recruiting bright and young talent and develop them within the organisation. This is reflected in the age profile of our recruits where 98.9% of our new hires were millennials (total: 1,788).

Our key initiatives for FY2018 were:

- Participated in five (5) career fairs in the United Kingdom (UK) and Malaysia which also included participation from our subsidiaries
- Organised career talks and formed a strategic partnership with iCube, a UK student society
- Formed strategic partnerships with a number of local academic institutions and organisations to regularly engage with students to spark an interest in the energy industry specifically TNB
- Hosted “Tea with Tenaga” sessions at UNITEN with undergraduates from 10 universities
- In support of the Government’s SL1M initiative to train graduates who have yet to gain employment, we brought in a total of 880 trainees (up until 31 August 2018)
- Set up a dedicated onboarding team, enabling each recruit to have a single contact person pre-onboarding and on Day 1

CAREER DEVELOPMENT AND TRAINING

As part of becoming an agile workforce, we have created a High-Impact Learning Culture in which we offer our people many opportunities for growth. We view learning and development as intrinsic in the context of day-to-day work.

A total of
677,960
training hours
for TNB Company

3,120 hours
utilised for general training

Investment up to
RM142 million
on training and development

TNB employees are provided extensive on-the-job development opportunities including stretch assignments and is complemented by coaching and mentoring. One of the main focuses in FY2018 is to develop cognitive skills on Business Strategy, Financial Acumen and Customer Centricity.

Career Enhancement Management

TNB’s Career Enhancement Management (CEM) facilitate towards ensuring all employees have roles based on their skill sets and competencies. Affected employees are upskilled for present and future role requirements. Moving forward, CEM aligns its activities towards realising Reimagining TNB.

43 project
assignments in CEM platform

Establishing
Renewable Energy Community
and forecasting workforce requirements for
Renewable Energy initiatives

90.29%
CEM Engagement Score

Facilitating assignment of manpower for
Sabah Electricity Sdn. Bhd. (SESB)
Task Force SAIDI 150

Division Academies

To accelerate technical capability development at TNB, we collaborated with ILSAS to set up separate academies for Generation, Grid, Distribution and Procurement Divisions. The objective is to produce Subject Matter Experts (SMEs) in each division who will coach others and provide on-the job technical upskilling to enhance performance.

Generation Division was the first academy being set up and had produced 215 SMEs. The SMEs play a major role in the Division Transformation Programme which has accumulated savings of RM1.82 billion since FY2014. Other key initiatives for the year include:

- Generation Leadership Development (GLD) Programme to develop the talents to become the future Functional and Business Leaders for TNB
- SMEs Development Programme to develop executives and supervisors with specialised skill sets

Leadership Development

Nurturing leaders at all levels not only motivates our employees, it also strengthens our succession planning, enabling us to develop a strong pipeline of leaders. This has been integrated into employees’ Competency Assessment alongside Technical Competencies.

Our Leadership Development Centre (LDC) designs new experiential leadership and development programmes to coach and mentor employees at all levels. So far, 2,496 training hours have been recorded in FY2018.

In August 2018, 30 employees selected for the MBA programme in 2017 graduated from our third cohort of UNITEN/Melbourne Business School (MBS) programme.

We also have introduced new programmes such as New Leadership Initiative: Global Leaders Programme where specialised training programmes were organised in different countries and operations to ensure succession of qualified employees with both core and functional competencies.

UPDATE ON OUR LEADERSHIP DRIVE

Leadership Drive (LD) blends experiential with classroom lessons and mission-based work assignments. Launched in FY2016 targeting high potential executives, we have trained three (3) batches of employees. The third batch was specifically for senior managers. Future programmes will be extended to managers and executives.

Season	No. of Talents
LD One	32
LD Two	11
LD Three	70

ENGAGING AND LISTENING TO OUR PEOPLE

We engage employees in two-way communication in order to harness their views for the benefit of the Company.

Channels of communication



Online/virtual

- Intranet
- Bulletins
- Tenagawan Daily newsletter
- Social Media
- TV TNB/Info TV
- Livewire

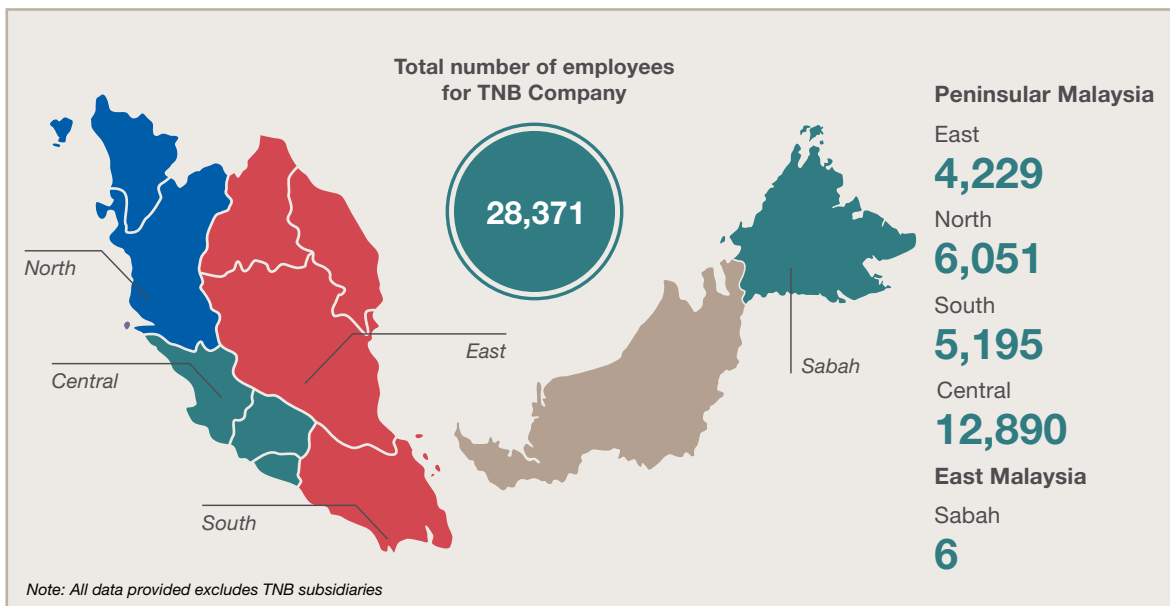


Physical Engagements

- Townhall
- Outreach and learning sessions
- Morning talk

DIVERSITY AND INCLUSION

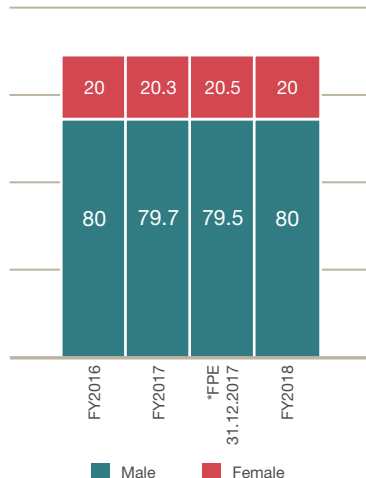
We recognise the value that diversity brings to the workplace, in broadening our intellectual perspective and enriching the basis on which important decisions are made. We provide a convenient work space where people of diverse backgrounds feel safe and motivated to work.



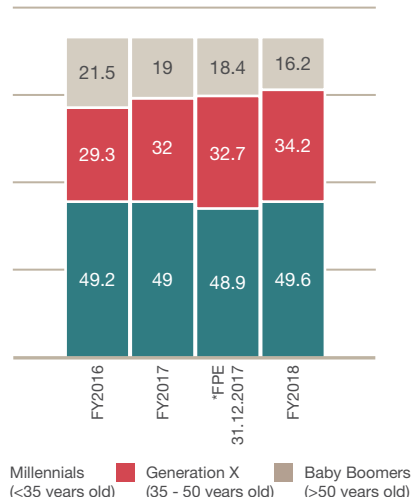
Total number of employees for TNB Group

35,574

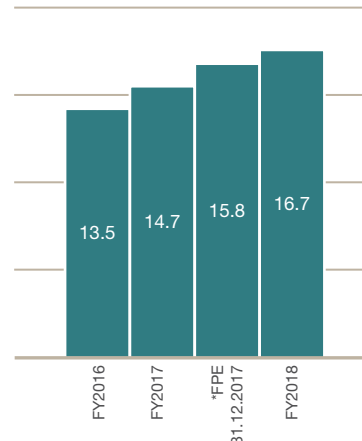
Breakdown By Gender (%)



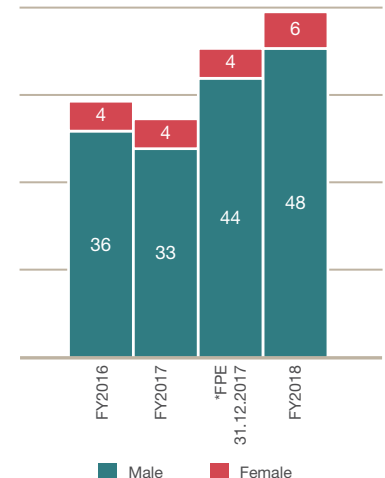
Breakdown By Age Generation (%)



Women In Senior Management (%)



Employees With Disabilities (No.)





Embracing Relationship Generative Safety Culture



Health and Safety will always be on top of our agenda and this shall be based on respective each other and guided by rules.

KEY HIGHLIGHTS

Tenaga Safety Culture launched to inculcate four (4) core values

- Assess
- Intervene
- Comply
- Actively Caring

5 Integrated Community-Based Disaster Management (ICBDM) exercises conducted

Won **Golden Globe Tigers Award 2018 - Best in Managing Health at Work**

by World HRD Congress

MATERIAL MATTERS

- Safety and Emergency Preparedness
- Health and Well-being

We seek to create a Generative Safety Culture in which everyone is concerned not only of his or her own safety, but also the safety of their colleagues to achieve zero accidents and fatalities

WHAT SAFETY MEANS TO US

Our people are exposed to various risks in their line of work, thus, we never compromise on safety and ensure everyone "Get Home Safe". We are guided by TNB's Safety and Health Policy to produce a comprehensive safety governance framework. Safety and Health Committees have been set up in all departments and all committee members meet on a quarterly basis to discuss safety performance and address any shortcomings.

As part of continuous efforts to improve our safety procedures, we introduced a new HSE management manual, namely the Health, Safety and Environment Management System (HSEMS). The manual is expected to be fully implemented by end of 2020. Supplementing our aspiration for a safe work culture, we also have TNB's Life-Saving Rules (LSR), which comprises nine (9) rules focused on saving lives and preventing serious injuries.

All our power plants and grid have been Occupational Health and Safety Assessment Series certified (OHSAS 18001:2007) while our Distribution Network Division has embarked on implementing this standard and expects to be certified by end 2019.

Safety Performance

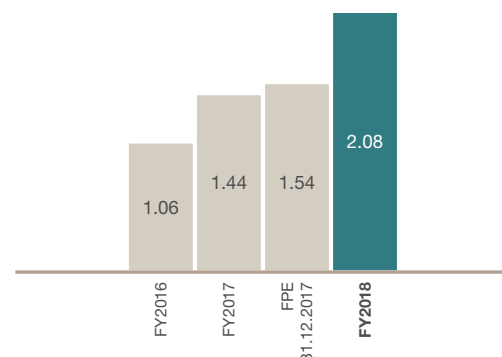
In FY2018, we have recorded a Lost Time Injury Frequency (LTIF) of 2.08 with higher accidents reported throughout the Company. Unfortunately, we have recorded 2 employee fatalities and 4 fatalities involving contractors. Our statistics show that 48% of Lost Time Injury (LTI) cases are motor vehicle accidents.

To increase awareness and as part of mitigation efforts, we have conducted motorcycle safe riding programme for all meter readers in collaboration with Malaysian Institute of Road Safety Research (MIROS) as well as audit for safe riding implementation. Moving forward, we will

strive towards enforcing greater awareness and inculcate a stronger safety culture to improve our overall safety performance.

Number of Lost Time Injuries	Number of Lost Days	Lost Days Severity Rate (per million man hours)
153	13,531	185.16

Lost Time Injury Frequency (LTIF) (Per Million Man-Hours)



Notes: • All data provided excludes TNB subsidiaries
• FPE 31.12.2017 denotes 1 September to 31 December 2017

Emergency Preparedness

Our group-wide business continuity is safeguarded by the TNB Business Continuity Management (BCM) Framework, which enables prompt and coordinated response and recovery in the event of a crisis. At the corporate level, the effectiveness of the framework was tested through communication and full-scaled drills in response to electricity supply disruption scenarios.

This framework is the focal point of reference for business units in formulating and implementing its BCM strategy and practices tailored to its business objectives and critical functions. For example, power plants are responsible to design, implement and regularly test their emergency response and recovery plans. In addition, our Integrated Community Based Disaster Management exercises are conducted for communities close to our hydroelectric power plants and in FY2018, these were conducted in Cameron Highlands, Hulu Terengganu and Kuala Kangsar districts.

SUPPORTING EMPLOYEE HEALTH & WELLNESS

We promote a healthy lifestyle among employees and their families through our Total Wellness Programme. To date, the Total Wellness Programme has been conducted at 135 stations nationwide, where face-to-face awareness and education sessions are held with employees. We have also compiled the health data of 16,634 employees based on screening results.

Some of our highlights for FY2018 include:

- TNB's 71 Kelab Kilat around Malaysia organised various health-promoting activities
- Signatory to the Ministry of Health's Healthy Community, Mighty Country (KOSPEN) programme which focuses on weight management, health screening and maintaining a positive mental outlook
- Organised TNB Family Wellness Day involving 9,657 TNB staff
- Eight (8) TNB cafeterias have been certified "healthy" by the Ministry of Health
- A total of 61 TNB gyms were established across TNB offices

More initiatives are in the pipeline under the Total Wellness Programme as we look to expand the reach of the programme and nurture healthy and health-conscious workforce.



TNB encourages wellness in our workplace by adopting various approaches to monitor employees' health and promote regular physical activities.



Embracing Relationship

Brightening Surrounding Communities

Direct Contribution

08 RECENT WORK AND ECONOMIC GROWTH

17 PARTNERSHIPS FOR THE GOALS



We seek to create better brighter lives by providing a positive impact on the communities in which we operate.

KEY HIGHLIGHTS

Total contributions/ sponsorships of approximately **RM14.2 million**

Allocated **RM10 million** under **My Brighter Future** programme

110,335 streetlights replaced with LED lights nationwide

MATERIAL MATTERS

- Community Development
- Education

We strive to make people's lives better and brighter through our conviction in sustainability, and commitment towards people and the environment. We do this by supporting them with skill, sustaining the environment and enhancing their livelihood. We engage in a wide range of programmes that seek to leave a long-lasting positive impact to people and communities

GIVING BACK TO THE COMMUNITY

We seek to create better, brighter lives by providing a positive impact on the communities through our initiatives and investments in community programmes that support Nation-building.

Aside from self-initiated programmes, we also form partnerships with the government, charitable bodies and NGOs. In FY2018, our total contributions and sponsorships were approximately RM14.2 million.

Our focus are based on our beliefs as follows:

- Economic & Social - We believe that capability, social, and community development support livability and enhancing livelihood by uplifting the economic and social quality of life.
- Environment - We believe that the future of our planet and next generation depends on our responsible behavior today.
- Education - We believe education can transform lives of not just one individual but families and generation.



TNB continues to uplift the lives of the communities in the areas of education, human capital development and community enrichment.

Economic and Social Transformation Programmes

Rewiring Programme

- 83 homes were refurbished at a cost of RM192,987.18
- TNB targets to rewire 1,000 underprivileged homes across Peninsular Malaysia



LED Streetlight Replacement Programme

- Total of 110,335 units of LED lights have been installed nationwide to replace ordinary High Pressure Sodium Vapour (HPSV) lamps



Rural Electrification Programme (Bekalan Elektrik Luar Bandar (BELB))

- BELB Kampung Orang Asli Sungai Siput Perak Phase 1 – Pos Yum, Kuala Mu and Kampung Jong was completed (tested and commissioned on 24 December 2018)
- Under BELB 2017-2018, TNB was contracted to supply electricity for 30 *Kampung Orang Asli* across 6 states in Peninsular Malaysia - to date, we have completed 41% of the installation
- The purpose of the Rural Electrification programme is to support the bigger agenda to increase well-being and the social economy of the communities in the rural areas



Village Street Lighting Project (Lampu Jalan Kampung (LJK))

- Phase 8 completed with 91,782 lights installed (81,249 in Peninsular Malaysia and 10,533 in Sabah)
- Phase 9 progress is currently at 90.53%, where 25,131 out of 27,760 units installed to-date
 - Covers Peninsular Malaysia and Sabah (including Labuan) with a total cost of RM30.76 million



Home For Needy Programme

- Programme benefited 150 families, from a total contribution of RM7.5 million
- *Projek Baiti Jannati* – 122 families benefited from a total contribution of RM6.1 million
- *Program Mesra Rakyat* – 28 families benefited from a total contribution of RM1.4 million



Better Brighter Shelter (BBS) Programme

- Total sponsored in FY2018 is RM2.2 million
- As of 2018, 19,857 people benefited from the Better Brighter Dormitory for the Institut Jantung Negara (IJN)
- To date, 2,000 people benefited from the Better Brighter Anjung Kasih at Hospital Serdang, Yayasan Kebajikan Negara (YKN)
- It is expected that this programme will be expanded to the state of Melaka by 2019



Environmental Sustenance Programmes

Fireflies Conservation Project



- Total of RM1.9 million was disbursed in FY2018 in terms of Research & Development (R&D)
- Three (3) more villages were added in addition to Kampung Kuantan (Selangor): Kampung Yak Yah, Kemaman (Terengganu), Kampung Sungai Timun, Rembau (Negeri Sembilan) and Kampung Dew, Taiping (Perak)

Tree For A Tree Programme



- Invested a total of RM1.56 million to plant a total of 17,608 trees since the programme's inception

TRANSFORMING LIVES THROUGH EDUCATION

Our educational efforts are undertaken by our foundation, Yayasan Tenaga Nasional (YTN) as well as our EduHub, which groups together Universiti Tenaga Nasional (UNITEN); Leadership Development Centre (LDC) and our in-house capacity building centre, TNB Integrated Learning Solutions (ILSAS).

Yayasan Tenaga Nasional (YTN)

YTN was founded in 1993 to provide financial aid to various communities and organisations. Today, its focus is primarily on education, and specifically its scholarship programmes.

The foundation's objectives are:

- To establish, maintain and administer scholarship funds and to award scholarships for pre-university, undergraduate or postgraduate studies at any institution
- To foster, develop and improve different types of education as approved under the Educational Law of Malaysia
- To grant donations to local and national institutions or organisations approved by the Director General of Inland Revenue
- To assist, aid and provide relief to the poor and needy

To date, more than 11,000 students have been able to pursue tertiary education, either locally or abroad. YTN runs motivational and thought-leadership programmes for its scholars and other Malaysian youth. For further information on YTN's initiative, visit <https://ytn.tnb.com.my/>.

YTN updates in FY2018



Total spend on **YTN scholars**

RM35 million



Number of **YTN scholarship awarded**

816 students

UNITEN – the Energy University

UNITEN plays a significant role in offering local and international students quality engineering, IT and business management programmes at the foundation, diploma, undergraduate and postgraduate levels. The university has also been at the forefront of energy research since it was established in 1997, leveraging TNB's extensive industry experience in power generation, grid and distribution network.

UNITEN Highlights

3,145

graduates produced for FY2018

93.69%

Employability rate within **6 months**

**TOP 7 in
Malaysia**

in **Times Higher Education
(THE) World University
Rankings 2019**



Entry into
Malaysia Book of Records
for the
**Most Number of Paper
Bags**
made from Recyclable
Newspapers



UNITEN Initiatives

Reducing Plastic Pollution through “Project Newspaper”	Smart UniverCity	Research Hub
300 volunteers from UNITEN took part in Project Newspaper “There’s No Planet B”. Together with visitors, they made 21,505 paper bags from used newspapers, earning an entry into the Malaysia Book of Records for the Most Number of Paper Bags made from Recyclable Newspapers.	UNITEN Smart UniverCity, implemented in 2018 is a collaboration between UNITEN and TNB to enable UNITEN to become a living lab for smart city solutions. There are five (5) aspects of Smart UniverCity, namely: Smart Lifestyle, Smart Infrastructure, Smart Energy, Smart Mobility and Smart Education. 	UNITEN Research Hub was officially launched in 2018 which comprises six (6) research entities namely the Institute of Power Engineering (IPE), the Institute of Sustainable Energy (ISE), the Institute of Energy Policy & Research (IEPRE), the Institute of Informatics & Computing in Energy (IICE), the Institute of Energy Infrastructure (IEI) and the Innovation & Research Management Centre (IRMC). The establishment of this hub defines the determination of UNITEN in producing cutting-edge research that will best serve the society. The hub also highlights opportunities, research and programmes that corresponds to the long-term need of the university’s stakeholders.

304 staff
with
147 trainers

Surpassed
RM136 million
revenue in FY2018

50,571 individuals
trained*

* Number of individuals trained is recorded in accumulative man-days

TNB Integrated Learning Solution (ILSAS)

ILSAS has provided technical training and specialised services to TNB and the energy supply industry for over 30 years. The range of programmes and services offered supports its transformation into a leading energy learning centre. Looking ahead, ILSAS has developed a business plan for 2019 – 2030 to be a Global Leader Learning Solution Provider.

Notable recognitions and achievements in FY2018

- Approved City and Guilds (UK) Centre
- Institute of Leadership Management (ILM) (UK) Centre
- Department of Occupational Safety and Health (DOSH) Examination Centre
- Awarded the Top 20 Training Providers under the Human Resources Development Fund (HRDF), almost every month



Educational Development Programmes

Trust Schools Programme

- Public-private partnership between Malaysia's Ministry of Education and Khazanah Nasional's Yayasan AMIR
- Total contribution of RM6.4 million to our eight (8) adopted schools
- TNB has committed to providing RM800,000 per year to each of the eight (8) schools over a period of five (5) years



Back-To-School Programme

- Benefited 13,040 underprivileged primary school students from 50 locations nationwide
- All students received various school supplies amounting to RM1.94 million

My Brighter Future (MyBF) Programme

- TNB allocated RM10 million for 1,000 students from low-income families for this scholarship programme through YTN
- The scholarship is offered for studies in the fields of Science, Technology, Engineering and Mathematics (STEM)



Pintar School Adoption Programme

- Total contribution of RM1 million in FY2018
- 18 schools adopted for the next three (3) years from FY2017 onwards
- 58 schools adopted nationwide to-date



National Hockey Development and Thunderbolts Programme

- Four (4) schools adopted since programme inception:
 - Sekolah Sukan Bukit Jalil, Federal Territory of Kuala Lumpur
 - Sekolah Sukan Tunku Mahkota Ismail, Johor
 - Sekolah Menengah Kebangsaan Seberang, Temerloh, Pahang
 - Sekolah Menengah Kebangsaan Anderson, Ipoh, Perak
- The total contribution of RM6 million in FY2018 included sponsorship to Malaysia Hockey Confederation in supporting national hockey tournament

B40 Programme

- Joint collaboration with Yayasan Raja Zarith Sofiah, Johor to help students from B40 families (RM3,000 or less per month)
- 54 students from three (3) schools within the vicinity of TNB's Headquarters in Kuala Lumpur are to receive RM1,500 per year for a period of three (3) years (2018-2020) and sponsored to attend any value-added programme organised by TNB such as motivational camps, outreach programmes and others



TOWARDS A GREENER AND BRIGHTER FUTURE



As Malaysia's premier utility company, we're not just looking to nature to power the demands of a growing population; we're harvesting ideas for a sustainable energy system. We're not just calculating wind speeds or hours of sunshine, we're counting the ways in which we can make a difference. It's all part of our blueprint for a better world. And today, we're expanding to Pakistan, India, Turkey, Saudi Arabia, the United Kingdom and beyond, so we can be part of the global energy transition towards a cleaner, bright future.

The background of the entire page is a bokeh effect of out-of-focus lights in warm colors like yellow, orange, and red. A semi-transparent red rectangle is positioned in the upper half of the page, serving as a backdrop for the title and table of contents.

THE STRENGTH OF OUR GOVERNANCE

98	Chairman's Introduction
100	A Committed Board
111	An Effective Leadership
118	Leadership & Effectiveness <ul style="list-style-type: none">- Nomination and Remuneration Committee Report
132	Accountability <ul style="list-style-type: none">- Audit Committee Report- Risk Committee Report- Internal Audit Function
141	Relations with Shareholders
144	Statement of Risk Management and Internal Control

CHAIRMAN'S INTRODUCTION



TAN SRI LEO MOGGIE
Chairman

**Integrity is
embedded
into the entire
organisation and
flows through
our culture and
intrinsic values.**

At TNB, we work with integrity at all times, recognising that in doing so the Company will maintain the trust of its many stakeholders. We are committed to working responsibly as part of our strategy to deliver value for all stakeholders and engaging with our stakeholders on a regular basis, with a clear focus on working in a safe and secure, as well as environmentally and socially responsible manner.

WE...

BUILD RESPECT

We build respect by communicating openly with each other and our stakeholders, listening effectively and providing feedback and recognition in a constructive way.

NURTURE RELATIONSHIPS

We work closely with our stakeholders – colleagues, local communities, contractors, suppliers, governments, regulators, non-governmental organisations, industry partners and shareholders.

ACT RESPONSIBLY

We act with honesty and integrity to ensure all our operations are carried out safely and empower our people to achieve their goals and contribute to the wider performance of the business in a responsible manner.

The Board recognises its important role in demonstrating high standards of corporate governance and understands that an effective, challenging and diverse Board is essential to enable the Company to deliver its strategy in line with shareholders' and other stakeholders' long-term interests, whilst also generating confidence that the business is conducting itself in an ethical and responsible manner. The Board is especially pleased that this unwavering commitment to good governance has resulted in the Company being awarded the ISO 37001 Anti-Corruption Management System by SIRIM. This award, coupled with the TNB Corporate Integrity Management System Handbook further strengthens our resolve to act with utmost integrity.

During the year, the Board welcomed several new members that bring not only additional skills, knowledge and expertise but also diversity. The Board realised its commitment to achieving at least 30% female representation at Board level with the addition of Ong Ai Lin, as an Independent Non-Executive Director. Ong Ai Lin is a seasoned executive with both economics and accounting backgrounds. Towards the mid-to-end of the financial year, the Board also welcomed Datuk Ahmad Badri bin Mohd Zahir as a Non-Independent Non-Executive Director and Gopala Krishnan K.Sundaram as an Independent Non-Executive Director. Each of these individuals brings skills and experience to aid the Board's discussions. On 15 March 2019, the Board has appointed Dato' Roslina binti Zainal, a former Vice President, Regulatory Economics and Planning, TNB as the Non-Independent Non-Executive

Chairman's Introduction

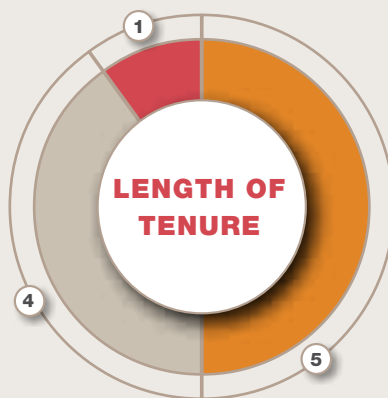
Director. Her inclusion shall further strengthen the Board and give valuable insight on the future regulatory landscape of the electricity industry. Further details of the appointment of the new Non-Executive Directors are provided on pages 107 to 109. The Board also thanked the departing members for their insightful contributions and for laying the foundations of strengthened governance within the Group.

The Board spends considerable time focusing on how the strategy is being implemented and monitoring progress. We also focus on the longer-term future and the implications that a changing marketplace might have for the business. We do this in several ways, including actively seeking out internal and external perspectives on how the marketplace might develop, the risks and opportunities which exist and how these are being addressed.

The Board has continued to devote time to strengthening risk management systems across the Group and this has generated thoughtful discussion on risk appetite and risk mitigation in both the Board Risk Committee and around the boardroom table. The approach taken by the Group to risk management, and how it tracks and mitigates the principal risks it faces, is intended to enable the Group to respond swiftly to changing market conditions or external events as they arise.


TAN SRI LEO MOGGIE
Chairman

BOARD BALANCE AND COMPOSITION



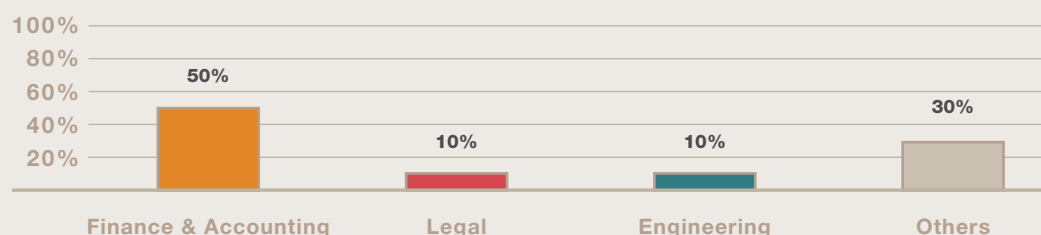
> 5 Years

< 1 Year

1 - 5 Years

The difference of tenure served by our Board ensures we optimise transparency and accountability.

DIRECTOR'S CORE AREA OF EXPERTISE



The diversity of expertise among our Board ensures we achieve a balanced perspective in decision-making.

The following pages provide an explanation of our work throughout the year, and detail our continued commitment to deliver transparent and sustainable value to all our stakeholders.

A COMMITTED BOARD



Chairman of
Respective Committee



Board Audit
Committee



Board Finance And
Investment Committee



TAN SRI LEO MOGGIE

Chairman, Non-Independent Non-Executive Director*

*Appointed Director of TNB

Age: **77** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **12 APRIL 2004**

Year(s) of Directorship:

15 years

Date of Last Re-Appointment:

18 December 2017

Board Meeting Attendance in the Financial Year:

20/21

Qualification(s):

- Master of Arts in History, University of Otago, New Zealand
- Master of Business Administration, Pennsylvania State University, United States of America

Membership of Board Committee(s):

F

Present Directorship(s):

Listed Entity

- Nil

Other Public Company

- Chubb Insurance Malaysia Berhad

Skills, Experience and Expertise:

- Minister of Energy, Communications and Multimedia (1998 - 2004)
- Minister of Works (1989 - 1995)
- Minister of Energy, Telecommunications and Posts (1978 - 1989 and 1995 - 1998)
- Minister of Local Government, State Government of Sarawak (1977 - 1978)
- Minister of Welfare Services, State Government of Sarawak (1976 - 1977)
- Member of Council Negri Sarawak (Sarawak Legislative Assembly) (1974 - 1978)
- Member of Parliament (1974 - 2004)
- Civil Servant in the Sarawak State Civil Service (1966 - 1974)

* Appointed Director pursuant to Clause 20(2) of TNB's Constitution.

A Committed Board

T Board Tender Committee	NR Board Nomination And Remuneration Committee	R Board Risk Committee	L Board Long Term Incentive Plan Committee	I Board Integrity Committee
---------------------------------	-------------------------------------------------------	-------------------------------	---------------------------------------------------	------------------------------------



AMIR HAMZAH BIN AZIZAN

President/Chief Executive Officer, Non-Independent Executive Director*
*Appointed Director of TNB

Age: 51 Gender: MALE Nationality: MALAYSIAN Date Appointed to the Board: 2 APRIL 2019

<p>Year(s) of Directorship: Less than one (1) year</p> <p>Board Meeting Attendance in the Financial Year: NA</p>	<p>Qualification(s):</p> <ul style="list-style-type: none">• Bachelor of Science Degree in Management (Majored in Finance and Economics), Syracuse University, New York, United States of America• Stanford Executive Programme, Stanford University, Stanford, United States of America	<p>Membership of Board Committee(s): Attends Board Committees’ Meetings (By Invitation)</p> <p>Present Directorship(s):</p> <p>Listed Entity</p> <ul style="list-style-type: none">• UEM Edgenta Berhad <p>Other Public Company</p> <ul style="list-style-type: none">• Nil
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Skills, Experience and Expertise:

<ul style="list-style-type: none">• Group Chief Executive Officer, Themed Attractions Resorts & Hotels Sdn. Bhd. (2017 - April 2019)• Managing Director, Icon Offshore Berhad (2016 - 2017)• Vice President (Lubricants Business), Petroliam Nasional Berhad (2013 - 2016)• Group Managing Director/Chief Executive Officer, Petronas Lubricants International Sdn. Bhd. (2012 - 2016)• Vice President (Downstream Marketing), Petroliam Nasional Berhad (2011 - 2013)• Managing Director & Chief Executive Officer, Petronas Dagangan Berhad (2010 - 2011)• President & Chief Executive Officer, MISC Berhad (2009 - 2010)	<ul style="list-style-type: none">• President & Chief Executive Officer, AET Tankers Holding Sdn. Bhd. (2005 - 2008)• Regional Business Director, MISC Berhad (2004 - 2005)• General Manager, Corporate Planning, MISC Berhad (2000 - 2004)• Senior Treasury Advisor, Shell International Ltd. (1997 - 2000)• Manager, Planning & Support, Sarawak Shell Bhd. (1996 - 1997)• Performance Improvement Advisor, Sarawak Shell Bhd. (1996)• Head of Financial Services, Sarawak Shell Bhd. (1995 - 1996)• Corporate Finance Advisor, Shell Malaysia Ltd. (1993 - 1995)• Marketing Credit Accountant, Shell Singapore Petroleum Company (Pte) Ltd. (1992 - 1993)
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A COMMITTED BOARD



Chairman of
Respective Committee



Board Audit
Committee



Board Finance And
Investment Committee



DATUK AHMAD BADRI BIN MOHD ZAHIR

Non-Independent Non-Executive Director*

*Appointed Director of TNB

Age: **59** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **1 NOVEMBER 2018**

Year(s) of Directorship:

Less than one (1) year

Board Meeting Attendance in the Financial Year:

2/4 (since appointment date)

Qualification(s):

- Master in Business Administration, University of Hull, United Kingdom
- Degree in Land and Property Management, MARA Institute of Technology (now MARA University of Technology), Malaysia
- Diploma in Public Administration, National Institute of Public Administration (INTAN), Malaysia
- Diploma in Land and Property Management, MARA Institute of Technology (now MARA University of Technology), Malaysia

Membership of Board Committee(s):

T **NR** **L**

Present Directorship(s):

Listed Entity

- Nil

Other Public Companies

- Permodalan Nasional Berhad
- DanaInfra Nasional Berhad

Skills, Experience and Expertise:

- Secretary General of Treasury, Ministry of Finance (12 September 2018 - Present)
- Deputy Secretary General (Management), Ministry of Finance (1 April 2018 - 11 September 2018)
- Director of National Budget Office, National Budget Office, Ministry of Finance (2 February 2016 - 31 March 2018)
- Under Secretary, Strategic Investment Division, Ministry of Finance (13 January 2014 - 1 February 2016)
- Deputy Secretary, Loan Management, Financial Market & Actuary Division, Ministry of Finance (29 July 2010 - January 2014)
- Senior Principal Assistant Secretary, Market Loan, Bilateral & Multilateral Section, Finance Division, Ministry of Finance (April 2007 - 28 July 2010)
- Principal Assistant Secretary, Market Loan Unit, Finance Division, Ministry of Finance (July 2000 - March 2007)
- Director's Advisor, Asian Development Bank, Manila, Philippines (July 1997 - June 2000)
- Assistant Secretary, Bilateral Unit, Finance Division, Ministry of Finance (October 1995 - June 1997)
- Assistant Secretary, Multilateral Unit, Finance Division, Ministry of Finance (August 1989 - June 1994)
- Senior Valuation Executive, C.H. William, Talhar & Wong Sdn. Bhd. (Chartered Surveyors) (1986 - June 1988)

* Appointed Director pursuant to Clause 20(2) of TNB's Constitution.

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A Committed Board

T Board Tender Committee	NR Board Nomination And Remuneration Committee	R Board Risk Committee	L Board Long Term Incentive Plan Committee	I Board Integrity Committee
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AMRAN HAFIZ BIN AFFIFUDIN

Non-Independent Non-Executive Director*

*Appointed Director of TNB

Age: **44** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **22 JUNE 2017**

Year(s) of Directorship:

One (1) year

Date of Last Re-Election:

18 December 2017

Board Meeting Attendance in the Financial Year:

20/21

Qualification(s):

- Bachelor of Science in Commerce (Majoring in Accounting and Finance), the McIntire School of Commerce, University of Virginia, Charlottesville, United States of America
- Attended executive/professional courses at Harvard Business School and London Business School

Membership of Board Committee(s):

F **NR** **L** **I**

Present Directorship(s):

Listed Entity

- Nil

Other Public Companies

- Biotropics Malaysia Berhad
- Blue Archipelago Berhad
- Malaysian Agrifood Corporation Berhad
- Iskandar Investment Berhad

Skills, Experience and Expertise:

- Executive Director, Investments, Khazanah Nasional Berhad (20 April 2018 - Present)
- Director, Investments, Khazanah Nasional Berhad (2013 - 2018)
- Senior Vice President, Investments (Property/Healthcare), Khazanah Nasional Berhad (2011 - 2013)
- Investment Manager, Ethos Capital Sdn. Bhd. (2009 - 2011)
- Principal Consultant/Advisor, Nusa Capital Sdn. Bhd. (2006 - 2009)
- Director, Juwana Group of Companies (2005 - 2006)
- Senior Vice President, Namirah Ventures Pte Ltd (2000 - 2005)
- Analyst, Equities Investment, Petroleum Nasional Berhad (1998 - 2000)
- Corporate Finance Executive, Group Finance Division, Petroleum Nasional Berhad (1997 - 1998)

A COMMITTED BOARD



Chairman of
Respective Committee



Board Audit
Committee



Board Finance And
Investment Committee



NORAINI BINTI CHE DAN

Senior Independent Non-Executive Director

Age: **62** Gender: **FEMALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **2 JANUARY 2016**

Year(s) of Directorship:

Three (3) years

Date of Last

Re-Election:

15 May 2018

Board Meeting Attendance in the Financial Year:

19/21

Qualification(s):

- Member of Malaysian Institute of Accountants
- Member of Malaysian Institute of Certified Public Accountants
- Bachelor of Arts (Economics) (Hons.), University of Manchester, United Kingdom

Membership of Board Committee(s):

A **F** **NR** **R** **L**

Present Directorship(s):

Listed Entities

- S P Setia Berhad
- BIMB Holdings Berhad

Other Public Company

- Bank Islam Malaysia Berhad

Skills, Experience and Expertise:

- Has over 30 years of experience in audit and finance
- Served Pernas International Holdings Berhad for 15 years in various capacities including as Group General Manager Finance and Chief Financial Officer
- Head of Finance and Vice President of Finance, MISC Berhad for a total of 10 years
- Former Director, Labuan Reinsurance (L) Ltd.
- Senior Auditor in the firm of Hanafiah Raslan & Mohamad

A Committed Board

T Board Tender Committee	NR Board Nomination And Remuneration Committee	R Board Risk Committee	L Board Long Term Incentive Plan Committee	I Board Integrity Committee
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GEE SIEW YOONG
Independent Non-Executive Director

Age: 69 Gender: FEMALE Nationality: MALAYSIAN Date Appointed to the Board: 2 JANUARY 2016

Year(s) of Directorship: Three (3) years	Qualification(s): <ul style="list-style-type: none">• Member of Malaysian Institute of Accountants• Member of Malaysian Institute of Certified Public Accountants• International Banking Summer School, Cambridge, Massachusetts, United States of America	Membership of Board Committee(s): R T
Date of Last Re-Election: 15 May 2018		Present Directorship(s): Listed Entities <ul style="list-style-type: none">• Telekom Malaysia Berhad• Sapura Energy Berhad Other Public Company <ul style="list-style-type: none">• Nil
Board Meeting Attendance in the Financial Year: 21/21		

Skills, Experience and Expertise:

- Independent Non-Executive Director of various Public Listed Companies since 2001
- Has more than 40 years of experience in financial and auditing line within multiple industries
- Professional strengths are in Restructuring, Reorganisation, Change Management and Corporate Governance
- Worked with PriceWaterhouse in Kuala Lumpur, Malaysia and London, United Kingdom. The last position held was Senior Audit Manager and Continuing Education Manager, PriceWaterhouse (1969 - 1981)
- Group Financial Controller, Selangor Pewter Group (1981 - 1985) - Seconded to the United States of America as Director and Chief Executive Officer of Senaca Crystal Inc., a company in the Selangor Pewter Group, which was undergoing reorganisation under Chapter XI of the U.S. Bankruptcy Code (1983 - 1984)
- Personal Assistant to Executive Chairman of Lipkland Group (1985 - 1987)
- Was appointed by Bank Negara Malaysia as Executive Director and Chief Executive of Supreme Finance (M) Berhad, a financial institution undergoing rescue and reorganisation under the supervision of Bank Negara Malaysia (1987 - 1991)
- Group Divisional Chief, Management Development Services, Land & General Berhad (1993 - 1997)
- Executive Assistant to the Chief Executive, Multi-Purpose Capital Holdings Berhad (1997 - 1999). During this period, had also served as Director of Multi-Purpose Bank Berhad and Multi-Purpose Insurans Berhad and Executive Director of Multi-Purpose Trustee Berhad

A COMMITTED BOARD



Chairman of
Respective Committee



Board Audit
Committee



Board Finance And
Investment Committee



JUNIWATI RAHMAT HUSSIN

Independent Non-Executive Director

Age: **60** Gender: **FEMALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **1 JUNE 2017**

Year(s) of Directorship:

One (1) year

Date of Last

Re-Election:

18 December 2017

Board Meeting Attendance in the Financial Year:

18/21

Qualification(s):

- Bachelor of Science (Hons.) in Chemistry, University of Kent, Canterbury, United Kingdom
- Certificate in International Management, GE
- Attended the INSEAD Senior Management Development Programme and Advanced Management Programme
- Attended the HENLEY Business School Advanced Management Programme, United Kingdom

Membership of Board Committee(s):

NR L T R I

Present Directorship(s):

Listed Entity

- UEM Edgenta Berhad

Other Public Company

- Nil

Skills, Experience and Expertise:

- 2013 - 2016:
 - Vice President & Venture Director, Pengerang Integrated Complex
 - Chief Executive Officer, PETRONAS Refinery and Petrochemical Corporation Sdn. Bhd.
- Vice President, Human Resource Management Division, PETRONAS (2010 - 2012)
- Vice President, Education Division, PETRONAS (2009 - 2010)
- Chief Executive Officer, Malaysian Philharmonic Orchestra & Dewan Filharmonik PETRONAS (2005 - 2009)
- General Manager (Marketing & Trading-Chemicals), MITCO Sdn. Bhd. (2003 - 2005)
- Senior Manager (Marketing & Trading-Chemicals), MITCO Sdn. Bhd. (2001 - 2003)
- Manager, Human Resource Management, PETRONAS (1991 - 2001)
- 1994 - 1997:
 - Manager, Petrochemicals Business Planning Unit, Petrochemical Division, PETRONAS
 - Manager, Business Evaluation Department, Corporate Planning Division, PETRONAS
- Executive (Analyst), Refining & Marketing Planning Unit, PETRONAS (1991 - 1994)
- Executive (Refinery), PETRONAS Penapisan (Melaka) Sdn. Bhd. (1991)
- Production Planner (Refinery), PETRONAS Penapisan (Terengganu) Sdn. Bhd. (1988 - 1990)
- Chemist, Process Engineering & Technical, PETRONAS Penapisan (Terengganu) Sdn. Bhd. (1982 - 1987)
- Chemist, Laboratory Services, PETRONAS (1981 - 1982)

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A Committed Board

T Board Tender Committee

NR Board Nomination And Remuneration Committee

R Board Risk Committee

L Board Long Term Incentive Plan Committee

I Board Integrity Committee



GOPALA KRISHNAN K.SUNDARAM
Independent Non-Executive Director

Age: **64** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **4 JULY 2018**

Year(s) of Directorship:

Less than one (1) year

Board Meeting Attendance in the Financial Year:

9/9 (since appointment date)

Qualification(s):

- Bachelor in Law LL. B. (Hons.), University of Malaya, Malaysia
- Advocate and Solicitor of the High Court of Malaya

Membership of Board Committee(s):

I A R

Present Directorship(s):

Listed Entity

- Nil

Other Public Company

- Nil

Skills, Experience and Expertise:

- Consultant, Asian Development Bank (August 2018 - September 2019)
- Partners, Abdullah Chan & Co., Advocates & Solicitors (2012 - Present)
- Leading adviser on the Financial Services Act 2013 and Islamic Financial Services Act 2013
- Former Independent International Consultant, World Bank (August 2017 - 30 June 2018)
- Former Director, Kuwait Finance House (Malaysia) Berhad (2012 - June 2016)
- Held various positions in Bank Negara Malaysia (Central Bank of Malaysia) (1978 - 2012)
 - Project Advisor (2011 - 2012)
 - Assistant Governor (2006 - 2011)
 - Assistant Manager/Deputy Director/Director, Legal Department (1990 - 2006)
 - Senior Executive/Assistant Manager, Secretary's Department (1985 - 1990)
 - Senior Executive Banking Department (1982 - 1985)

A COMMITTED BOARD



Chairman of
Respective Committee



Board Audit
Committee



Board Finance And
Investment Committee



ONG AI LIN

Independent Non-Executive Director

Age: **63** Gender: **FEMALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **1 AUGUST 2018**

Year(s) of Directorship:

Less than one (1) year

Board Meeting Attendance in the Financial Year:

6/7 (since appointment date)

Qualification(s):

- Bachelor of Arts (Hons.) in Economics, University of Leeds, United Kingdom
- Associate of the Institute of Chartered Accountants in England and Wales (ICAEW)
- Certified Information System Auditor
- Certified Business Continuity Professional
- Member of Malaysian Institute of Accountants (MIA)
- Member of MIA Digital Economy Task Force
- Member of SIRIM ISO Technical Committee on Information Security
- Past President of Information Systems Audit & Control Association (ISACA), Malaysia

Membership of Board Committee(s):

A R I

Present Directorship(s):

Listed Entity

- RHB Bank Berhad

Other Public Companies

- RHB Islamic Bank Berhad
- FIDE Forum

Skills, Experience and Expertise:

- Held various positions in PricewaterhouseCoopers Malaysia
 - Partner/Senior Executive Director (1993 - June 2016)
 - Senior Manager (1991 - 1992)
- Kassim Chan & Co. (DH&S Malaysia) and DH&S Singapore (1986 - 1991)
- Deloitte Haskins & Sells (DH&S), London, United Kingdom (1978 - 1986)

T Board Tender Committee	NR Board Nomination And Remuneration Committee	R Board Risk Committee	L Board Long Term Incentive Plan Committee	I Board Integrity Committee
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DATO' ROSLINA BINTI ZAINAL

Non-Independent Non-Executive Director

Age: **56** Gender: **FEMALE** Nationality: **MALAYSIAN**

Date Appointed to the Board: **15 MARCH 2019**

Year(s) of Directorship:

Less than one (1) year

Board Meeting Attendance in the Financial Year:

NA

Qualification(s):

- Master of Business Administration, University of New England, New South Wales, Australia
- Bachelor of Electrical Engineering, Lakehead University, Canada

Membership of Board Committee(s):

A F T

Present Directorship(s):

Listed Entity

- Sapura Energy Berhad

Other Public Company

- Nil

Skills, Experience and Expertise:

- Senior Fellow, Khazanah Research & Investment Strategy, Khazanah Nasional Berhad (2018 - Present)
- Independent Council Member of Oversight Panel, Energy Commission of Malaysia (2016 - Present)
- Adjunct Professor, College of Business, Universiti Tenaga Nasional (2016 - Present)
- Vice President (Regulatory Economics & Planning), TNB (2015 - 2018)
- Vice President (Planning), TNB (2009 - 2015)
- General Manager (VPP/Energy Procurement), Planning Division, TNB (2008 - 2009)
- Has served Lembaga Elektrik Negara/TNB for 33 years. Worked in various divisions in TNB such as Distribution, Planning, Business Strategy, Regulations, Transmission and Corporate Planning
- Seconded to the Economic Planning Unit of the Prime Minister's Department (1990 - 1992)

Declaration by the Board:

- (i) **Family Relationship with any Director and/or Major Shareholder of TNB:**
None of the Directors has any family relationship with any Director and/or Major Shareholder of TNB.

- (ii) **Conflict of interest with TNB:**
Save as disclosed above, none of the Directors has any conflict of interest with TNB.

- (iii) **Other than traffic offences, any conviction for offences within the past five (5) years and any public sanction or penalty imposed by relevant regulatory bodies during the Financial Year under review:**

Other than traffic offences, none of the Directors has been convicted for any offences within the past five (5) years nor has been imposed of any public sanction or penalty by the relevant regulatory bodies during the Financial Year under review.

COMPANY SECRETARY



NORAZNI BINTI MOHD ISA

Company Secretary

Age: **55** Gender: **FEMALE** Nationality: **MALAYSIAN**

Date of Appointment: **31 MAY 2012**

Qualification(s):

- Master of Laws, University of Malaya, Malaysia
- Advanced Diploma in Law, MARA Institute of Technology (now MARA University of Technology), Malaysia
- Diploma in Law, MARA Institute of Technology (now MARA University of Technology), Malaysia

Present Directorship(s):

Listed Entity

- Nil

Other Public Company

- TNB Western Energy Berhad

Skills, Experience and Expertise:

- Had more than 28 years of vast experience within TNB where she had served in various positions specifically in legal services, tender, contract management and regulatory management
- Deputy Company Secretary and Joint Company Secretary, TNB (2011 - 2012)
- Head of Tender Management Unit, Procurement Division, TNB (2006 - 2011)
- Manager of Licensing and Compliance Unit, Corporate Communications Department, TNB (2003 - 2006)
- Manager of Contract Management, Procurement Division, TNB (2002 - 2003)
- Legal Executive in Legal Services Department, Company Secretary's Office, TNB (1990 - 2001)

Additional Information:

- (i) Family Relationship with Director and/or Major Shareholder of TNB: Nil
- (ii) Conflict of interest with TNB: Nil

- (iii) Other than traffic offences, any conviction for offences within the past five (5) years and any public sanction or penalty imposed by the relevant regulatory bodies during the Financial Year under review: Nil

AN EFFECTIVE LEADERSHIP



AMIR HAMZAH BIN AZIZAN
President/Chief Executive Officer

Age: **51** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

2 April 2019

Qualification(s):

- Bachelor of Science Degree in Management (Major in Finance and Economics), Syracuse University, New York, United States of America
- Stanford Executive Programme, Stanford University, Stanford, United States of America

Directorships in Public Companies and Public Listed Companies:

- UEM Edgenta Berhad

Management Committee(s):

GECC **GEMC**

Working Experience:

- Marketing Credit Accountant, Shell Singapore Petroleum Company (Pte) Ltd. (1992 - 1993)
- Corporate Finance Advisor, Shell Malaysia Ltd. (1993 - 1995)
- Head of Financial Services, Sarawak Shell Bhd. (1995 - 1996)
- Performance Improvement Advisor, Sarawak Shell Bhd. (1996)
- Manager, Planning & Support, Sarawak Shell Bhd. (1996 - 1997)
- Senior Treasury Advisor, Shell International Ltd. (1997 - 2000)
- General Manager, Corporate Planning, MISC Berhad (2000 - 2004)
- Regional Business Director, MISC Berhad (2004 - 2005)
- President & Chief Executive Officer, AET Tankers Holding Sdn. Bhd. (2005 - 2008)
- President & Chief Executive Officer, MISC Berhad (2009 - 2010)
- Managing Director & Chief Executive Officer, Petronas Dagangan Berhad (2010 - 2011)
- Vice President (Downstream Marketing), Petroliaam Nasional Berhad (2011 - 2013)
- Group Managing Director/Chief Executive Officer, Petronas Lubricants International. Sdn. Bhd. (2012 - 2016)
- Vice President (Lubricants Business), Petroliaam Nasional Berhad (2013 - 2016)
- Managing Director, Icon Offshore Berhad (2016 - 2017)
- Group Chief Executive Officer, Themed Attractions Resorts & Hotels Sdn. Bhd. (2017 - April 2019)



NAZMI BIN OTHMAN
Chief Financial Officer

Age: **54** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

14 February 2014

Qualification(s):

- Bachelor of Commerce (Accounting), University of Wollongong, Australia
- Certified Public Accountant of Malaysian Institute of Certified Public Accountants
- Certified Public Accountant of Australian Society of Certified Practising Accountants
- Member of Malaysian Institute of Accountants

Directorships in Public Companies and Public Listed Companies:

- Integrax Berhad

Management Committee(s):

GECC **GEMC** **ESC** **GMTC** **ComPEC** **ICTGC** **HSE**

Working Experience:

- Nazmi began his career at Island & Peninsular Berhad as Finance Manager and joined MRCB as the Financial Controller of Port Dickson Power Sdn. Bhd. an Independent Power Producer. He joined TNB Generation Sdn. Bhd. in 1998.
- In 2004, he became Head (Financial Reporting and Budget) and continued in this role before being promoted to General Manager (Operation) in 2006.
- He was made Senior General Manager (Group Finance/Group Accountant) in 2008 and became the Chief Investment Management Officer in 2014.
- Nazmi was appointed as Chief Financial Officer, Group Finance with effect from 1 August 2018.

AN EFFECTIVE LEADERSHIP



DATUK FAZLUR RAHMAN BIN ZAINUDDIN
Chief Strategy & Regulatory Officer

Age: **49** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 July 2012

Qualification(s):

- Fellow of Association of Chartered Certified Accountants, United Kingdom
- Member of Malaysian Institute of Accountants

Directorships in Public Companies and Public Listed Companies:

- Integrax Berhad
- TNB Global Ventures Capital Berhad

Management Committee(s):

GECC GEMC ESC SDC GMTC ComPEC ICTGC

Working Experience:

- Datuk Fazlur Rahman served for four (4) years in public accounting practices with three (3) years in PricewaterhouseCoopers Malaysia, Kuala Lumpur, as a Tax Consultant.
- He later served in Shell Malaysia for a decade in various capacities within the corporate and financial management functions of the company starting from 1995.
- He joined Telekom Malaysia Berhad in 2005 and served in several senior roles with the last position as Vice President – Business Development. He became the Chief Financial Officer of Naza Group in 2010.
- He was appointed TNB's Chief Financial Officer/Vice President, Group Finance in July 2012, where he served for six (6) years.
- Datuk Fazlur was appointed as Chief Strategy & Regulatory Officer with effect from 1 August 2018.



Ir. ROSLAN BIN ABD RAHMAN
Chief Generation Officer

Age: **55** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 December 2018

Qualification(s):

- Master of Business Administration, Universiti Tenaga Nasional, Malaysia
- Bachelor of Science (Electrical Engineering), Syracuse University, New York, United States of America

Directorships in Public Companies and Public Listed Companies:

- Integrax Berhad

Management Committee(s):

GECC GEMC ESC SDC GMTC ComPEC ICTGC HSE

Working Experience:

- Ir. Roslan started his career with the Lembaga Elektrik Negara in 1985 at the Perai Power Station in Penang. From then, his career progressed to various roles and responsibilities within the power stations owned by TNB.
- After serving as General Manager for the TNB Connaught Bridge Power Station and the TNB Tuanku Jaafar Power Station, he was appointed as Senior General Manager (Asset Operation), Generation Division (2014 - 2018).
- Ir. Roslan was appointed as Chief Generation Officer with effect from 1 December 2018.



DATUK Ir. HUSAINI BIN HUSIN
Chief Grid Officer

Age: **58** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 February 2019

Qualification(s):

- Master of Business Administration, Ohio University, United States of America
- Bachelor of Engineering and Applied Science (Electrical Engineering), Sussex University, United Kingdom
- Diploma in Electrical Engineering, Brighton Technical College, United Kingdom

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GECC GEMC ESC SDC GMTC ICTGC HSE

Working Experience:

- Datuk Ir. Husaini began his career with TNB as an Assistant Engineer (Transmission Line) in the Asset Maintenance Department in Kluang, Johor, in 1984.
- He spent 32 years serving in maintenance roles for TNB's transmission overhead lines and cables, transmission substation equipment, transmission substation secondary equipment, and high-voltage direct current power lines.
- He was appointed as Senior General Manager (Asset Maintenance), Transmission Division, from 2015 to 2016. He was later promoted to Senior General Manager (Asset Development), Grid Division, in February 2016.
- Datuk Ir. Husaini was appointed as Chief Grid Officer, Grid Division with effect from 1 February 2019.



DATUK Ir. BAHARIN BIN DIN
Chief Distribution Network Officer

Age: **55** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 January 2012

Qualification(s):

- Master of Business Administration – joint MBA programme between Universiti Tenaga Nasional, Malaysia and Bond University, Australia
- Bachelor of Science (Electrical Engineering), Syracuse University, New York, United States of America

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GECC GEMC ESC SDC GMTC ICTGC HSE

Working Experience:

- Datuk Ir. Baharin built his career in TNB serving in various engineering and managerial positions within the company, including Business Development, Network Maintenance, Network Planning, Construction Services, Metering Service, and Engineering Services.
- He was seconded to the Ministry of Energy, Green Technology and Water (KeTTHA), for two (2) and a half years, where he served as the Deputy Director for the Electrical Inspectorate Department in Sabah. He then became the Director for the Electrical Inspectorate Department in Pahang.
- He was the Managing Director of Sabah Electricity Sdn. Bhd. from 2007 to 2011, and was promoted to Senior General Manager (Customer Service & Metering) of TNB in December 2011.
- Datuk Ir. Baharin was made Vice President, Distribution, in January 2012 until July 2018, and was re-designated as Chief Distribution Network Officer with effect from 1 August 2018.

AN EFFECTIVE LEADERSHIP



DATO' NOR AZMAN BIN MUFTI
Chief Ventures Officer

Age: **58** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 November 2014

Qualification(s):

- Master of Engineering Management, Universiti Tenaga Nasional, Malaysia
- Bachelor of Engineering (Mechanical), University of Strathclyde, Glasgow, Scotland, United Kingdom
- Diploma in Mechanical Engineering, University of Technology, Malaysia

Directorships in Public Companies and Public Listed Companies:

- TNB Global Ventures Capital Berhad

Management Committee(s):

GECC **GEMC** **ESC** **SDC** **GMTG** **HSE**

Working Experience:

- Dato' Nor Azman started his career in TNB as a Mechanical Technician in 1980, before moving to pursue his diploma and degree between 1983 and 1987.
- He served in various technical and engineering capacities within the Generation Division, following his graduation in 1987.
- He was appointed as Chief Operating Officer of TNB Repair And Maintenance Sdn. Bhd. (TNB REMACO) from 2009 to 2010, and went on to become Managing Director of TNB REMACO from 2010 to 2014.
- Dato' Nor Azman was appointed as Vice President, Energy Ventures Division in November 2014, and was re-designated as Chief Ventures Officer with effect from 1 August 2018.



Ir. MEGAT JALALUDDIN BIN MEGAT HASSAN
Chief Retail Officer

Age: **54** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 August 2018

Qualification(s):

- Bachelor of Engineering (Hons.) (Electrical Engineering), University of Wollongong, Sydney, Australia
- Certified Professional Engineer of the Board of Engineers (BEM), Malaysia
- Member of Institution of Engineers, Malaysia

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GECC **GEMC** **ESC** **SDC** **ICTGC** **HSE**

Working Experience:

- Ir. Megat Jalaluddin was our Head of Remote Meter Reading Project under the Metering Services of the Distribution Division from 2006 until 2008.
- He then joined Celcom as Senior Manager in the Project Management Office (2008-2009), before rejoining as General Manager of the Distribution Division for Negri Sembilan (2009-2010).
- He later became General Manager of Metering Services (2010-2012), where he started the foundation for the smart grid project.
- Ir. Megat Jalaluddin was the Chief Strategy Officer (2012-2018), before being appointed as Chief Retail Officer with effect from 1 August 2018.



DATO' MUHAMMAD RAZIF BIN ABDUL RAHMAN
Chief People Officer

Age: **56** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

24 December 2008

Qualification(s):

- Bachelor of Engineering (Hons.) (Electrical Engineering), University of Liverpool, United Kingdom

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GEMC **HSE**

Working Experience:

- Dato' Muhammad Razif has served TNB for 34 years in various roles within the Group and its subsidiaries. Among the positions he has held include Transmission Protection Engineer, Power Plant Engineer and Business Development Manager at TNB Workshop Services Sdn. Bhd. Operations Manager at Perusahaan Otomobil Elektrik Malaysia; and Head of Training at TNB Transmission Network Sdn. Bhd.
- He was made as Head of Training & Development, Group Human Resource Division, in 2002, and later became Head of Human Resource Planning and Staffing in 2006.
- Dato' Muhammad Razif was promoted to Vice President, Human Resource in December 2008, and was re-designated as Chief People Officer, Group Human Resource Division with effect from 1 August 2018.



DATUK WIRA ROSLAN BIN AB RAHMAN
Chief Corporate Officer

Age: **61** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

3 September 2012

Qualification(s):

- Bachelor of Science (Honours) (Electrical Engineering), University of Southampton, United Kingdom

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GECC **GEMC** **SDC** **GMTC** **HSE**

Working Experience:

- Datuk Wira Roslan joined TNB in 1980 and held various positions within the Consumer, Planning, Construction, Operations, and Maintenance functions at the district level in Peninsular Malaysia.
- He also held several senior positions in the areas of Quality, Commercial, Customer Service, Marketing and Operations before being promoted to Chief Corporate Officer with effect from 3 September 2012.
- Datuk Wira Roslan currently oversees all internal and external Group's Corporate Communication matters. He is also the Country Coordinator for the Heads of ASEAN Power Utilities/Authorities (HAPUA).

AN EFFECTIVE LEADERSHIP



Ir. SYED ABU HANIFAH BIN SYED ALWI
Chief Procurement Officer

Age: **61** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 January 2013

Qualification(s):

- Advanced Diploma in Electrical Engineering (Power), MARA Institute of Technology (now known as MARA University of Technology), Malaysia
- Member of Institution of Engineers, Malaysia

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GEMC **GMTC** **ComPEC** **HSE**

Working Experience:

- Ir. Syed Abu Hanifah began his career with TNB as an Assistant Engineer, where he was responsible for the operations and maintenance of electrical systems for the Kuala Lumpur (South) district. He later became a District Manager in Kulim, Kedah.
- He was later assigned to the role of Material Planning Manager in the Material Resource Management Department, Distribution Division in 1998, and became the department's Senior General Manager in 2008.
- Ir. Syed Abu Hanifah was promoted to Chief Procurement Officer with effect from 1 January 2013.



FAZIL BIN IBRAHIM
Chief Information Officer

Age: **55** Gender: **MALE** Nationality: **MALAYSIAN**

Date Appointed to the Management Team:

1 September 2015

Qualification(s):

- Master of Business Administration, Ohio University, Athens, United States of America
- Bachelor of Science (Operations Management and Computer Science), Australian National University, Australia

Directorships in Public Companies and Public Listed Companies:

- Nil

Management Committee(s):

GEMC **GMTC** **ICTGC**

Working Experience:

- Fazil started his career with TNB in 1985 and has since served in different capacities within various departments and divisions of the Group, including Procurement, Corporate Services, Distribution, and Human Resource.
- There on, he moved to managerial roles in the Materials Management Services division within the Procurement Department.
- Among the special projects and Information Technology (IT) initiatives he was involved in, include Tariff & Power Trading, Business Performance Statistics, HR System Support, Field Force Automation, Corporate System & Application Support and the TNB Geospatial Information System Project.
- He was promoted to Senior General Manager of the IT & Business Solutions Department in June 2012.
- Fazil was appointed as Chief Information Officer with effect from 1 September 2015.



NORAZNI BINTI MOHD ISA
Company Secretary

Age: **55** Gender: **FEMALE** Nationality: **MALAYSIAN**

Her profile is set out in Company Secretary on page 110.

Management Committee(s):

GEMC

Additional Information on Our Management Team:

- (i) None of the members of our Management Team has any family relationship with any Director and/or Major Shareholder of TNB.
- (ii) None of the members of our Management Team has any conflict of interest with TNB.
- (iii) None of the members of our Management Team has been convicted of any offences (save for minor traffic offences) within the past five (5) years, nor has been imposed any public sanction or penalty by the relevant regulatory bodies during the Financial Year under review.

MEMBERSHIP KEY

GECC	GROUP EXECUTIVE COUNCIL COMMITTEE
ESC	ENERGY SUPPLY COMMITTEE
HSE	HEALTH, SAFETY AND ENVIRONMENT STEERING COMMITTEE
ComPEC	COMMODITY PROCUREMENT EXECUTIVE COMMITTEE
GEMC	GROUP EXECUTIVE MANAGEMENT COMMITTEE
SDC	SUSTAINABILITY DEVELOPMENT COMMITTEE
GMTC	GROUP MANAGEMENT TENDER COMMITTEE
ICTGC	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) GOVERNANCE COUNCIL

LEADERSHIP & EFFECTIVENESS

TNB GOVERNANCE MODEL

The Company's governance model is based on the principles of the Malaysian Code on Corporate Governance 2017 (MCCG). The Board is collectively responsible to shareholders and stakeholders, for the long term success of the Company. It fulfils this responsibility by providing leadership, setting the strategic goals for the Company and overseeing the execution of the strategy by Management. It ensures the Company has adequate resources to deliver its strategy and reviews the operating and financial performance of the Group. The Board ensures that the execution of the strategy and value creation are achieved within a framework of prudent and effective controls.

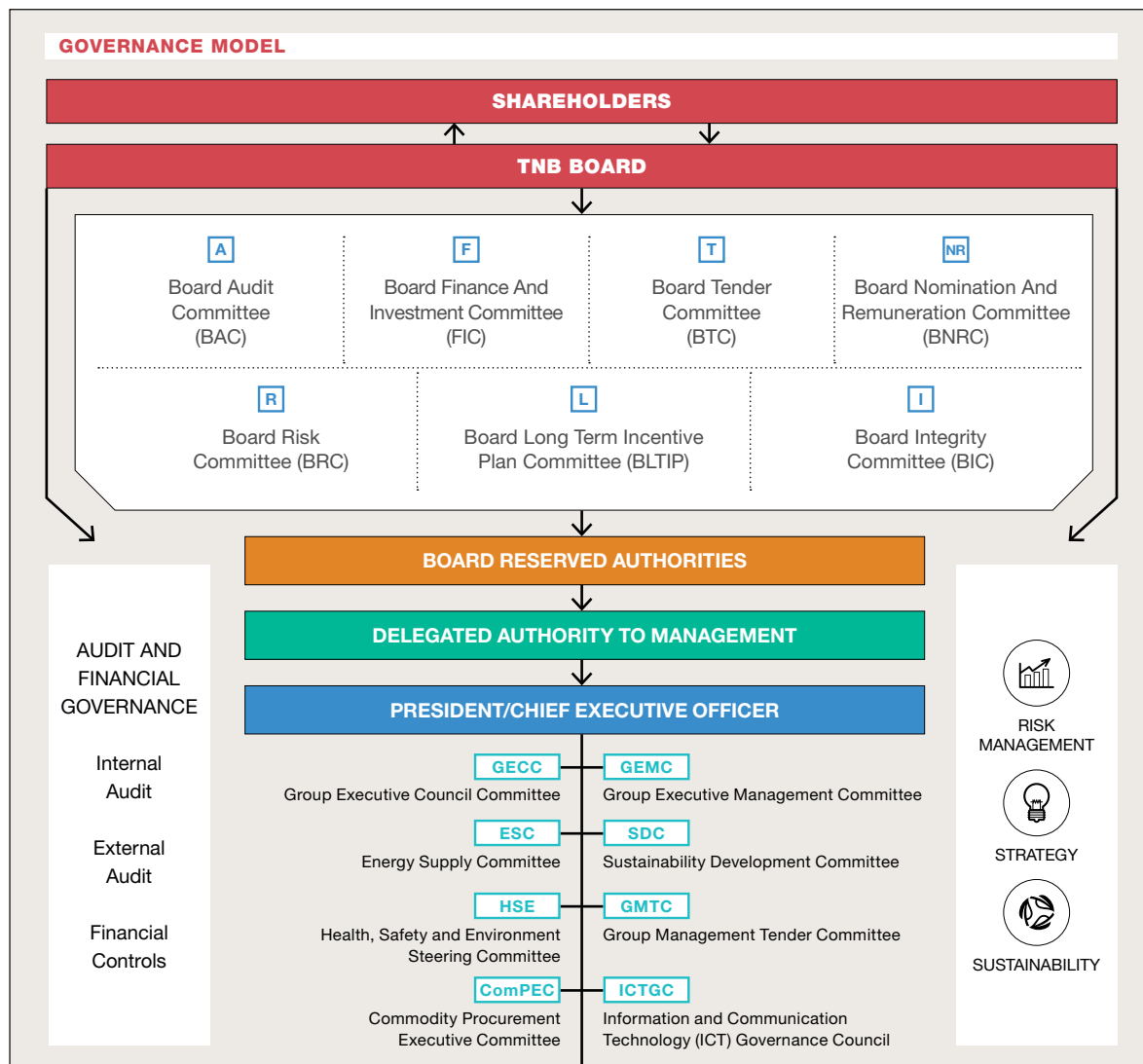
The Company's Constitution and the regulatory environment set the external framework for how the Company operates. The Board is assisted in fulfilling its responsibilities by delegating some of these to each of its Board Committees, which describes how the Committees discharge these responsibilities in this report. Both the Board and each Committees has a pre-set rolling annual schedule of topics and items for discussion. The agendas for Board meetings are set by the Chairman, assisted by the Group Company Secretary. The same process is adopted for each of the Board Committees.

This statement is to be read together with the Corporate Governance Report 2018 of the Company (CG Report) which is available on our website: www.tnb.com.my. The CG Report elaborates on the Company's application of each Principle of the MCCG 2017 for the Financial Year under review.

Our website contains the Board Charter inclusive of the Terms of Reference (TOR) of Committees and copies of policies mentioned in the Corporate Governance Overview Statement. The website is updated periodically to ensure that it reflects TNB's current corporate governance information.

BOARD ROLES AND RESPONSIBILITIES

The roles of the Chairman and President/Chief Executive Officer (President/CEO) are separated and held by different individuals. Whilst the Chairman provides leadership of the Board, the day-to-day management of the Company is delegated to the President/CEO and his Top Management Team. The Top Management Team assists the President/CEO in operational and strategic decision-making and collectively reviews areas such as strategy implementation, operational and financial performance, budget and risk matters across the Group as a whole.



CHAIRMAN ROLES

- Leadership, operation and governance of the Board;
- Setting the agenda for Board meetings ensuring that they operate effectively and provide appropriate opportunity for challenge and debate to support sound decision-making;
- Ensuring constructive relations exist between the Executive and Non-Executive Directors;
- Overseeing the performance evaluation of the Board, its Committees, Self and Peer;
- Meeting with shareholders, analysts and other representatives of institutional investors;
- Meeting with managers and employees at various locations throughout the Group;
- Leading Board meetings and discussions;
- Ensuring appropriate steps are taken to provide effective communication with stakeholders and that their views are communicated to the Board as a whole; and
- Leading the Board in establishing and monitoring good corporate governance practices.

SENIOR INDEPENDENT NON-EXECUTIVE DIRECTOR (SID) ROLES

- Providing a sounding board for the Chairman;
- An intermediary for other Directors when necessary and specifically serves as the principal conduit between the Independent Non-Executive Directors and Chairman on sensitive issues;
- Promote high standards of corporate governance and ensure that the Company's obligations to shareholders are understood and complied with;
- Ensure the composition of the Board with regards to the number of Independent Directors is in adherence to relevant requirements and regulations;
- Being available for confidential discussions with other Non-Executive Directors who may have concerns which they believe have not been properly considered by the Board as a whole;
- Being available to shareholders if they have any concerns which are unable to be resolved through the normal channels of Chairman, President/CEO or Chief Financial Officer, or if contact through these channels are deemed inappropriate; and
- If necessary, the Senior Independent Non-Executive Director can be emailed at norainicd.integrity@tnb.com.my.

PRESIDENT/CEO ROLES

- Delivering strategy as agreed by the Board;
- Leading the Management Committees which oversee the operational and financial performance including issues faced by the Group;
- Leading and supporting each of TNB's businesses and the functions of Human Resource, Strategy and Development and Corporate Affairs;
- Representing TNB externally to stakeholders, shareholders, customers, suppliers, regulatory and Government authorities and the community;
- Creating and implementing the Company's vision and mission;
- Ensuring that the Company has appropriate systems to enable it to conduct its activities both lawfully and ethically; and
- Ensuring the Directors are properly informed and that sufficient information is provided to the Board to enable the Directors to form appropriate judgements.

NON-EXECUTIVE DIRECTOR (NED) ROLES

- Scrutinising, measuring and reviewing the performance of Management;
- Constructively challenging and assisting in the development of strategy;
- Reviewing the Group financial information, ensuring systems of internal control and risk management are appropriate and effective;
- Reviewing the succession plans for the Board/ Top Management;
- Serving on various Committees of the Board; and
- Overseeing the development and implementation of the Company's stakeholders communication policy.

CHIEF FINANCIAL OFFICER (CFO) ROLES

- Providing strategic financial leadership of the Company and day-to-day management of the finance function;
- Leading the finance management teams; and
- Representing TNB externally to stakeholders, shareholders, customers, suppliers, regulatory and Government authorities and the community.

COMPANY SECRETARY ROLES

- Managing all Board and Board Committee meetings logistic, attending and recording minutes of all Board and Committee meetings and facilitating Board communications;
- Advising the Board on its roles and responsibilities;
- Facilitating the orientation of new Directors and assisting in Directors' training and development;
- Advising the Board on corporate disclosures and compliance with Companies Act 2016 and securities regulations and Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR);
- Managing processes pertaining to the general meetings;
- Monitoring corporate governance developments and assisting the Board in applying governance practices to meet the Board's needs and stakeholders' expectations;
- Serving as a focal point for stakeholders' communication and engagement on corporate governance issues; and
- The Board Members have unlimited access to the professional advice and services of the Company Secretary.

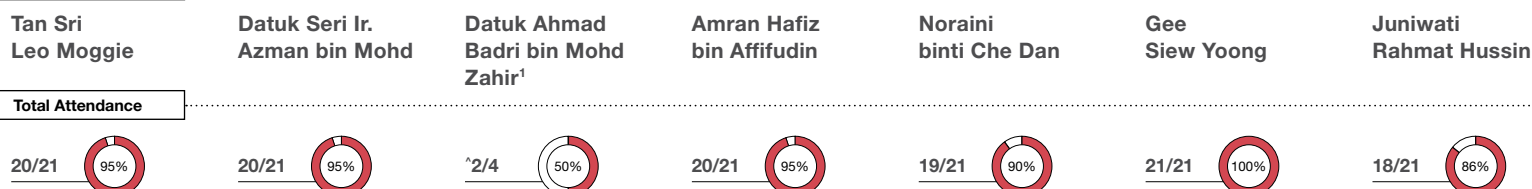
Leadership & Effectiveness

BOARD COMMITTEES

The Board has established its principal Committees to exercise oversight in specific areas. Our Board Committees structure during the Financial Year is set out below. It includes the Committees' Roles and Responsibilities, Membership, Attendance and Composition.

Prior to each Board meeting, the Board shall receive reports from the Chairman of each Board Committee on their deliberations and recommendations of each meeting. This ensures that each Director is informed of the decisions made including views/comments raised. The Chairman of each Board Committee shall then table to the Board its report and present its recommendations for the Board's approval accordingly at each Board meeting. This permits the Board to raise any comments/views (if any) on all deliberations.

Board of Directors

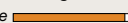


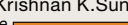
A BOARD AUDIT COMMITTEE (BAC)

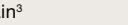
Chairman


Noraini binti Che Dan
Attendance  18/18 (100%)

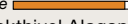
Members


Gee Siew Yoong
Attendance  17/18 (94%)


Gopala Krishnan K.Sundaram²
Attendance  8/8 (100%)

Ong Ai Lin³
Attendance  7/7 (100%)

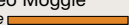
Dato' Abd Manaf bin Hashim⁵
Attendance  6/7 (86%)

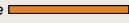
Datuk Sakthivel Alagappan⁶
Attendance  7/7 (100%)

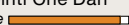
Tan Sri Dato' Seri Chor Chee Heung⁷
Attendance  10/10 (100%)


Badrul Ilahan bin Abd Jabbar⁸
Attendance  10/10 (100%)

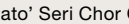
F BOARD FINANCE AND INVESTMENT COMMITTEE (FIC)

Tan Sri Leo Moggie
Attendance  13/13 (100%)


Amran Hafiz bin Affifudin
Attendance  13/13 (100%)

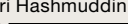
Noraini binti Che Dan
Attendance  12/13 (92%)


Datuk Sakthivel Alagappan⁶
Attendance  4/4 (100%)

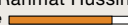
Tan Sri Dato' Seri Chor Chee Heung⁷
Attendance  6/6 (100%)

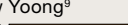
T BOARD TENDER COMMITTEE (BTC)

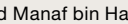
Datuk Ahmad Badri bin Mohd Zahir¹
Attendance  2/2 (100%)

Datuk Seri Hashmuddin bin Mohammad⁴
Attendance  3/3 (100%)

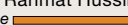
Amran Hafiz bin Affifudin
Attendance  12/12 (100%)

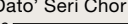
Juniwati Rahmat Hussin
Attendance  10/12 (83%)

Gee Siew Yoong⁹
Attendance  8/8 (100%)

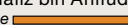
Dato' Abd Manaf bin Hashim⁵
Attendance  4/4 (100%)

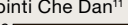
NR BOARD NOMINATION AND REMUNERATION COMMITTEE (BNRC)

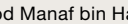
Juniwati Rahmat Hussin¹⁰
Attendance  5/5 (100%)

Tan Sri Dato' Seri Chor Chee Heung⁷
Attendance  8/8 (100%)

Datuk Ahmad Badri bin Mohd Zahir¹
(No meeting held since his appointment)

Amran Hafiz bin Affifudin
Attendance  10/10 (100%)

Noraini binti Che Dan¹¹
Attendance  2/2 (100%)

Dato' Abd Manaf bin Hashim⁵
Attendance  5/5 (100%)

Key Roles and Responsibilities

To oversee the integrity of the financial statements in compliance with legal and regulatory requirements and applicable accounting standards.

To assess the effectiveness of the Group's internal control framework as well as internal and external audit functions.

The BAC's TOR is available on the Company's website at www.tnb.com.my.

Review, monitor and make recommendations to the Board for approval of the annual and supplementary budgets, capital budgets and investments of TNB.

Review and evaluate, as may be appropriate, information relating to the Company's investable assets, its investment policies, strategies, objectives and activities.

Monitor and review investments in subsidiaries and associated companies, and to evaluate and consider and make appropriate recommendations on proposals for any new investments/divestments proposed by the Management.

To provide input on the valuation of the proposed investment/divestments taking into account compliance with the Investment Policy, risk management analysis, findings of the due diligence and written report from external advisers, as applicable.

To establish the framework of TNB's Procurement & Supply Chain Policy and Procedures.

To advise the Board regarding the details and implementation of TNB's Procurement & Supply Chain Policy and Procedures framework.

To assist the Board in regulating the compliance of Top Management and Executive Director with TNB's Procurement & Supply Chain Policy and Procedures.

To ensure TNB complies with the applicable laws, regulations, rules and guidelines to achieve best business practices in its procurement of equipments, materials, works and services.

To identify and recommend new nominees to the Board, Board Committees and Board of TNB Group.

To consider the Executive Director and Top Management's succession planning.

To assist the Board in reviewing the Board's required mix of skills, experience and other qualities, including core competencies which Non-Executive Directors should bring to the Board.

To implement the process formulated by the Board to assess the effectiveness of the Board, Board Committees, Self and Peer.

To determine and recommend to the Board the remuneration packages of Non-Executive Directors/Executive Directors/Top Management.

The BNRC's TOR is available on the Company's website at www.tnb.com.my.

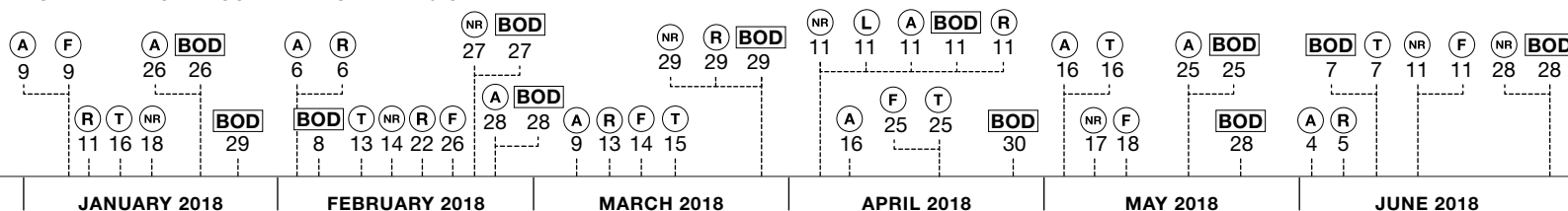
 BAC Meeting Hours 44.69

 FIC Meeting Hours 25.26

 BTC Meeting Hours 30.02

 BNRC Meeting Hours 9.17

BOARD AND BOARD COMMITTEES MEETING CALENDAR



Leadership & Effectiveness

All deliberations and recommendations must be minuted and approved by each Board Committee and confirmed by the Chairman of each Board Committee at their respective Board Committee meetings.

Each Board Committee is entitled to seek information from any employee of the Company and to obtain professional advice as the Board Committee deems appropriate in its discretion.

For this Financial Year under review based on the Board annual evaluation on its Committees, the Board unanimously resolves that each Board Committee and its members has discharged its roles and responsibilities effectively as guided by its respective TOR.

Ad-hoc committees are also convened to consider matters of special importance or to exercise the delegated authority of the Board.



BOARD RISK COMMITTEE (BRC)

Gee Siew Yoong⁹
Attendance: 12/12 (100%)
Dato' Abd Manaf bin Hashim⁵
Attendance: 6/6 (100%)

Noraini binti Che Dan
Attendance: 12/12 (100%)
Juniwati Rahmat Hussin
Attendance: 11/12 (92%)
Gopala Krishnan K.Sundaram²
Attendance: 5/5 (100%)
Ong Ai Lin³
Attendance: 4/4 (100%)
Datuk Seri Hashmuddin bin Mohammad⁴
Attendance: 4/5 (80%)
Badrul Ilahan bin Abd Jabbar⁸
Attendance: 7/7 (100%)

To oversee the establishment and implementation of the risk management framework that is embedded into the culture, processes and structures of the Company and is responsive to changes in the business environment.

To approve the Risk Management Policies on behalf of the Board.

To ensure the principles and requirements of managing risk are consistently communicated and adopted throughout the Company.

BOARD LONG TERM INCENTIVE PLAN COMMITTEE (BLTIP)

Juniwati Rahmat Hussin¹⁰
Attendance: 1/1 (100%)
Tan Sri Dato' Seri Chor Chee Heung⁷
Attendance: 1/1 (100%)

Datuk Ahmad Badri bin Mohd Zahir¹
Attendance: 0/1 (0%)
Amran Hafiz bin Affudun
Attendance: 2/2 (100%)
Noraini binti Che Dan¹¹
Attendance: 1/1 (100%)
Dato' Abd Manaf bin Hashim⁵
Attendance: 1/1 (100%)

To oversee the administration of TNB LTIP and the shares granted (LTIP Shares) subject to the By-Laws.

To approve and determine the manner in which the LTIP Shares are granted and subsequently vested to the selected employees in accordance with the By-Laws, including inter alia, the determination of eligibility, grant level, terms of acceptance of offers, terms of vesting of shares, performance conditions and any other terms and conditions imposed at the discretion of the BLTIP.

BOARD INTEGRITY COMMITTEE (BIC)

Gopala Krishnan K.Sundaram²
Attendance: 3/3 (100%)
Tan Sri Dato' Seri Chor Chee Heung⁷
(No meeting held during his tenure/service)

Juniwati Rahmat Hussin
Attendance: 3/3 (100%)
Ong Ai Lin³
Attendance: 3/3 (100%)
Datuk Sakthivel Alagappan⁶
(No meeting held during his tenure/service)
Badrul Ilahan bin Abd Jabbar⁸
(No meeting held during his tenure/service)

To manage disciplinary issues and actions with regard to employees' misconduct, except for the hearing of appeal of executives of grade M15 and above or equivalent grade with regard to disciplinary cases, for which the power lies with the Board.

To review the disciplinary procedures, whenever applicable, subject to the Board's approval.

NOTES

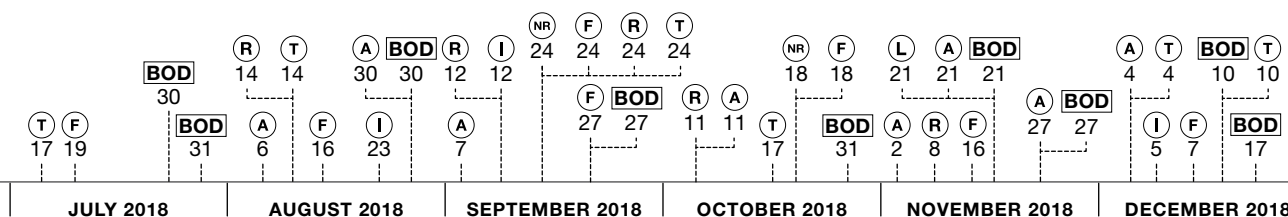
- Appointed as Director, Chairman of BTC and Member of BNRC & BLTIP w.e.f. 1 November 2018
- Appointed as Director w.e.f. 4 July 2018, Chairman of BIC and Member of BAC & BRC w.e.f. 1 August 2018
- Appointed as Director w.e.f. 1 August 2018 and Member of BAC, BRC & BIC w.e.f. 15 August 2018
- Resigned as Director, ceased as Chairman of BTC and Member of BRC w.e.f. 1 April 2018
- Cessation of office as Director, Chairman of BRC and Member of BAC, BTC, BNRC & BLTIP w.e.f. 15 May 2018
- Cessation of office as Director and Member of BAC, FIC & BIC w.e.f. 15 May 2018

- Resigned as Director, ceased as Chairman of BNRC, BLTIP & BIC and Member of BAC & FIC w.e.f. 30 June 2018
- Resigned as Director and ceased as Member of BAC, BRC & BIC w.e.f. 30 June 2018
- Appointed as Chairman of BRC and Member of BTC w.e.f. 16 May 2018
- Appointed as Chairman of BNRC & BLTIP w.e.f. 1 August 2018
- Appointed as Member of BNRC & BLTIP w.e.f. 1 August 2018
- Reflects the number of meetings during the time the Director held office/was Chairman/Member of Committee
- Reflects the number of meetings since his/her respective appointment on the Board/relevant Board Committee

BRC Meeting Hours 42.92

BLTIP Meeting Hours 1.83

BIC Meeting Hours 7.67



TOTAL HOURS OF THE BOARD MEETINGS
41.98



OVERALL PERCENTAGE OF THE BOARD MEETINGS ATTENDED BY DIRECTORS
90%



TOTAL HOURS OF THE BOARD & BOARD COMMITTEES' MEETINGS
203.54

All Directors have complied with the minimum attendance as stipulated in the MMLR, of which being present not less than 50% of the Board meetings held during the Financial Year.

BOARD ACTIVITIES

TNB is built on strong foundations and operates with a clear strategic framework comprising a balance range of businesses in core markets and a commitment to efficient operations and disciplined investment. Some of the matters considered by the Board in relation to these strategic priorities are set out below:

MATERIAL MATTERS RESERVED FOR THE BOARD

Formulating, reviewing and approving the Company's strategic business plan

Identifying and managing principal risks affecting the Company

MATTERS CONSIDERED BY THE BOARD

The Board plays a pivotal role in reviewing the Company's strategic direction and approving corporate strategic initiatives developed by the Management. The Board deliberates annually on the Company's strategic and business plan as proposed by the Management, including the annual capital and revenue budget for the ensuing year as well as the Key Performance Indicators (KPIs). This will ensure that the KPIs correspond with the Company's annual strategic and business plan. The Board reviews and deliberates on the Management's views/assumptions in ensuring the best decisions are reached after considering all relevant aspects.

A separate and informal session between the Board and Top Management, known as the Board Breakout Session (BBO), is held to discuss in-depth and exchange views on the Company's strategic issues/challenges. The BBO is coordinated by the Company Secretary's Office as and when the need arises and is a platform for the Board and Management to deliberate and exchange views as well as opinions in formulating strategic plans and to chart the direction of the Group, including the reporting of its progress.

During the Financial Year under review, two (2) BBOs were held on 10 October 2018 and 11 December 2018, specifically to discuss on the TNB International Investment Strategy Refinement and Regulatory Landscape & Challenges under Malaysia Electricity Supply Industry.

During the BBOs, the Management shared with the Board of the Regulatory Landscape, its Current Challenges and Cost of Service & Tariff Design Study as well as Strategies in Refining TNB's International Investment.

In return, the Management gained constructive inputs/guidance from the Board on way forward of these investments and regulatory landscapes & challenges of utility industry in Malaysia. More information on the Strategic Direction is available in the 2018 Year in Review on pages 21 to 43 of this Integrated Annual Report.

Half-year reviews of the business plan and the budget were conducted whereby comparison of approved targets against the Company's actual performance was made.

Based on the evaluation for Financial Year under review, the Board collectively concurs that it has reviewed the Company's strategic and financial plan as well as monitored its implementation, including the setting of suitable KPIs in achieving the Company's objectives.

The BRC assists the Board in overseeing the establishment, implementation and effectiveness of the risk management system. The BRC on behalf of the Board, also approves risk management policies/practices, reviews periodic reports on risk management and makes relevant recommendations to the Board for its approval.

The Risk Management Department (RMD), led by the Chief Risk Officer, is responsible for the effective implementation of the TNB Risk Management Framework for informed decision-making. Additionally, RMD manages the insurance programmes for the Company and its subsidiaries. RMD had implemented various initiatives in Financial Year 2018 in alignment with the BRC's objective, which is to ensure that the Company has in place a sound and robust enterprise risk management framework and such framework has been effectively implemented to enhance the Company's ability to achieve its strategic objectives.

There has been strong and consistent mandate from the BRC and TNB Top Management in driving effective risk management across the Company and its subsidiaries. In Financial Year 2018, BRC communicated its mandate through the TNB Top Management Risk Forum 2018 held on 23 January 2018. About 100 Senior including Top Management personnel from business units and subsidiaries dialogued with the BRC members regarding risks and opportunities in the coming year.

Additionally, there were 12 BRC sittings in Financial Year 2018 to deliberate risk management matters and mitigations across the organisation. Business units had numerous opportunities to provide assurances to BRC of its risk management efforts, assisting the Board in its decision-making, especially in the management of strategic risks that may prevent TNB from achieving its Reimagining TNB outcomes.

BRC were provided with timely alerts on the health of the organisation in achieving its strategic objectives through the quarterly Risk Dashboard reports. RMD collated and highlighted the status of 28 Key Risk Indicators (KRI) identified by the business units. Indicators at triggering and breaking points were deliberated for accelerated mitigating actions to manage the potential impacts. Moreover, RMD facilitated the review of the KRIs to ensure they remain relevant to the present business and strategic objectives as well as adaptive to the changing industry and global scenarios.

Based on the evaluation for the Financial Year under review, the Board collectively agrees that it has discharged its roles in identifying principal risks and in ensuring that the Group has put in place an adequate risk management framework to effectively monitor and manage the risks of its operational businesses.

LINK TO STRATEGY

- Grid of the Future
- Future Generation Sources
- Future Proof Regulations
- Winning the Customer

LINK TO STRATEGY

- Future Proof Regulations

Reviewing the adequacy and integrity of the Company's internal control system

The Board is responsible for ensuring that a sound reporting framework of internal controls and regulatory compliance is in place throughout the Company. Based on the evaluation for the Financial Year under review, the Board collectively concurs that it has discharged its roles through the BRC/BAC whereby regular meetings were held in reviewing the effectiveness of the Company's internal control system. Details of the Company's internal control system and its effectiveness are provided in the Statement of Risk Management and Internal Control in this Integrated Annual Report.

LINK TO STRATEGY

- Future Proof Regulations

Overseeing and evaluating the conduct and performance of the Company's businesses

The President/CEO is responsible for managing the day-to-day operations of the Company and implementing the Group strategies and policies as agreed by the Board. In doing so he is well supported by the respective Management Committees. The performance of the Management is measured through the Company's and Group's quarterly financial reports. The Board, on a continuous basis, is well informed of the progress of the Company's strategic initiatives and critical operational issues as well as of the Group's performance based on approved KPIs.

LINK TO STRATEGY

- Grid of the Future
- Future Generation Sources
- Winning the Customer

Succession Planning

The Board, through the BNRC is entrusted to review potential candidates for Top Management positions and establish their remuneration. The Group's nomination, selection and succession policies are formulated by the BNRC.

During the Financial Year under review, there were three (3) new additions to the Board, duly appointed by the BNRC/Board.

Gopala Krishnan K.Sundaram and Ong Ai Lin were appointed as Independent Non-Executive Directors with effect from 4 July 2018 and 1 August 2018 respectively, while Datuk Ahmad Badri bin Mohd Zahir, a Non-Independent Non-Executive Director was appointed on 1 November 2018, as Appointed Director of the Minister of Finance (Incorporated) (MoF Inc.), the Special Shareholder of TNB.

Their mix of skills, experience, expertise and qualification are analysed prior to their respective appointments.

The selection of candidates and appointment of Independent Non-Executive Directors by the BNRC/Board are made with the assistance of independent consultant.

During the year, Datuk Fazlur Rahman bin Zainuddin has assume the position of Chief Strategy & Regulatory Officer whilst Nazmi bin Othman has been appointed as CFO as part of job rotation. This is in line with the Company's succession planning program.

The Board is satisfied that the BNRC has efficiently discharged its duties pertaining to the nomination, remuneration and succession management functions as set out in its TOR.

The BNRC annually evaluates the performance of the President/CEO and the Top Management, whose remunerations are directly linked to their respective KPIs. The President/CEO's remuneration package is reviewed by the BNRC to reflect the contributions made towards the Group's achievements for the year. The BNRC's views and recommendations on this are submitted to the Board for its decision/approval. Based on the evaluation for the Financial Year under review, the Board collectively concurs that succession planning for the President/CEO and Top Management as well as for the Company's future leaders has been appropriately developed.

LINK TO STRATEGY

- Winning the Customer

BOARD MEETINGS

The Board schedules meetings on a monthly basis. Additional meetings are held to discuss specific issues that require deliberation in between the scheduled meetings. The Board held 21 Board meetings during the Financial Year under review.

The calendar for Board and Board Committee meetings is scheduled well in advance, which include the BBO, Pre-Board meetings and Annual General Meeting (AGM), with dates for the year circulated to the Board in the month of October of the preceding year to give the Directors ample time to plan their attendance. A Pre-Board meeting is held prior to any Board meetings for the Management to provide the Chairman with insights into the papers that will be deliberated.

The agenda of Board meetings is drawn up after consultation between the Chairman, President/CEO and Company Secretary at the Pre-Board meeting. Copies of the agenda and Board papers are circulated to Board Members electronically and in hard copies at least five (5) working days prior to the meetings. This permits prior review by the Directors and if necessary, the provision of further information for deliberation at the meeting to ensure informed decision-making. Any Director may request matters to be included in the agenda.

Top Management and external advisors may be invited to attend Board meetings to advise the Board when matters under their purview are being considered, or as otherwise requested by the Board to enable informed decision-making. Should a Director be unable to attend a meeting, his/her views are sought in advance and put to the meeting to facilitate a comprehensive discussion. Thereupon, each Director makes himself/herself available to fellow Directors and may contribute to all major decisions before the Board.

A comprehensive Board paper comprising the objectives, background, issues, implications, risks, appropriate analysis/statistics, recommendations and other relevant information is prepared to enable the Board to make informed and effective decisions.

The Board and Board Committee meetings are also held at various business operating units or sites of major/new projects to allow the Board to better assess progress made and note any other important issue raised. As at to date, the Board/respective Board Committees visited the following business operations/on-going projects:

BOARD

Date	Venue
23 April 2018	TNB Sepang Solar Sdn. Bhd. Large Scale Solar Project at Lot 32888, Mukim Tanjung Dua Belas, Daerah Kuala Langat, Selangor
19 November 2018	Track 4A 1440MW Combined Cycle Power Plant in Pasir Gudang, Johor

BAC

Date	Venue
7 September 2018	(i) PMU Kmanis, Daerah Papar, Sabah
	(ii) Kmanis Power Sdn. Bhd. (Independent Power Producer), Kota Kinabalu, Sabah

Decisions of the Board and Board Committees are made unanimously or by consensus. These decisions and conclusions are recorded in the Board minutes. In the case of a tied vote, the Chairman has a second or casting vote. The Board's decisions may also be obtained via circulation depending on the urgency and availability of the Directors as well as the nature of the proposal/subject matter.

Minutes of the meetings are circulated earlier to all Directors for their perusal prior to the meetings. The Directors may request for clarification or raise comments on the minutes prior to their confirmation. After the Directors' confirmation, the Chairman of the meeting signs the minutes as a correct record of the proceedings. The Directors are also informed of announcements made to Bursa Malaysia Securities Berhad for their notification.

SUPPLY OF INFORMATION AND ACCESS TO ADVICE

The Board receives accurate, timely and clear information five (5) working days prior to meetings to enable it to effectively discharge its duties and responsibilities. Thus, it has separate and independent access to information to assist it with its deliberations, including the opportunity to request supplementary or explanatory information from Management. The Management provides information to the Board on an on-going basis to allow the Board to effectively discharge its responsibilities.

The Board recognises the importance of independent judgement and constructive debate on all issues under consideration. Where necessary, the Board collectively and individually has the right to obtain external independent legal, accounting or other professional advice at the Company's expense to assist with its decision-making process.

NR NOMINATION AND REMUNERATION COMMITTEE REPORT

BOARD NOMINATION AND REMUNERATION COMMITTEE

CHAIRMAN

Juniwati Rahmat Hussin

Independent Non-Executive Director

(Appointed as Chairman w.e.f. 1 August 2018)

Tan Sri Dato' Seri Chor Chee Heung

Independent Non-Executive Director

(Ceased as Chairman w.e.f. 30 June 2018)

MEMBERS

Amran Hafiz bin Affifudin

Non-Independent Non-Executive Director

Noraini binti Che Dan

Senior Independent Non-Executive Director

(Appointed w.e.f. 1 August 2018)

Datuk Ahmad Badri bin Mohd Zahir

Non-Independent Non-Executive Director

(Appointed w.e.f. 1 November 2018)

Dato' Abd Manaf bin Hashim

Senior Independent Non-Executive Director

(Ceased as Member w.e.f. 15 May 2018)

KEY RESPONSIBILITIES

- To identify and recommend new nominees to the Board, Board Committees and Boards of TNB Group.
- To consider the Executive Director and Top Management's succession planning.
- To assist the Board in reviewing the Board's required mix of skills, experience and other qualities, including core competencies which Non-Executive Directors should bring to the Board.
- To implement the process formulated by the Board to assess the effectiveness of the Board, the Board Committees, Self and Peer.
- To determine and recommend to the Board the remuneration packages of Non-Executive Directors/Executive Directors/Top Management.
- The BNRC's duties and responsibilities are set out in its TOR which is also available on the Company's website at www.tnb.com.my.

ROLE OF COMMITTEE

The Committee has a dual role. Firstly, the Committee ensures there is a formal and appropriate procedure for the appointment of new Directors to the Board. The Committee is responsible for leading this process and making recommendations to the Board. Secondly, the Committee determines and makes recommendations to the Board on the Company's framework and policy for the remuneration of the Non-Executive Directors, the Executive Director and Top Management.

SUMMARY OF ACTIVITIES FOR THE FINANCIAL YEAR UNDER REVIEW

Juniwati Rahmat Hussin, an Independent Non-Executive Director was appointed as the Chairman of BNRC with effect from 1 August 2018. She is well supported by three (3) Members, of which half of the BNRC members are Independent Non-Executive Directors.

During the Financial Year under review, the BNRC held 10 meetings on matters including the following:

- Appointment of new Board Members;
- Re-election and re-appointment of Independent Non-Executive Directors;
- Review of the status of independence of the Independent Non-Executive Directors;
- Findings of Annual Assessment of the Board, its Committees, Self and Peer;
- Review of composition of the Board Committees;
- Review of composition of the Boards of TNB Group of Companies;
- Review and assess the performance and make recommendation to the Board with regards to Directors who seek re-election and re-appointment at the AGM;
- Assess and recommend to the Board the renewal of service contracts of Top Management;
- Appointment of Senior Independent Non-Executive Director;
- Oversee the appointment, succession planning and performance evaluation of President/CEO and Top Management; and
- Review of TNB Non-Executive Directors remuneration by an independent expert.

The BNRC annually reviews the size, composition and diversity of the Board as well as the mix of existing and desired competencies of Members, and reports its conclusions to the Board.

Through its annual assessment and recommendations made by the BNRC, the Board believes that the current size and composition of the Board is conducive to appropriate decision-making and incorporates a diversity of perspectives and skills in order to represent the best interests of the Company as a whole.

In view of the need to ensure proper processes are in place to manage succession issues at the Board level, an appropriate process for the selection, nomination and appointment of suitable candidates to the Board has been put in place.

The BNRC is entrusted with the responsibility of assessing and considering the capabilities, commitment and qualities of candidates to be appointed as Board Members as well as Committees' Members, taking into account the required mix of skills, background, experience/expertise/knowledge relevant to Company's business, existing commitment and potential conflict of interest prior to recommending to the Board.

Following each appointment, a letter of appointment will be issued and the Company Secretary shall undertake the necessary as authorised by the Board, so as to ensure the appointment is in accordance with the statutory requirements and as prescribed by the MMLR. All necessary information will be obtained from the newly appointed Director for the Company's records and for meeting the statutory requirements and other applicable rules and regulations.

NR NOMINATION AND REMUNERATION COMMITTEE REPORT

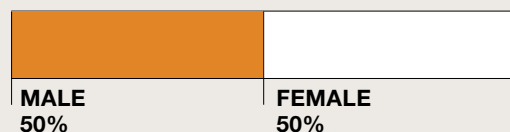
BOARD DIVERSITY

The Board in this regard is to make appointments based on merit with the over-riding objective of ensuring that the Board maintains the correct balance of skills, experience, length of service and knowledge of the Group to successfully deliver the Group's strategy. In addition, the Board believes that the appointments of the existing Directors were guided by their skills, experience, competency and wealth of knowledge while taking into consideration gender diversity.

The Board strongly supports the Government's target of having 30% women's participation on boards of public companies in Malaysia. To date, five (5) women sit on the Board, namely Noraini binti Che Dan, Gee Siew Yoong, Juniwati Rahmat Hussin, Ong Ai Lin and Dato' Roslina binti Zainal representing 50% of the Board, an increase compared to the previous Financial Period.

The gender mix of the Board and throughout the Company is illustrated by the diagram below:

DIVERSITY OF THE BOARD



DIVERSITY IN THE COMPANY



SUCCESSION PLANNING

The Board assisted by the BNRC is responsible for developing plans to identify the necessary and desirable competencies and skills of Directors and succession plans to ensure there is an appropriate dynamic of skills, experience, expertise and diversity on the Board. The BNRC/Board also oversee the appointment as well as the succession planning of the Top Management.

COMPOSITION OF THE BOARD

TNB Board currently consists of 10 members; one (1) Executive Director and nine (9) Non-Executive Directors, of whom five (5) are Independent Directors. The Independent Directors make up half of the Board, as recommended by the MCG 2017, while their number exceeds the minimum as prescribed by the MMLR. These Directors are considered by the Board to be independent of Management and free of any business or other relationship or circumstance that could materially interfere with the exercise of objective, unfettered or independent judgement.

The Board may appoint a new Director either to fill a casual vacancy or to add to the existing Directors. The Minister of Finance Incorporated (MoF Inc.), being the Special Shareholder of TNB also possesses the right to appoint up to six (6) Directors. The Company's Constitution provides that the Company must have at least two (2) Directors but not more than 12 Directors.

The Directors believe that the Board presently has an appropriate balance of skills, experience, knowledge and independence to deliver the Group's strategy, to enable the Non-Executive Directors to effectively challenge the views of the Management and to satisfy the requirements of good governance.

RE-ELECTION OF DIRECTORS

Tan Sri Leo Moggie and Juniwati Rahmat Hussin, being Directors who are retiring by rotation in accordance with Clause 64(1) of the Company's Constitution and being eligible, have offered themselves for re-election.

New additions to the Board shall include, Gopala Krishnan K.Sundaram and Ong Ai Lin, both were appointed, with effect from 4 July 2018 and 1 August 2018, respectively. Whilst, Datuk Ahmad Badri bin Mohd Zahir was appointed to the Board with effect from 1 November 2018. On 15 March 2019, Dato' Roslina binti Zainal was subsequently appointed to the Board. Recently, the Board with the concurrence of the Special Shareholder of TNB has approved the appointment of Amir Hamzah bin Azizan as the new President/CEO of TNB for a period of three (3) years with effect from 2 April 2019. At the forthcoming AGM, they are retiring in accordance with Clause 63(2) of the Company's Constitution, and being eligible, have offered themselves for re-election.

Tan Sri Leo Moggie, Datuk Ahmad Badri bin Mohd Zahir and Amir Hamzah bin Azizan are the Appointed Directors by MoF Inc., the Special Shareholder of TNB.

The Board recognises Directors' performance are used as basis in recommending to the shareholders for their re-election. This, in turn, is determined through their annual evaluation and independence assessment, which are assessed by the BNRC before any recommendation is made to the Board for the deliberation and its approval.

Based on the annual independence assessment of all Independent Directors inclusive of Gopala Krishnan K.Sundaram and Ong Ai Lin, the BNRC/Board are satisfied that these Independent Directors have complied with the independence criteria as set out by the MMLR and continue to bring independent and objective judgement to the Board. Through the Board annual evaluation including Self and Peer Assessment, having considered their professionalism, vast experience, material relationship, competency, commitment and individual contribution in performing their respective duties, the BNRC/Board are satisfied that all Directors who are seeking for re-election at AGM 2019 have met the Board's expectation by continuously discharging their duties diligently as Directors of the Company.

With that the BNRC/Board collectively resolved to recommend the re-election of each Director who is standing for re-election at AGM 2019.

INDEPENDENCE ASSESSMENT OF INDEPENDENT DIRECTORS

It is vital for the Board to assess the independence of its Independent Directors. This is done annually with reference to the key criteria developed by the BNRC in a framework adopted by TNB. The criteria include independence from the Management and the absence of any business relationship which could materially interfere with, or could reasonably be perceived to materially interfere with, the Independent Director's judgement. The Directors are also assessed on their ability to provide strong, valuable contributions to the Board's deliberations, without interference to and acting in the best interest of TNB.

The Board has considered the independence of each Independent Non-Executive Director in office for Financial Year under review and has concluded that each Independent Non-Executive Director has met the independence criteria as set out in the MMLR. The Board is generally satisfied that each Independent Non-Executive Director remains independent in character and judgement and is free from relationships or circumstances which are likely to affect or could appear to affect the Director's judgement.

In reaching this conclusion, the Board has considered all relevant facts and circumstances of these relationships, which include whether the Independent Director:

- (a) is a major shareholder of the Company or an officer of, or otherwise associated directly with, a major shareholder of the Company;
- (b) is employed, or has previously been employed within the last two (2) years in an executive capacity by the Company;
- (c) has been engaged as an adviser by the Company or is presently a partner, director (except an Independent Director) or major shareholder, as the case may be, of a firm or corporation which provides professional advisory services to the Company; or
- (d) has engaged in any transaction with the Company or is presently a partner, director or major shareholder, as the case may be, of a firm or corporation which has engaged in any transaction with the Company.

The Board also concurs that the continuous contributions of the Directors are beneficial to the Board and the Company as a whole.

The BNRC shall assess the independence of Independent Non-Executive Directors annually. The independence status of Independent Non-Executive Directors standing for re-election is disclosed in the Notice of the 29th AGM.

The Board adopts the policy that limits the tenure of its Independent Non-Executive Directors to nine (9) years, pursuant to Step Up 4.3 of MCCG 2017.

Currently, none of the Independent Non-Executive Directors has served the Board for more than nine (9) years.

BOARD DEVELOPMENT

The Board is conscious of the need to keep themselves properly briefed and informed about current issues. The Board on a continuous basis attends internal and external training programmes, in ensuring they remain updated with the development of the Company's business and industry that may affect their roles and responsibilities. Topics covered at sessions attended by the Directors during the Financial Year were economics, regulatory developments, risk management, finance, investment, governance and sustainability.

The Company Secretary assists the Board Continuing Development by facilitating the orientation of new Directors and co-ordinating internal training programmes, as well as arranging for external training programmes.

INDUCTION

Newly-appointed Directors receive appropriate induction and training on the Company's business, corporate governance and reporting procedures, on which they are continuously updated. In addition, the Directors are advised on policies and procedures of the Board and Board Committees' meetings and their rights and responsibilities.

In addition, the Directors receive a comprehensive information pack containing the Board Charter, the Non-Executive Directors' Handbook, the Company's Constitution, relevant Acts affecting the Company, the latest Annual Report, TNB's Procurement & Supply Chain Policy and Procedures, Procurement Code of Conduct and Code of Ethics in order to facilitate the discharge of their duties.

New Board Members are provided with the opportunity to experience the Company's operations first-hand and to meet and discuss all aspects of this with the Top Management. The Company Secretary facilitates the induction programme by providing the new Board Members with access to information on areas such as operations, finance, treasury and risk management, as required.

There were a number of induction sessions arranged by the Company Secretary's Office between the Directors with the respective Top Management during the Financial Year under review to better assist them in understanding the Company's core businesses and its whole operation. The details are as follows:

DATE	INDUCTION PROGRAMME	DIRECTOR(S) IN ATTENDANCE
26 February 2018	ICT Division Overview Briefing	1. Amran Hafiz bin Affifudin 2. Juniwati Rahmat Hussin
1 March 2018	TNB Repair And Maintenance Sdn. Bhd. (REMACO), TNB Energy Services Sdn. Bhd. (TNBES) dan TNB Engineering Corporation Sdn. Bhd. (TNEC) Overview Briefing	1. Amran Hafiz bin Affifudin 2. Juniwati Rahmat Hussin
23 July 2018	Group Finance Division Overview Briefing	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin
23 July 2018	Strategic Management & Performance Department Overview Briefing	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin

NR NOMINATION AND REMUNERATION COMMITTEE REPORT

DATE	INDUCTION PROGRAMME	DIRECTOR(S) IN ATTENDANCE
19 September 2018	Real Estate Ventures Department Overview Briefing	1. Noraini binti Che Dan 2. Gee Siew Yoong 3. Juniwati Rahmat Hussin 4. Gopala Krishnan K.Sundaram
2 October 2018	Risk Management Department DAM Safety	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin
24 October 2018	ICT Division Overview Briefing Strategic Management & Performance Department Overview Briefing	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin
8 November 2018	Distribution Network Division Advanced Metering Infrastructure (AMI)	1. Noraini binti Che Dan 2. Gee Siew Yoong 3. Juniwati Rahmat Hussin 4. Gopala Krishnan K.Sundaram
13 November 2018	Generation Division Findings and Recommendations of DAM Safety Assessment at TNB Hydroelectric Schemes by Poyry Energy Sdn. Bhd.	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin
14 November 2018	Fleet Management Department Overview Briefing	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin
15 November 2018	Group Finance Division Overview Briefing	1. Gopala Krishnan K.Sundaram
13 December 2018	Strategy & Regulatory Division Reimagining TNB and Project Needle	1. Gopala Krishnan K.Sundaram 2. Ong Ai Lin

PROFESSIONAL TRAINING

Directors are encouraged to develop and refresh their knowledge and skills on an on-going basis with developmental needs reviewed as part of the annual Board evaluation process and the necessary resources made available should any Director request additional training. For the Financial Year under review, the Board participated in various technical updates and briefings, including sessions between Directors and members of Top Management.

During the Financial Year under review, Gopala Krishnan K.Sundaram, appointed to the Board with effect from 4 July 2018 had successfully attended the Mandatory Accreditation Programme for Directors of Public Listed Companies (MAP) which was held on 8 and 9 October 2018, within four (4) months from his appointment date as prescribed under Paragraph 15.08 by the MMLR. All Board Members including the newly appointed Directors, Ong Ai Lin, Datuk Ahmad Badri bin Mohd Zahir, Dato' Roslina binti Zainal and Amir Hamzah bin Azizan have completed their MAPs accordingly.

The Board also participates in annual Board Technical Visit, either locally or abroad, with the aim of enhancing its understanding and knowledge of the technical and operational aspects of the power sector as well as to keep abreast of the latest technologies.

The Company Secretary's Office facilitates the Board in organising internal and arranging external programmes, training sessions, briefings, workshops and seminars that are relevant to the Directors. These include the annual Board Development Programme (BDP) which is organised in-house as part of TNB's Board Continuing Development Programme.

In 2018, a BDP was held on 1 August 2018, on strategic investment which was presented by Datuk Hisham Hamdan, Executive Director, Investments and Head of Khazanah Research & Investment Strategy, Khazanah Nasional Berhad and his team member.

Details of Directors' training, including the Company Secretary's training for the Financial Year under review are listed below:

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING PROGRAMME ATTENDED
Tan Sri Leo Moggie	23-24 January 2018	International Energy Week 2018
	1 August 2018	TNB Board Development Programme 2018
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8-9 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	7-8 November 2018	OECD-Asean Roundtable On Corporate Governance, Securities Commission Malaysia
	13 November 2018	32 Sultan Azlan Shah Law Lecturer, Sultan Azlan Shah Foundation
Datuk Seri Ir. Azman bin Mohd	1 August 2018	TNB Board Development Programme 2018
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8-9 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	12 November 2018	MIGHT's : Appreciation Get Together
Datuk Ahmad Badri bin Mohd Zahir (Appointed w.e.f. 1 November 2018)	10 April 2018	Budget Discourse 2018
	13-16 April 2018	Budget Retreat 2018
	10 October 2018	Seminar Kesedaran Berhubung Kecuaian Yang Boleh Dikenakan Surcaj
	3 December 2018	Pembangunan Strategi Keselamatan Siber Negara
	6 December 2018	Young Leaders Forum 2018 "The Voices of Malaysia Baharu"
	10 December 2018	Anti-Corruption Champion : Sharing Session With Winners of The Sheikh Tamim bin Hamad Al-Thani International Anti-Corruption Excellence Award 2018
Amran Hafiz bin Affifudin	18 January 2018	Live Viewing of Khazanah Annual Review 2018 (KAR 2018) Media Briefing
	11-23 February 2018	Senior Executive Programme
	5-9 March 2018	UBS Sovereign Wealth Fund Conference
	7 May 2018	Khazanah Investment Mid Year Retreat
	11-12 May 2018	Khazanah The Strategic Planning Group Mid Year Retreat
	15 May 2018	Seminar Governance Reform of Single Buyer and Grid System Operator
	1 August 2018	TNB Board Development Programme 2018
	8 August 2018	Business Foresight Forum 2018 Disruptions and Collaborations : The Rise of Capital Market Businesses 4.0
	12 September 2018	Asia Summit : Asia's Food And Agriculture Leaders Roundtable
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8-9 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	29-31 October 2018	Executive Leadership Programme 2018, McKinsey Forum
	6 December 2018	Khazanah Team Building Investment Division
	13 December 2018	Kedah International Business And Investment Summit
Noraini binti Che Dan	8 January 2018	Briefing On Information Technology (IT) Roadmap and Digital Journey
	1 March 2018	Navigation The VUCA World by Professor Tan Sri Dato' Dr. Lin See-Yan
	1 March 2018	Focus Group Discussion In Preparation for The 5 th BNM-FIDE Forum Annual Dialogue With The Governor For The Banking Industry and Insurance & Takaful Industry
	19 April 2018	5 th BNM-FIDE Forum Annual Dialogue With The Deputy Governor of BNM

Leadership & Effectiveness

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING PROGRAMME ATTENDED
Noraini binti Che Dan	1 August 2018	TNB Board Development Programme 2018
	8 August 2018	Business Foresight Forum 2018 Disruptions and Collaborations : The Rise of Capital Market Businesses 4.0
	3-4 September 2018	Credit Risk Management Banking Sector
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	21 September 2018	Information Security Awareness and IT Security Talk
	27 September 2018	Board Development Programme Sale And Services Tax
	8 October 2018	Khazanah Forum On Balance Recalibrating Market, Firms, Society and People
Gee Siew Yoong	10 January 2018	Briefing on Malaysian Code of Corporate Governance 2017
	25 January 2018	Developing Leaders, Transforming Organisations, Impacting Your Future
	5 February 2018	Technical Visit To a Self Propelled Heavy Lift Pipelaying Vassels - Sapura 3500
	5 February 2018	Global Gas Market Developments Supply - Demand and Implementations to Pricing Dynamics
	5 February 2018	Middle East : Opportunity Space for Offshore Oil & Gas Industry
	5 March 2018	Malaysian Financial Reporting Standards (MFRS 15 & 9)
	1 August 2018	TNB Board Development Programme 2018
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	14 December 2018	Malaysian Financial Reporting Standards (MFRS 15)
Juniwati Rahmat Hussin	24-25 January 2018	Blockchain Conference - Decentralising and Distributing for Data Validation and Management
	18 July 2018	Malaysia Association of Risk and Insurance Management (MARIM) Conference 2018
	1 August 2018	TNB Board Development Programme 2018
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8-9 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	16 October 2018	UEM Edgenta Forum : Expressway Operation Safety Passport
	18-19 October 2018	Asean Board of Directors : Future Proof Your Boardroom "Evolving Into a Proactive and Tech Savvy Board Director Ready to Steer The Company Through A Storm of Opportunities"
Gopala Krishnan K.Sundaram (Appointed w.e.f. 4 July 2018)	22 October 2018	ICLIF : Emerging of Risks, The Future - Board and Return On Compliance
	1 August 2018	TNB Board Development Programme 2018
	8 August 2018	Business Foresight Forum 2018 Disruptions and Calloborations : The Rise of Capital Market Businesses 4.0
	18-20 September 2018	CEPSI 2018 Kuala Lumpur : Reimagining Utility of The Future
	8 October 2018	Khazanah Megatrends Forum : Recalibrating Markets, Firms, Society and People
	8-9 October 2018	Mandatory Accreditation Programme
	18-19 October 2018	Asean Board of Directors : Future Proof Your Boardroom "Evolving Into a Proactive and Tech Savvy Board Director Ready to Steer The Company Through A Storm of Opportunities"
	30 October 2018	The Annual Report of Tomorrow : Guide to Forward Looking Information
	15 November 2018	Majlis Sirim Industri 2018
Ong Ai Lin (Appointed w.e.f. 1 August 2018)	5-8 February 2018	Financial Institutions Directors Education - Part 1
	10 April 2018	Artificial Intelligence (AI) and The Auditors
	6 June 2018	Win The Innovation Race By Prof. Roy Chua
	13 July 2018	RHB Bank Sustainability Awareness Session
	16-19 September 2018	Financial Institutions Directors Education - Part 2
	9 October 2018	Malaysia- A New Dawn Investors' Conferences
	9-10 October 2018	Malaysian Institution Accountant Conference
	30 October 2018	DNA of A Board Leader - De Marshall Goldsmith

NAME	DATE	COURSE
Norazni binti Mohd Isa	18 July 2018	Corporate Liability Provision 2018
	26-27 July 2018	General Counsel & Company Secretary Asia : Breaking Boundaries in the Age of Disruptive Change
	19 September 2018	Directors' Remuneration for GLICs, GLCs & Government Agencies 2018
	20 September 2018	Companies Act 2016: Dealing With Common Issues
	18 December 2018	Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA)

BOARD EVALUATION

The Board recognises an objective and well-managed board evaluation process can lead to substantial improvement in board effectiveness, bringing significant benefits to the Company. This is achieved through annual performance evaluations, induction programmes for new Board members and on-going Board development activities.

In 2018, the Board with the assistance of BNRC, had undertaken a formal and extensive Board Evaluation Assessment (BEA) of its own performance, its Committees and Individual Directors, for the Financial Year ended 31 December 2018.

These evaluations were conducted through the BEA questionnaires and the results were subsequently collected and analysed.

The BEA questionnaires towards an Effective Board cover the following parameters:

Responsibility and Conduct:

- Business Strategy governance and implementation
- Risk management and integrity
- Implementation of strategies and policies

Process and Administration:

- Board and Committee Charters
- Agenda and frequency of meetings
- Sufficient information availability and on a timely basis

Composition:

- Diversity
- Competencies of the Members
- Board and Committee compositions

NR NOMINATION AND REMUNERATION COMMITTEE REPORT

This year's process



2018 BOARD EVALUATION ASSESSMENT RESULTS

Based on the 2018 BEA results, the effectiveness of both the Chairman and President/CEO are reflective of the Board's confidence in both Chairman and President/CEO, where there is strong leadership helping the Company.

Overall the Board operates effectively as a team as evident in the synergies of its Members whereby it has remained highly effective and have consistently met high performance standards and all expectations. This indicates that the Directors have continuously fulfilled their responsibilities as Members of the Board. The Board also has identified some areas of improvements for the effectiveness of its operation of which among others, in managing the regulatory outcome and industry reformation, the Company's restructuring and the succession planning of Board and Top Management.

The respective Board Committees in average have been regarded as very effective in assisting the Board to carry out its duties. This indicates that each Committee member has continuously fulfilled his/her responsibilities as Member of the Board Committee.

The BEA 2018 also inclusive of Directors' Self and Peer Assessment whereby the results in general reflected the Board's consensus that each of the Director's level of performance was good and that they had also met the prescribed performance criterias.

In conclusion, the Board and Board Committees are satisfied with their existing composition and are of the view that, with the current mix of skills, knowledge, experience and strength of the existing Directors, the Board and respective Board Committees are able to discharge their duties effectively.

The performance of each Director who is retiring at the next AGM is taken into account by the Board in determining whether or not the Board should support the re-election or re-appointment of the Director.

OUR REMUNERATION APPROACH

The overall objectives of the BNRC are to determine an appropriate remuneration policy that aligns remuneration with strategy to drive the long-term success of the Company and ensures that the Company can continue to attract, retain and motivate quality leaders.

The Directors' Remuneration Policy is shaped by the following underlying principles:



EXECUTIVE DIRECTOR'S REMUNERATION

The remuneration package for the Executive Director is structured to link rewards to corporate and individual performance. It comprises salary, allowances, bonuses and other customary benefits as accorded by comparable companies. A significant portion of an Executive Director's compensation package has been made variable and is determined by performance during the year against individual KPIs in a scorecard aligned with the corporate objectives as approved by the Board. The Executive Director recuses himself from deliberation and voting on his remuneration at Board meetings.

The BNRC reviews the performance of the Executive Director annually and submits views/recommendations to the Board on adjustments in remuneration and/or rewards to reflect the Executive Director's contributions towards the Group's achievements for the year.

NON-EXECUTIVE DIRECTORS' REMUNERATION

The Board as a whole shall determine and recommend the remuneration of the Non-Executive Directors for shareholders' approval at the AGM. The Non-Executive Directors are remunerated through fixed monthly fees, meeting allowances and benefits-in-kind, inclusive of the reimbursement of electricity bills, telephone bills and business peripherals.

The level of remuneration of Non-Executive Directors reflects the current demanding challenges in discharging their fiduciary duties, roles and responsibilities, whether individually or collectively, as well as the complexity of the Company's operations and the industry. The existing remuneration by the Board, was last reviewed on 31 January 2013.

In 2018, the Board engaged Willis Towers Watson (WTW) to conduct a holistic and independent review of the Non-Executive Directors' Remuneration with the view to determine its market competitiveness and alignment with the latest regulations/corporate governance guidelines in Malaysia.

Due to limited listed company data in utilities industry in Malaysia, multiple data sources, combining of local and regional listed companies, beyond the local market and industry, are considered and benchmarked.

From the study, overall, TNB is at par with the market for most of the compensation elements offered to the Non-Executive Directors. With that the current remuneration framework of TNB Non-Executive Directors be retained, and to be reviewed in the next one (1) or two (2) years time to ensure its market competitiveness, as recommended by WTW.

DETAILS OF EACH DIRECTOR'S REMUNERATION FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2018:

Name of Directors	Director's Fees			Meeting Allowances		Emoluments ¹ (RM)	Benefits-in-Kind ² (RM)	Total (RM)
	Salary (RM)	Company (RM)	Subsidiaries (RM)	Company (RM)	Subsidiaries (RM)			
Executive Director								
Datuk Seri Ir. Azman bin Mohd	2,760,000.00	-	-	-	-	8,694,961.00	44,500.22 ³	11,499,461.22
	2,760,000.00	-	-	-	-	8,694,961.00	44,500.22	11,499,461.22
Non-Executive Directors								
Tan Sri Leo Moggie	-	360,000.00	300,000.00	78,500.00	32,800.00	-	111,739.71	883,039.71
Datuk Ahmad Badri bin Mohd Zahir (Appointed w.e.f. 1 November 2018)	-	40,000.00	-	8,000.00	-	-	-	48,000.00
Amran Hafiz bin Affifudin	-	240,000.00 ⁴	-	101,500.00 ⁴	-	-	33,460.70	374,960.70
Noraini binti Che Dan (Redesignated w.e.f. 28 February 2019)	-	240,000.00	-	116,500.00	-	-	27,657.33	384,157.33
Gee Siew Yoong	-	240,000.00 ⁵	-	102,500.00	-	-	18,313.96	360,813.96
Juniwati Rahmat Hussin	-	240,000.00	-	84,500.00	-	-	18,931.18	343,431.18
Gopala Krishnan K.Sundaram (Appointed w.e.f. 4 July 2018)	-	118,064.51	-	43,500.00	-	-	23,294.40	184,858.91
Ong Ai Lin (Appointed w.e.f. 1 August 2018)	-	100,000.00 ⁵	-	33,000.00	-	-	18,541.43	151,541.43
Datuk Seri Hashmuddin bin Mohammad (Resigned w.e.f. 1 April 2018)	-	60,000.00	-	22,000.00	-	200,000.00	4,849.20	286,849.20
Dato' Abd Manaf bin Hashim (Cessation of Office as Director w.e.f. 15 May 2018)	-	89,677.42	33,333.33	50,000.00	5,000.00	568,500.00 ³	67,411.60 ³	813,922.35
Datuk Sakthivel Alagappan (Cessation of Office as Director w.e.f. 15 May 2018)	-	89,677.42	-	32,500.00	-	200,000.00	71,193.97	393,371.39
Tan Sri Dato' Seri Chor Chee Heung (Resigned w.e.f. 30 June 2018)	-	120,000.00	-	66,000.00	-	200,000.00	43,782.25	429,782.25
Badrul Ilahan bin Abd Jabbar (Resigned w.e.f. 30 June 2018)	-	120,000.00	-	51,500.00	-	60,000.00	67,630.64	299,130.64
Total	2,760,000.00	2,057,419.35	333,333.33	790,000.00	37,800.00	9,923,461.00	551,306.59	16,453,320.27

NOTES

- Contribution to EPF, Bonus, Car Allowance, Flexi Benefits, LTIP and Gratuity.
- Electricity Bills, Telephone Bills, Business Peripherals, Purchase of Handphone, Medicals and Travelling Expenses.
- Include Subsidiary.
- Paid to Khazanah Nasional Berhad, in respect of Director's Fees and Meeting Allowances provided for Amran Hafiz bin Affudun.
- Receivable by the Directors upon shareholders' approval.

ACCOUNTABILITY

A AUDIT COMMITTEE REPORT

The Board Audit Committee (BAC) was established on 9 December 1990 by the Board of Directors to assist the Directors to carry out their responsibilities. The BAC is guided by its Terms of Reference.

MEMBERSHIP AND MEETINGS

The BAC comprises four (4) Independent Directors as at 31 December 2018, all of whom are Non-Executive Directors. The Chairman of BAC is not the Chairman of TNB's Board of Directors. This composition is aligned with Paragraph 15.09 (a) and (b) of the MMLR.

Details of BAC members and their attendance record at BAC meetings held during the Financial Year ended 31 December 2018 (FY2018) are as follows:

No.	Name	Status of Directorship	Independent	No. of Meetings Attended
1.	Noraini binti Che Dan <i>Chairman</i>	Non-Executive Director	Yes	18/18
2.	Gee Siew Yoong <i>Member</i>	Non-Executive Director	Yes	17/18
3.	Gopala Krishnan K.Sundaram <i>Appointed as Member w.e.f. 4 July 2018</i>	Non-Executive Director	Yes	8/8
4.	Ong Ai Lin <i>Appointed as Member w.e.f. 1 August 2018</i>	Non-Executive Director	Yes	7/7
5.	Tan Sri Dato' Seri Chor Chee Heung <i>Ceased as Member w.e.f. 30 June 2018</i>	Non-Executive Director	Yes	10/10
6.	Badrul Ilahan bin Abd Jabbar <i>Ceased as Member w.e.f. 30 June 2018</i>	Non-Executive Director	Yes	10/10
7.	Datuk Sakthivel Alagappan <i>Ceased as Member w.e.f. 15 May 2018</i>	Non-Executive Director	Yes	7/7
8.	Dato' Abd Manaf bin Hashim <i>Ceased as Member w.e.f. 15 May 2018</i>	Non-Executive Director	Yes	6/7

During the financial year under review, 18 BAC meetings were held. This satisfies Paragraph 5.1 of the BAC Terms of Reference, which requires the Committee to meet at least six (6) times a year.

The Company Secretary, who is the secretary to the BAC, and the Chief Internal Auditor (CIA) were in attendance during the meetings. The President/CEO and other officers were invited to the meetings to deliberate on matters within their purview.

After each meeting, the BAC Chairman submits a report to the Board of Directors on the matters deliberated. Matters reserved for the Board's approval are tabled at the TNB Board meetings. Action sheets are issued by the Company Secretary on the decisions made and the actions required. These are circulated to the Management for their further action.

SUMMARY OF ACTIVITIES OF THE BOARD AUDIT COMMITTEE

Principal activities performed by the BAC during FY2018 are summarised as below:

Internal Audit

- Approved the 2019 Group Internal Audit (GIA) Annual Audit Plan in November 2018, in which 90 audits were proposed to be conducted. The plan consists of audits in the form of full scope, design reviews, surprise audits, and external assessments.

Reviewed GIA's methodology in assessing the risk levels of various auditable areas based on a number of considerations, including high and significant risk rating, TNB's strategic objectives, business landscape, regulatory requirements, and inputs from BAC and the Senior Management.

The approved plan was established based on an estimated requirement of 9,345 man-days and a projected operating cost of RM20.5 million.

- Approved the FY2019 Key Performance Indicators (KPI) for CIA, relating to TNB's stakeholders, namely, our shareholders, employees and customers.
- Approved the revised FY2018 Annual Audit Plan in September 2018 to ensure its pertinence and in consideration of changes in current business requirements, as well as to meet requests from BAC and the Management.
- Deliberated on the internal audit reports for TNB and its subsidiaries issued by GIA, which, among others, focused on the effectiveness and adequacy of governance, risk management, and internal controls, audit recommendations, and the Management's response towards the issues highlighted in the presence of Management. Among the reports presented include security assessment for SCADA control, cyber security strategy, personal data protection, and international investment.
- Two (2) BAC meetings were held at Sabah Electricity Sdn. Bhd. (SESB) on 16 April 2018 and 7 September 2018, respectively, to deliberate on audit findings related to fuel management, human resources, long-term incentive plan, generation planning, collection and credit management, as well as safety.
- BAC took note of the status of actions taken by the Management on matters arising from previous meetings.
- Reviewed TNB's State of Internal Controls, tabled by GIA on a quarterly basis. Matters reported include audit plan coverage status, audit scope and the risks covered as at the date of the reports, audit rating summary for completed audits, significant audit findings, findings escalated for the Management's immediate action, and the status of corrective actions.

- BAC was updated quarterly on GIA's performance, which included percentage completion of the audit plan, cycle time of audit completion, and contribution(s) to the organisation in terms of cost savings/recoveries and/or business process improvements.

Among other matters reported during the meeting were Auditee Satisfaction Survey results, budget utilisation status, summary of trainings attended by auditors, number of auditors with/currently pursuing professional certifications, and improvement initiatives undertaken by GIA.

- Approved the revised Group Internal Audit Charter, after taking into consideration the changes made to the Internal Audit Activity Model Charter 2017, issued by the Institute of Internal Auditors (IIA) Global.

Key revisions made were in the areas of the mission statement of GIA, BAC's authority on GIA, conditions that may impair the objectivity and independence of internal auditors, and quality assurance and improvement programme.

- BAC reviewed GIA's organisational independence declaration for FY2018, which was prepared in accordance with the IIA Standards 1110 (Organisation Independence) and 1130 (Impairment to Independence and Objectivity).

It was brought to the BAC's attention that there had been no conflicts of interest arising from GIA's audit engagements in FY2018. In the event the CIA determines that GIA's independence or objectivity may be impaired in fact or appearance, details of impairment will be disclosed to the appropriate parties as stated in the Internal Audit Charter.

External Audit

- Deliberated and recommended for the Board's approval, the external auditor's 2018 Audit Plan encompassing the proposed audit approach, the nature and scope for the year's audit, audit fees, reporting schedule, and potential key audit matters. The external auditor informed that focus will be placed on areas related to information technology risk assurance i.e. security, application control, sales and service tax, and change of handled devices.
- Evaluated the independence and objectivity of the external auditor by reviewing the fees and the list of non-audit services provided by the external auditor to TNB and the Group on a quarterly basis.

BAC requested that justifications are to be provided by the Management for the appointment of external auditors for non-audit services. Additionally, allocation of non-audit services to the external auditor that exceeds the threshold set (i.e. 50% of audit and audit-related services), will need to be reported to BAC and the Board.

A AUDIT COMMITTEE REPORT

During the year, BAC was informed that the non-audit services amount for external auditors had exceeded the threshold limit. This was due to contracts awarded prior to the implementation of the threshold limit. Subsequently, the appointment of PricewaterhouseCoopers (PwC) as TNB's tax advisor for year assessment 2019 and 2020 was deferred as the non-audit services amount had exceeded the threshold set, and to avoid potential impairment of independence.

- BAC exercised its rights, as stipulated in its Terms of Reference, to hold meetings with the appointed external auditor without the presence of Management to enable open discussions with the BAC.

During the year, three (3) meetings were held without the Management's presence, namely, on 28 February 2018, 30 August 2018 and 27 November 2018.

- Reviewed the overall performance of the external auditor for the period from 1 September 2017 to 31 December 2017.

A survey was coordinated by GIA, and assessments on the effectiveness of the external auditor was performed by members of BAC and the Management. The external auditor was assessed based on:

- (1) Quality of service;
- (2) Sufficiency of resources;
- (3) Communication and interaction; and
- (4) Independence, objectivity and professional scepticism.

Based on the assessments, the external auditor was informed on areas that required further improvement to enhance their services.

- Deliberated and endorsed the revised policy on external auditors for the Board's approval. Changes made took into consideration the provisions under the Malaysian Code on Corporate Governance (MCCG) 2017 and the TNB Implementation Guidelines on External Auditors' Independence.

Financial Results

- In February 2018, BAC endorsed and recommended the audited financial statements of the Company and the Group for the Financial Year ended 31 December 2017 for the Board's approval.
- Reviewed the quarterly Unaudited Financial Results of the Group and the draft announcements before recommending them for the Board's approval. The recommendations were made upon deliberation on the external auditor's Audit Committee Report, comprising:
 - (1) Significant accounting matters;
 - (2) Key developments during the quarter involving the acquisition of subsidiaries, transition of the Malaysian Financial Reporting Standards (MFRS) framework, new projects and renewable energy;
 - (3) Overseas investments; and
 - (4) Key accounting developments including MFRS 16 (Leases).

- Recommended the proposed final dividend for the period ended 31 December 2017 and Interim 1 Single-Tier Dividend for the quarter ended 30 June 2018. BAC reviewed and received assurance from the Management, based on the solvency test conducted, that the distribution of dividends was in accordance with the provisions made under the Companies Act 2016.

Related Party Transactions

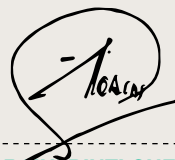
- In February 2018, BAC reviewed all related party/recurrent related party transactions entered into by TNB Group for the Financial Year ended 31 December 2017, and recommended to the Board that TNB Group complied with the MMLR.

Annual Reporting

- Reviewed and endorsed the BAC Report, Statement on Internal Audit Function, TNB Sustainability Statement and Corporate Governance Overview Statement for the Board's approval.

Others

- Discussed and advised newly-acquired subsidiaries on compliance with the Group External Auditors Policy for the appointment of external auditors.
- Reviewed the proposal for the granting and vesting of performance shares, as well as restricted shares under TNB's Long Term Incentive Plan (LTIP) for the Board's approval.
- During the BAC meeting in March 2018, key highlights and findings of the Regulatory Compliance Audit (RCA) 2016, carried out in conjunction with the requirement of the Malaysian Electricity Supply Act 1990 and the operator license granted to TNB were discussed. BAC commented that the RCA 2016 results were satisfactory, as the initiatives planned by TNB showed consistent improvements as compared to previous audit results.



NORAINI BINTI CHE DAN
Chairman, Board Audit Committee
Senior Independent Non-Executive Director

LIMITS OF AUTHORITY

The Limits of Authority outline principles to govern decision making within the Group, including appropriate escalation and reporting to the Board. The Board has also delegated to the President/CEO, and through the President/CEO to other Executives, responsibility to manage the Company's day-to-day activities. The Limits of Authority encompass both monetary and non-monetary limits of authority for recommending and approving operational and management decision-making activities prior to its execution. This allows for balanced effective oversight with appropriate empowerment and accountability of the Management.

CODE OF ETHICS

The Board of Directors is guided by a high standard of ethical conduct in accordance with the Code of Ethics for Company Directors as established by the Companies Commission of Malaysia.

Each Non-Executive Director is supplied with the Non-Executive Directors' Handbook as reference of their professional responsibilities as well as the terms and conditions of their service. The Non-Executive Directors' Handbook is updated as and when the need arises to reflect any changes of the applicable rules and regulations as well as in the policies/procedures that govern the conduct of the Directors.

TNB has a Code of Ethics to govern the conduct of its employees. The provisions set out in the Code of Ethics ensure compliance with laws and regulations, sound employment practices, confidentiality and privacy. It also includes provisions on conflicts of interest, giving and accepting business courtesies and the protection and proper use of TNB's assets and resources.

TNB's Code of Ethics also defines how TNB relates to its shareholders, employees, customers, suppliers and the communities in which it operates. It includes TNB's general principles on business integrity. All employees are expected to conduct business in accordance with the applicable laws, rules and regulations and in a manner so as to enhance and protect the reputation of TNB.

TNB's Procurement Code of Conduct guides TNB's Directors and employees as well as all existing and potential suppliers/contractors including their directors and employees. TNB believes that all supplier/contractor relationships should be based on principles of good governance such as integrity, accountability, fairness and a zero-tolerance rule towards bribery and corruption. These principles are enforced in the Procurement Code of Conduct, which is constantly revised to reflect changes in regulations, reputational demands and business challenges.

The Procurement & Supply Chain Policy and Procedures provides a set of general policy and procedures as guidance in executing procurement within TNB. The Policy and Procedures enables TNB to obtain the best value in procurement, adopt leading business practice, advance TNB's business priorities, add value to customers and uphold good corporate governance.

TNB's Code of Ethics and Procurement Code of Conduct are available at their respective sections of the Company's website at www.tnb.com.my.

CONFLICTS OF INTEREST

To foster ethical and independent decision-making, the Company requires Directors with any direct or indirect interest in a proposal or transaction being considered by the Board or its Committees to declare that interest and recuse himself/herself from the deliberations. The affected Director will take no part in the decision-making.

WHISTLE BLOWING PROCEDURE

The Whistle Blowing Procedure embodies TNB's commitment to maintaining an open working environment in which employees, contractors and members of the public are able to report instances of unethical, unlawful or undesirable conduct on a confidential basis without any fear of intimidation or reprisal. An independent investigation team investigates all reported concerns and where applicable, provides feedback regarding the investigation's outcome.

The objectives of the Whistle Blowing Procedure are as follows:

- to detect and address unacceptable conduct;
- to provide employees and contractors with a supportive working environment in which they feel able to raise issues of legitimate concern to them and to TNB; and
- to protect people who report unacceptable conduct in good faith.

Complaints can be channeled online via wbis.tnb.com.my or norainicd.integrity@tnb.com.my or by calling the toll-free line at 1-800-888-862.

TNB had been awarded the ISO 37001 Anti-Corruption Management System from SIRIM on 15 November 2018, strengthening its integrity values through the publication of the TNB Corporate Integrity Management System (TCIMS) Handbook.

The objectives for the TCIMS are summarised below:

- Bring TNB up to international standards of integrity infrastructure
- Impact corruption costs; and
- Improve Company culture.

The TCIMS Handbook was launched by the Deputy Minister of Energy, Science, Technology, Environment and Climate Change (MESTECC), Isnaraissah Munirah Majilis, in conjunction with TNB's Integrity Day 2018, which was held on 20 December 2018, at Dewan Serbaguna, Kompleks Sukan TNB, Jalan Pantai Baru, 59200 Kuala Lumpur. The TCIMS Handbook, is based on the ISO 37001 standard, covers elements such as due diligence, financial and non-financial controls, policies on specific high-risk bribery areas, whistleblowing policy, and training and communication.

The 61-page book covers five (5) TCIMS policies; Anti Bribery Policy, Gifts, Hospitality and Related Benefits Policy, Conflicts of Interest Policy, Whistleblowing Policy and Integrity Pact and Committee Integrity Pledges Policy.

R RISK COMMITTEE REPORT

BOARD RISK COMMITTEE

CHAIRMAN

Gee Siew Yoong

Independent Non-Executive Director

(Appointed as Chairman w.e.f. 16 May 2018)

Dato' Abd Manaf bin Hashim

Senior Independent Non-Executive Director

(Ceased as Chairman w.e.f. 15 May 2018)

MEMBERS

Noraini binti Che Dan

Senior Independent Non-Executive Director

Juniwati Rahmat Hussin

Independent Non-Executive Director

Gopala Krishnan K.Sundaram

Independent Non-Executive Director

(Appointed as Member w.e.f. 1 August 2018)

Ong Ai Lin

Independent Non-Executive Director

(Appointed as Member w.e.f. 15 August 2018)

Datuk Seri Hashmuddin bin Mohammad

Non-Independent Non-Executive Director

(Ceased as Member w.e.f. 1 April 2018)

Badrul Ilahan bin Abd Jabbar

Independent Non-Executive Director

(Ceased as Member w.e.f. 30 June 2018)

KEY RESPONSIBILITIES

- Oversees the establishment and implementation of the risk management framework that is embedded into the culture, processes and structures of the Group and is responsive to changes in the business environment.
- Approves the risk management framework and policies on behalf of the Board.
- Ensures that the principles and requirements of managing risk are consistently communicated and adopted throughout the Group.
- Deliberates the Group's strategic risks as well as key operating risks and risk issues through timely and regular reports and ensures the implementation of appropriate systems to manage these risks. It has the authority to direct special investigations, on behalf of the Board, into significant risk management activities, as and when necessary.
- Approves on behalf of the Board, the risk appetite for the strategic risks and key operating risks and ensures that actions are taken in a timely manner when risks are outside tolerable ranges.
- Reviews the adequacy of and to provide independent assurance to the Board of the effectiveness of the risk management framework implemented in the Group on an annual basis.

ROLE OF COMMITTEE

The Board Risk Committee (BRC) was established on 5 June 2013 by the Board of Directors (Board) to assist the Board to carry out its responsibilities. The Board, through the BRC, is responsible to oversee the effectiveness and adequacy of the Group's risk management framework and ensure it forms part of the corporate culture. This is in line with the requirements stated in the Malaysian Code on Corporate Governance and Bursa Malaysia's Main Market Listing Requirements.

The main role of the BRC is to assist the Board in ensuring that the Group has in place a sound and robust enterprise risk management framework and such framework has been effectively implemented to enhance the Group's ability to achieve its strategic objectives.

HOW THE COMMITTEE OPERATES

The BRC meetings are pre-determined for the following financial year and is tabled to the Board. It is thereafter communicated to the members with the specific meeting agenda prior to each meeting.

In FY2018, there were 12 BRC sittings. Prior to the meeting, BRC members were provided with papers approved for tabling and updates of outstanding matters from previous meetings for the members' perusal.

The Chief Risk Officer (CRO) and Company Secretary, who is also secretary to the BRC, attended the meetings. Other attendees, internal or external, were invited to deliberate on matters within their purview.

Action sheets were issued by the Company Secretary on decisions made and action required. These were circulated to Management for their further action. The BRC Chairman Reports were tabled at the Board meetings for notification and/or further deliberation on matters within the purview of the Board.

SUMMARY OF ACTIVITIES FOR FY2018

The BRC principal activities in the year under review are summarised below:

- Reviewed the Statement of Risk Management and Internal Control, which summarised the risk management practices and internal controls implemented by Management. Assurances from the President/CEO and CFO were given to the Board that the Group's risk management and internal control system is operating adequately and effectively, in all material aspects.
- Deliberated the Group's key operational risks and key controls taken to manage the risks. Additional mitigations to strengthen the management of existing and emerging risks were recommended for further action.
- Reviewed and deliberated Key Risk Indicators that were reported through a Quarterly Risk Dashboard. Relevant business units reported the status of action taken to mitigate potential adverse impacts.

- Reviewed reports on risk incidents and deliberated the adequacy and effectiveness of preventive and corrective action.
- Reviewed the risk profiles and mitigation plans for projects and proposed investments with recommendations for further action and/or study of the feasibility and commerciality of the projects and investments in meeting the Group's strategic objectives.
- Reviewed the Group's insurance programmes and recommended improvements for an adequate and effective risk transfer mechanism in the interests of the Group.

RISK MANAGEMENT

BRC is assisted by the CRO and the Risk Management Department (RMD) in discharging its duties and responsibilities.

RMD is responsible for the effective implementation of the TNB Risk Management Framework for informed decision-making. The TNB Risk Management Framework had been developed in alignment with the ISO 31000 international standard. RMD is responsible to consolidate, assess and report risk information from across the Group. The implementation of the TNB Risk Management Framework in the Group is subjected to the independent assurance and assessment of the Group Internal Audit Department. Additionally, RMD establishes appropriate insurance programmes as an effective risk transfer mechanism for the Group.

RMD ensures the implementation of the TNB Risk Management Process across the Group. The TNB Risk Management Process is a step-by-step process of risk identification, analysis evaluation and treatment in view of the business objectives and strategy. In the year under review, RMD facilitated 24 risk workshops with relevant risk owners across the Group in applying the TNB Risk Management Process. The online and real-time TNB Risk Information System (TRIS) captures the risk registers of the Group and functions as a platform for monitoring and reporting.

The TNB Investment Risk Assessment (TIRA) was developed by RMD in 2015 with the objective of providing a standardised risk assessment methodology for investment proposals that reflects the risk appetite of the BRC. In the year under review, the TIRA guideline was applied for five (5) investment proposals.

In accordance with the TNB Risk Management Structure, risk matters especially cross-divisional issues are deliberated at the quarterly Group Risk Management Working Committee meetings chaired by the CRO. In addition, a Subsidiary Risk Management Working Committee (SRMWC) with Managing Directors of TNB subsidiaries as members, was formed for the purpose of effective implementation and integration of risk management in TNB subsidiaries. RMD, secretariat of the above-mentioned committees, collates and reports the risk profiles, Key Risk Indicators, lessons learned from risk events and emerging risks.

In the year under review, RMD assessed the risk maturity of 12 business units and subsidiaries with the objective of gauging the risk culture and risk management effectiveness of the organisation and providing value-added recommendations for risk management improvements.

Moreover, in the effort to inculcate a risk-thinking mentality amongst TNB employees, two (2) risk conferences for executives were organised in Johor Bahru and Kuala Lumpur with the theme "Let's Manage Risk Together". Furthermore, an inaugural TNB Cyber Security Risk Conference was organised to heighten the mindfulness of decision makers of cyber security risks and related mitigation in view of the potential catastrophic impact to business and reputation. In addition, 376 non-executives in total attended three (3) risk forums held across Peninsular Malaysia. Besides learning lessons from case studies, the non-executives had the opportunity to brainstorm potential risks and mitigations related to their areas of responsibility.

CONCLUSION

The BRC continues to diligently exercise its risk oversight responsibilities by ensuring that risk management is an integral part of strategic planning and decision making for the achievement of the Group's strategic outcomes and long-term objectives.

This statement was made in accordance with the resolution of the Board of Directors dated 28 February 2019.



GEE SIEW YOONG

Chairman, Board Risk Committee
Independent Non-Executive Director

INTERNAL AUDIT FUNCTION

TNB's internal audit function, which is under the purview of the Group Internal Audit Department (GIA), is established by TNB's Board of Directors to provide independent, objective assurance, and consulting services designed to add value and improve TNB's operations.

GIA is currently headed by Rosli bin Mohd Rose, who is the Chief Internal Auditor (CIA). He joined GIA as the Deputy CIA (Core Business) in 2006, and was appointed as the CIA in 2014. He holds a Degree of Electrical and Electronic Engineering from Brighton Polytechnic (currently known as University of Brighton), United Kingdom, and a Master of Engineering from Universiti Tenaga Nasional, Malaysia. Prior to joining GIA, he had extensive experience in various aspects of TNB's operations, such as operations and maintenance, project management, asset management, human resources, and business development. Additionally, he is an Associate Member of Institute of Internal Auditors Malaysia.

PRACTICES AND FRAMEWORK

GIA endeavours to enhance and protect TNB Group's organisational value by providing independent, risk-based and objective assurance, advice and insight. GIA helps TNB accomplish its objective by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and internal control processes.

GIA is guided by internal policies and procedures, as well as the Internal Control Framework of Committee of Sponsoring Organisation of the Treadway Commission (COSO) and the Control Objectives for Information and Related Technologies (COBIT), in assessing and reporting the adequacy and effectiveness of the design and implementation of the organisation's overall system of internal controls, risk management, and governance.

Additionally, to effectively manage its functions and perform audit engagements, GIA adopts the standards and principles outlined in the International Professional Practices Framework (IPPF) of the Institute of Internal Auditors (IIA) Global, which comprises the Core Principles for the Professional Practice of Internal Auditing, the International Standards for the Professional Practice of Internal Auditing, the definition of Internal Auditing, and our Code of Ethics.

SCOPE AND COVERAGE

GIA formulated its annual audit plan using a risk-based approach, taking into consideration TNB's strategic objectives, business landscape, regulatory requirements, as well as inputs from the BAC and the Senior Management.

The audit universe covered during the FY2018 includes, but not limited to, departments, divisions, and corporate functions, such as: generation, grid, distribution, procurement, projects, engineering, accounting and finance, human resources, information and communication technology, strategy and regulatory, corporate communications, energy ventures, and subsidiaries.

Among the key operational areas reviewed during FY2018 include:

- Operations and maintenance;
- Project management;
- Fuel/coal management;
- Production and quality assurance;
- Corporate governance;
- System security and data centre management;
- Financial management;
- Key leadership management;
- Human resource and compensation/benefit management;
- Strategic risk management;
- Procurement and contract management;
- Supplier management;
- Fleet management;
- Regulatory compliance management;
- Insurance management;
- Management of security services;
- Meter installation management;
- Collection and credit management;
- Investment management;
- Integrity management; and
- Health, safety and environmental management.

Based on the audits carried out in FY2018, among the key risks covered include non-compliance with regulatory requirements, fraud, cyber threat including data manipulation/security breach, ineffective credit management and delay in collections, competency mismatch to drive strategy, inability to adapt to changing market environment, incapability to leverage on available technology, and ineffective engagements and communications with stakeholders.

RESOURCES

As at 31 December 2018, GIA is staffed with 63 auditors from diverse disciplines, as summarised below:

Discipline	No. of Auditors	Percentage (%)
Accounting, Finance and Business	32	51
Engineering	20	32
Quantity Surveying	4	6
System Analyst/Computer Science/Information Technology	7	11
Total	63	100

The total cost incurred in managing the internal audit function for FY2018 was RM18.4 million, comprising mainly staff costs and spending related to audit activities, as follows:

Category	RM (Million)	% of Total Cost
Staff costs	12.5	68
Operating costs	2.7	15
Consultancy fees	3.2	17
Total	18.4	100

During FY2018, GIA issued a total of 196 reports arising from 70 planned audits, three (3) investigation audits, two (2) surprise audits, and 121 follow-up audits.

PROFESSIONAL QUALIFICATIONS AND COMPETENCY DEVELOPMENT

GIA continuously encourages its auditors to uphold professional skills and proficiency by obtaining the relevant professional qualifications and/or certifications, namely, Certified Internal Auditor (CIA), Certified Information System Auditor (CISA), Certification in Risk Management Assurance (CRMA), Chartered Accountant (CA) and Professional Engineer.

As at 31 December 2018, GIA had in its team a total of 19 qualified professionals who possess various professional qualifications and/or certifications, as shown below:

Certification	No. of Auditors
CIA	7
CRMA	2
CISA	1
CPA/ACCA/CIMA/MICPA/CA	7
Professional Engineer	2
Total	19

Note: CPA – Certified Public Accountant, ACCA – Association of Chartered Certified Accountant, CIMA – Chartered Institute of Management Accountant, MICPA – Malaysian Institute of Certified Public Accountant

INTERNAL AUDIT FUNCTION

In addition to the above, 33% (equivalent to 21 auditors) are in the midst of pursuing their respective professional qualifications and/or certifications at various levels.

GIA commits to ensure that the level of its auditors' skills, knowledge, and competencies are maintained as stipulated in GIA's Charter. These are accomplished through the following:

- Involvement of auditors in conferences and trainings in the area of auditing skills, technical skills, leadership and communication skills, business acumen, strategic management and personal development;
- Assignment of auditors to other divisions/special projects to gain operational experience; and
- Participation in knowledge sharing sessions with government-linked companies and presentation of audit papers in conferences.

As at 31 December 2018, GIA incurred a total cost of RM201,000 on such trainings and conferences.

SUMMARY OF GIA'S ACTIVITIES IN FY2018

The following summarises the activities undertaken by GIA in FY2018:

- Presented TNB's State of Internal Controls to the BAC on a quarterly basis to highlight the implementation status of GIA's audit plan and coverage, audit scope and the risks covered as at the report date, audit rating summary for completed audits, significant audit findings, findings escalated for the Management's immediate action, and status of corrective actions.
- Coordinated and attended meetings with the Risk Management Department to deliberate on emerging risks and relevant mitigation plans.
- Carried out advisory services, among which include:
 - (1) Engaged with Top Management during TNB Leadership Group (TLG) meetings to discuss key highlights of internal audit reports and participated in management seminars to brief on TNB's current internal audit structure, execution of surprise audits, and corrective actions status update; and
 - (2) Conducted control self-assessment training for the Security Services Department.

- Provided independent and objective assurance on the adequacy of internal controls implemented to mitigate risk exposures. Reports on audits performed, which consist of observations, improvement opportunities, Management responses, deadlines and the persons-in-charge for the implementation of corrective actions were issued to the respective auditees, Senior Management and BAC.
- Performed follow-up audits on corrective actions agreed by the Management to assess whether the necessary actions have been implemented adequately and in a timely manner.
- Conducted quality assurance and improvement activities, including:
 - (1) Internal quality assessment on the audit function to assess conformance to the IPPF; and
 - (2) Established quality assurance and improvement programmes which are monitored on a quarterly basis and reported to the BAC.
- Rolled out electronic updating/monitoring of corrective actions via TeamCentral, as part of Management updates.
- Enhanced GIA's audit approach and coverage through the use of technology (i.e. Audit Management System and Computer-Assisted Audit Tools) and carried out resource optimisation to further improve audit efficiency and effectiveness.



ROSLI BIN MOHD ROSE
Chief Internal Auditor



NORAINI BINTI CHE DAN
Chairman, Board Audit Committee
Senior Independent Non-Executive Director

RELATIONS WITH SHAREHOLDERS

COMMUNICATION AND ENGAGEMENT WITH SHAREHOLDERS

The Group values engagement with investment community and consistently improving transparency by having various channels of communication for shareholders and investors. The Group believes that having continues effective relationship with investors, as well as acknowledges the importance of timely, accurate and transparent in disseminating information to the investment community are the fundamentals in maximising the shareholder value.

The Board encourages continuous disclosure and communication of information to its stakeholders. This is essential to strengthen the Group relationship with the stakeholders in realising the Company's aspiration to become a Global Top 10 Utility by 2025. Keeping that in mind, the Group proactively sets investor engagement sessions with the investment community to instill confidence and enhancing their understanding of the Company's strategic decisions.

The Group has outlined various extensive channels, which allows TNB Senior Management and Investor Relations (IR) team to communicate relevant and material information in order to maintain close and transparent relationships with our institutional and retail investors, fund managers and research analysts.

These channels include:

- Quarterly and Full Year Financial Results Announcements
- Engagement session with investors and analysts through One-on-One/ Group Meetings, IR Conferences and Non-Deal Roadshows
- Interactive session with investors at Annual General Meeting
- Site Visits
- IR section of the website
- Bursa filings and Press Release
- Annual reports

CORPORATE DISCLOSURE POLICY

The Corporate Disclosure Policy, as well as associated guidelines, reinforce TNB's commitment to continuous disclosure and outline Management's accountabilities and the processes to be followed in ensuring compliance.

TNB's practice is to release all price-sensitive information to Bursa Malaysia Securities Berhad in a timely manner as required under the MMLR and to the market and community generally through TNB's media releases, website and other appropriate channels.

For disclosure purposes, price-sensitive information is information that a reasonable person would expect to have a material effect on the price or value of TNB's securities. The Company Secretary is responsible for reviewing proposed disclosures and making decisions in relation to the disclosure of information to the market. Each Division in TNB is required to inform the Company Secretary of any potential price-sensitive information concerning TNB as soon as this becomes known.

ANNUAL GENERAL MEETING

Our Annual General Meeting is attended by our Board and Top Management and all our eligible shareholders are welcomed to attend.

A presentation of the Company's financial and technical/operational highlights is given before the Chairman deals with the formal business of the meeting. Shareholders are encouraged to attend the AGMs and to use the opportunity to ask questions on the Company's performance under review and to vote on the proposed resolutions including but not limited to the receipt of the audited financial statements and the reports of Directors and Auditors, re-election of Directors of those retiring and the fixing of the fees of Directors. TNB conducts its AGM by poll/ e-voting in accordance with Paragraph 8.29A of the MMLR (voting by poll). The outcomes of voting on the proposed resolutions are disclosed to the market and posted on the Company's website after the AGM. The External Auditors attend the AGM to answer shareholders' questions on the conduct of the audit, the preparation and content of the audit report, the accounting policies adopted by the Company and the independence of the auditors in the audit process. TNB further encourages shareholders to access the Integrated Annual Report online to complement the Group's commitment to the environment, as well as to achieve greater cost efficiencies. Nevertheless, shareholders are still provided with the Integrated Annual Report in CD-ROM format together with a summarised version of the Financial Statements, Notice of AGM and Proxy Form.

INVESTOR RELATIONS

TNB strives to continuously aim and building strong and long-term relationships with our various stakeholders, especially the financial community. TNB are committed in maintaining high standard in the dissemination of relevant and material information on the Company's development through effective engagement and communication, while ensuring these information are comprehensive, timely and transparent. The information communicated to the financial community consists mainly of TNB business strategies and directions, regulatory updates, financial and technical performance.

IR uses numerous platforms to maintain our engagements with shareholders and stakeholders through Quarterly and Full Year Financial Announcements, Analysts Briefing Presentations, Conference Calls, One-on-One and Group Meetings at Investor Conferences, Non-Deal Roadshows (NDR) and In-House Meetings.

FINANCIAL REPORTING

The Board aims to provide a clear, balanced and comprehensive assessment of the Group's financial performance and prospects to shareholders, investors and relevant regulatory authorities via the quarterly financial reports, audited financial statements, annual reports and other reports or statements as well as through material disclosures made in accordance with the MMLR.

The BAC assists the Board in overseeing the integrity of the Group's financial reporting, including the operation of the financial reporting processes. The processes are aimed at providing assurance that the financial statements and related notes are completed in accordance with applicable legal requirements and accounting standards and give a true and fair view of the Group's financial position.

RELATIONSHIP WITH EXTERNAL AUDITORS

The Board maintains a transparent and professional relationship with the External Auditors, with the BAC responsible for recommending the appointment or removal of the External Auditors, the approval of their remuneration and the terms of their engagement to the Board.

As underlined by its TOR, the BAC shall meet the External and Internal Auditors or both at least twice a year to discuss issues arising out of audits and any matters that the auditors may wish to discuss in the absence of the Management.

For the Financial Year under review, three (3) sessions between the BAC and the External Auditors in the absence of Management was held for greater exchange of views and opinions between both parties in relation to financial reporting.

The Board/BAC are responsible for reviewing, assessing and monitoring the performances, suitability and independence of External Auditors. The Board has set a policy on External Auditors which stipulates the guidelines and procedures for the Board/BAC to assess and monitor the performances and independence of External Auditors.

The policy covers Selection and Appointment, Independence, Conflict of Interest, Non-Audit Services, Rotation of Audit Partner (applies to lead audit engagement partner), Annual Reporting, Annual Assessment and Audit Fees.

The appointed Audit Partner by the External Auditors is subject to rotation at least every five (5) financial years.

The External Auditors can also be engaged to perform non-audit services provided such services do not impair either in fact or appearance, the auditors' objectivity, judgment or independence.

The External Auditors are required to provide their written assurance of meeting the independence requirements for each non-audit service undertaken by them for TNB Group.

The prohibition of non-audit services is based on three (3) basic principles that the External Auditors cannot function in the role of Management; cannot audit their own work; and cannot serve in an advocacy role of TNB Group.

The External Auditors shall observe and comply with the By-Laws of the Malaysian Institute of Accountants in relation to the provision of non-audit services and if necessary, apply safeguards as stipulated in the By-Laws.

The BAC assists the Board in assessing whether the independence of the External Auditors has been maintained, having regard to any non-audit related services. The BAC has considered the provision of non-audit fees by the External Auditors for the non-audit services provided to the Group and the Company during the Financial Year and has concluded that the provision of these fees does not compromise and impair the External Auditors' independence or objectivity.

The Auditors' Remuneration including Non-Audit Fees for the Company and the Group for the Financial Year ended 31 December 2018 is as follows:

	Group RM 'Million	Company RM 'Million
Statutory Audit	3.5	1.5
Audit Related Services	2.6	2.6
Non-audit Services:		
- Tax Related Services	2.8	2.4
- Other Non-Audit Services*	4.8	4.4

* Other non-audit services primarily relates to consultancy services and project management.

All services were procured competitively in accordance with TNB's Procurement & Supply Chain Policy and Procedures and External Auditors Policy. Non-audit services can be offered by the External Auditors of the Group if there are clear efficiencies and value added benefits to the Group.

Based on the External Auditors Assessment Results for the Financial Year under review, the Board/BAC are satisfied with the quality of service, adequacy of resources provided, communication, interaction skills and independence, objectivity and professionalism demonstrated by the External Auditors in carrying out their functions.

Being satisfied with the External Auditors' performance, the Board recommends their re-appointment for shareholders' approval at the AGM.

INSIDER TRADING

The Directors and Top Management of TNB are prohibited from trading in securities or any kind of price-sensitive information and knowledge which have not been publicly announced in accordance with the MMLR and relevant provisions of the Capital Markets & Services Act 2007. Where applicable, notices on the closed period for trading in TNB's securities are circulated to Directors and Top Management who are deemed to be privy to any price-sensitive information and knowledge, in advance of the closed period.

PROMOTING SUSTAINABILITY

The Board recognises that the Company's stakeholders are increasingly interested in understanding its approach and performance in embedding sustainability in the organisation.

For this Financial Year, TNB has published a Sustainability Statement which discloses TNB's efforts and initiatives in managing its material economic, environmental and social risks and opportunities. The reporting is guided by the Global Reporting Initiative (GRI) standard. The Sustainability Statement is on pages 66 to 96 of this Integrated Annual Report.

RESPONSIBILITY STATEMENT IN RESPECT OF THE FINANCIAL YEAR UNDER REVIEW

The Board is fully accountable for ensuring the Audited Financial Statements are prepared in accordance with the Companies Act 2016 and the applicable approved accounting standards set out by the Malaysian Accounting Standards Board so as to present a true and fair view of the Group's state of affairs and of the profit or loss and cash flow as at the end of the accounting period.

In preparing the Audited Financial Statements, the Directors are satisfied that the applicable approved accounting standards in Malaysia have been complied with and reasonable and prudent judgements and estimates have been made. The Audited Financial Statements are also prepared on a going concern basis as the Board has a reasonable expectation, after having made enquiries that the Group has adequate resources to continue its operational existence for the foreseeable future.

ADDITIONAL COMPLIANCE STATEMENT

(1) Utilisation of Proceeds Raised from Any Corporate Proposal

Utilisation of Proceeds Raised from Corporate Proposals by the Company during the Financial Year under review:

A Multicurrency Sukuk Issuance Programme of USD2.5 billion (Or its Equivalent In Other Currencies) by TNB Global Ventures Capital Berhad with TNB as the Obligor

First Issuance on 10 October 2016	USD750 million
Total utilisation as at 31 December 2018	USD596 million
Balance of proceeds as at 31 December 2018	USD154 million

Establishment of Sukuk Wakalah Programme of up to RM5.0 billion by TNB

First issuance on 3 August 2017	RM2.0 billion
Second issuance on 29 August 2018	RM3.0 billion
Balance of proceeds as at 31 December 2018	Nil

(2) Material Contracts

There were no material contracts entered into by the Company and its Subsidiaries involving the interest of the Directors or Major Shareholders, either still subsisting at the end of the Financial Year or, if not then subsisting, entered into since the end of the previous Financial Year.

(3) Related Party Transactions

The Group has established appropriate procedures to ensure it complies with the MMLR with regards to related party transactions. All related party transactions are reviewed by the Group Internal Audit Department, following which a Group-Wide Report is submitted to the BAC on a quarterly basis for monitoring purposes.

The Group did not seek any mandate of its shareholders pertaining to related party transactions during the Financial Year under review.

STATEMENT ON COMPLIANCE WITH THE REQUIREMENTS OF BURSA MALAYSIA IN RELATION TO APPLICATION OF PRINCIPLES AND ADOPTION OF BEST PRACTICES LAID DOWN IN THE MALAYSIAN CODE ON CORPORATE GOVERNANCE 2017

(Pursuant to paragraph 15.25 of the MMLR)

The Board has reviewed, deliberated and approved this Statement. The Board is pleased to report to its shareholders that to the best of its knowledge, the Company has complied with and shall remain committed to attaining the highest possible standards of corporate governance through the continuous adoption of the principles and best practices of the MCGG 2017 and all other applicable laws.

Signed on behalf of the Board of Directors in accordance with their resolution dated 28 February 2019.



NORAIN BINTI CHE DAN

Senior Independent Non-Executive Director

STATEMENT OF RISK MANAGEMENT AND INTERNAL CONTROL

For the Financial Year ended 31 December 2018

In the same manner, the Group's strategic risk profile was developed, reflecting six (6) risks that may prevent the Group from achieving its strategic and long-term objectives. Mitigations listed in the table below provides an indication of the strategies put in place to manage these strategic risks.

Risk	Description	Mitigation
1. Inability to keep pace with changing customers' expectations	In view of our Reimagining TNB initiatives, understanding changing customers' values and expectations is important to be successful in the beyond kWh business. Failing to keep pace with changing customers' expectations may lead to lost opportunities and deterioration of customer satisfaction.	<ul style="list-style-type: none"> Establish customer analytics and market intelligence initiatives. Implement comprehensive and integrated communication plan for targeted customers to shape intended perception. Embark on Advanced Metering Infrastructure (smart meter installation).
2. Competency mismatch to drive strategy	As a leading electricity utility for the past 69 years, TNB has continuously developed employees with the necessary skills and competencies. To accelerate growth in regulated and non-regulated businesses, it is essential that our personnel are equipped with strategic and operational capabilities for TNB to be successful in a competitive global business environment.	<ul style="list-style-type: none"> Establish Leadership Development Programmes; e.g., Leadership Drive, Tour of Duty, Upward Mobility, etc. Identify and place leaders in pivotal positions to drive Reimagining TNB initiatives. Implement "Return policy" for ex-TNB staff with required skill sets to bring value to TNB.
3. Inability to adapt to changing market environment	In our quest towards becoming a top 10 global utility company, we must be agile and respond quickly in this VUCA market environment, especially in the political, economic, social, technology, environment and legal (PESTEL) areas.	<ul style="list-style-type: none"> Establish centralised intelligence information databases; e.g., country, partners, companies, individuals, etc. Establish Strategic Partnership with relevant sources.
4. Inability to leverage on available and new technology	TNB needs to capitalise and monetise the latest relevant technologies as value levers to drive the Reimagining TNB initiatives.	<ul style="list-style-type: none"> Establish strategic affiliations with industry leaders, reputable utilities and Engineering Organisations; e.g., CIGRE, EPRI, IEEE etc., to gain market intelligence on latest available technology. Establish appropriate (fast and suitable) acceptance process for new technologies to be adopted by TNB. Establish strategic partnership with the right technology provider.
5. Ineffective engagement and communication to stakeholders	It is vital that stakeholders at all levels (such as government, regulators, customers, investors, employees, etc.) are engaged and committed to bring about the success of Reimagining TNB initiatives. Failure to win the hearts and minds of stakeholders may lead to diminishing loyalty and lack of trust in TNB's brand.	<ul style="list-style-type: none"> Establish and roll-down a comprehensive and integrated strategic communication & engagement plan for Reimagining TNB initiatives. Establishment of a war room to proactively strategise and position TNB as National Pride. Conduct assessment on the impact and effectiveness of the content of messages communicated and the medium/channel utilised.
6. Regulatory constraints that can negatively impact TNB businesses	In domestic and international regulated business environments, TNB is governed by rules and regulations set by respective regulatory bodies. Constraints imposed by regulators may become significant hurdles in the pursuit of our growth strategies.	<ul style="list-style-type: none"> Strategise the secondment of TNB staff at regulatory bodies to mediate any issues and obtain first-hand information of any future policy/initiative. Strengthen international business intelligence through country reports, experienced advisors and strategic affiliation, M&A activities, etc.

Monitoring, Review and Reporting

The risks assessed from applying the Risk Management Process are registered and monitored through the TNB Risk Information System (TRIS), an online real-time tool and database for risk management accessible by all employees. These risks are reviewed on a regular basis by the respective risk owners with 24 reviews facilitated by Risk Management Department in the year under review.

Business units reports its risk profiles on a half-yearly basis and highlights from these reports are respectively deliberated at the Group Risk Management Working Committee and the Subsidiaries Risk Management Working Committee. In addition, in the year under review, Risk Management Department assessed the risk maturity of 12 business units. The objective of the assessment was to evaluate the risk culture and risk management effectiveness of the organisation in view of creating a matured risk based organisation.

Communication and Continual Improvement

Business units regularly communicate with internal and external stakeholders with up-to-date risk information and timely feedback is collated for opportunities for continual improvement. Risk Management Department developed and implemented an annual risk and insurance communication plan throughout the year under review with the purpose of inculcating a risk-thinking mind-set among internal stakeholders and communicating TNB's risk management initiatives to relevant external stakeholders.

Specifically, two (2) risk conferences, with the theme "Let's Manage Risk Together", were attended by approximately 220 TNB executives in total. The executives had the opportunity to dialogue with several C-suites who shared their experience and emphasised the importance and benefits of effective risk management in propelling the Group towards its aspirations. In addition, an inaugural TNB Cyber Security Risk Conference was organised to heighten the mindfulness of decision makers of cyber security risks and related mitigation. Moreover, 376 non-executives in total attended three (3) risk forums held across Peninsular Malaysia. Besides learning lessons from case studies, the non-executives had the opportunity to brainstorm potential risks and mitigations related to their areas of responsibility.

INTERNAL CONTROL

Group Policies and Procedures

Group-wide policies and procedures have been approved by Management and the Board to ensure ethics and internal control principles and mechanisms are embedded in business operations. These policies and procedures are reviewed regularly to ensure relevance and effectiveness.

Among others, the Group policies and procedures in place are:

- TNB Code of Ethics
- TNB Ethics & Integrity Policy
- TNB Risk Management Policy
- TNB Confidentiality Policy
- TNB Asset Management Policy
- TNB Limits of Authority
- TNB Procurement & Supply Chain Policy and Procedures

- TNB ICT Codes of Practice and Guidelines
- TNB Safety & Health Policy
- TNB Environmental Policy
- TNB Communication Policy
- TNB Personal Data Protection Policy
- TNB Disciplinary Procedures
- TNB Group Financial Policies and Procedures
- TNB Group Human Resource Circulars and Guidelines

Financial and Operational Control Framework

TNB Group Financial Policies and Procedures (GFPP) serves as a compulsory source of reference for the Group in conducting its operations to manage associated risks. The Group has acted in accordance with generally accepted accounting principles and the Malaysian Financial Reporting Standards (MFRS). Periodic reviews of actual performance versus budgets, targets, and performance in prior periods for key functions and major initiatives are carried out and appropriate mitigating and follow-up action are taken.

The Board Audit Committee (BAC) reviews the Group's quarterly financial performance together with management, and these are subsequently reported to the Board. The quarterly reviews enable the BAC to deliberate and assess the Group's financial results and operational performance.

TNB continues to proactively engage with relevant stakeholders for smooth implementation of the Incentive Based Regulation (IBR) framework and Imbalance Cost Pass-Through (ICPT) mechanism. The performance of the regulated business is meticulously monitored through the IBR performance indicators and dashboards. These are reported regularly to relevant decision-making councils and committees to ensure effective implementation of the IBR framework as well as to the Energy Commission in compliance to the IBR guidelines.

The procedures for critical functions and key activities are documented, communicated to employees and periodically reviewed. Relevant divisions, departments and subsidiaries have been consistently maintaining its certification in ISO 9001, ISO 14001, ISO 27001, OHSAS 18001 and ISO 55000. The compliance management department in several divisions conducts audits and reviews within its division to ensure compliance with relevant standards and procedures.

Human Resource Management and Development

Job descriptions and responsibilities of approved positions are clearly defined and communicated through the internal online platform, People Matters. Work force requirement planning is carried out, led by Group Human Resource, mirroring the budget planning cycle with the aim to optimise staffing levels and increase productivity. Employee training needs are regularly assessed and various programmes are in place to address competency gaps.

In the year under review, Group Human Resource continued to roll out the Wellness Programme, which is aimed to educate and influence employees to live a healthy lifestyle. Among the initiatives of the programme implemented throughout the year were the establishment of gymnasiums in TNB premises, the move towards healthy cafeterias, monitoring of employees' Body Mass Index and organisation of sports events. These initiatives indirectly contribute to lowering medical costs and increasing productivity.

Tenaga Safety Culture

In the year under review, the Tenaga Safety Culture programme was implemented to inculcate four (4) core behaviours among employees, namely 'Assess', 'Comply', 'Intervene' and 'Actively Caring'. The aim of the programme is promote safety as part of the everyday working culture, transforming it from a mere compliance activity. The programme was launched Group-wide by TNB President/Chief Executive Officer alongside the Chairman of the National Institute of Occupational Safety and Health (NIOSH). In addition, Spiritual Hour has been embedded in the programme to align good safety practices with religious teachings as an additional emphasis on the value of safety as a lifestyle.

Management Information Systems

Leveraging on information and communication technology is vital in promoting effective and efficient business operations as well as timely and accurate communication with internal and external stakeholders. Key information systems utilised by the Group for that purpose are:

- Enterprise Resource Management System (ERMS)
- Enterprise Human Resources Management System (EHRMS)
- Corporate Geospatial Information System (CGIS)
- Supervisory Control and Data Acquisition System (SCADA)
- TNB Outage Management Systems (TOMS)
- Billing Customer Relation Management (BCRM)
- Employee Self Service (ESS)

Super User Privilege Management and Governance, Risk and Compliance systems have been implemented to control and govern access to core systems and servers. This is to ensure that access to critical information systems and confidential information is adequately monitored and controlled. Annual disaster recovery tests are carried out at the data centres and ICT security assessments are regularly carried out on IT systems at the business units. In addition, various enhancements are implemented to strengthen cyber security for Information Technology and Operational Technology Systems.

Personal Data Protection

TNB is committed to safeguard customers' privacy rights and personal data. TNB was an active contributor in the development of The Personal Data Protection Code of Practice for The Utilities Sector (Electricity), which serves as a guide for the processing and handling of customers' personal data. The code of practice is aligned to the Personal Data Protection Act 2010 (Section 23) (PDPA), which protects personal information of an individual being processed for commercial transaction purposes. The Legal Services Department is committed to consistently educate and communicate the requirements of the PDPA and the Code of Practice across the Group to heighten awareness and compliance as well as enhance controls.

Customer Feedback

Customer feedback is regularly collated and analysed with appropriate follow-up action. The TNB One Stop Engagement Centre offers a single point of contact to respond to customer enquiries and feedback on billing and account related matters. A variety of channels utilising online infrastructure and social media is made available for customers to submit queries or report problems.

Business Continuity Management

The objective of the TNB Business Continuity Management (BCM) Framework is to provide a structured approach in managing business continuity in the Group. It enables a prompt, coordinated and effective response to a crisis and maintaining continuity of essential activities while protecting human life, assets, brand and reputation. This framework is the focal point of reference for business units in formulating and implementing its BCM strategy and practices that are tailored to its business objectives and critical functions. The effectiveness of the framework is tested through drills and in the year under review, two (2) communication drills and one (1) full-scaled drill were carried out at the corporate level. Drills to test preparedness of business units are carried out according to plan and improvements identified in post-mortem reports are implemented to improve promptness of response.

CONCLUSION

The Board has obtained assurances from the President/Chief Executive Officer, Chief Financial Officer and Chief Internal Auditor that the Group's Risk Management and Internal Control System is operating adequately and effectively, in all material aspects. Where weaknesses are identified, rectification steps have been put in place.

The Board is of the view that the Risk Management and Internal Control System in place for the year under review and up to the date of approval of this statement for inclusion into the annual report, is adequate and effective to safeguard shareholders' investment, the interests of customers, regulators and employees, and the Group's assets.

REVIEW OF THE STATEMENT BY EXTERNAL AUDITOR

As required by Paragraph 15.23 of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad, the external auditors have reviewed this Statement on Risk Management and Internal Control. Their limited assurance engagement was performed in accordance with Malaysia Approved Standard on Assurance Engagements, ISAE 3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information and AAPG 3, Guidance for Auditors on Engagements to Report on the Statement on Risk Management and Internal Control Included in the Annual Report.

This statement is made in accordance with the resolution of the Board of Directors dated 28 February 2019.

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DIRECTORS' REPORT

The Directors hereby submit their report and the audited financial statements of the Group and of the Company for the financial year ended 31 December 2018.

PRINCIPAL ACTIVITIES

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sales of electricity and those tabulated in Note 15 to the financial statements, which also includes the details of the subsidiaries of the Group.

There have been no significant changes in these activities during the financial year.

FINANCIAL RESULTS

	Group RM'million	Company RM'million
Profit for the financial year attributable to:		
- Owners of the Company	3,723.7	3,218.6
- Non-controlling interests	21.3	0
Profit for the financial year	3,745.0	3,218.6

DIVIDENDS

The dividends paid or declared since the previous financial period ended 31 December 2017 were as follows:

	RM'million
In respect of the financial period ended ('FPE') 31 December 2017:	
Final single tier dividend of 21.41 sen per ordinary share, paid on 19 April 2018	1,213.1
In respect of the financial year ended 31 December 2018:	
Interim single tier dividend of 30.27 sen per ordinary share, paid on 11 October 2018	1,718.8

The Directors have proposed a final single tier dividend of 23.0 sen per share, on 5,686,888,771 ordinary shares in respect of the financial year ended 31 December 2018 amounting to a total of RM1,308.0 million. The books closure and payment dates will be announced in due course.

RESERVES AND PROVISIONS

All material transfers to or from reserves and provisions during the financial year are shown in the financial statements.

ISSUE OF SHARES

During the financial year, the paid-up share capital of the Company increased due to the vesting of Long Term Incentive Plan ('LTIP') granted to eligible employees, details of which are disclosed in Note 7 to the financial statements. The new ordinary shares rank pari passu in all respects with the existing ordinary shares of the Company.

TENAGA NASIONAL BERHAD'S LONG TERM INCENTIVE PLAN ('LTIP')

The Company implemented a LTIP on 30 April 2015 for a period of 10 years. The LTIP is governed by the by-laws, which were approved by the shareholders at an Extraordinary General Meeting on 18 December 2014.

The main features and details of the number of grants over the shares of the Company are set out in Note 7 to the financial statements.

The Company has been granted an exemption by the Companies Commission of Malaysia via letter dated 18 February 2019 from having to disclose in this report the names of the persons to whom LTIP have been granted under the scheme and details of their holdings pursuant to Section 255(1) Paragraph 5, Part 1, Fifth Schedule of the Companies Act 2016 except for information on employees who were granted the offering of up to 133,200 and more ordinary shares under the LTIP scheme.

The employees of the Company who were granted the offering of up to 133,200 and more ordinary shares under the LTIP scheme are as follows:

	Number of ordinary shares granted under PS*	Number of ordinary shares granted under RS**	Total
Datuk Seri Ir. Azman bin Mohd	522,700	235,700	758,400
Datuk Fazlur Rahman bin Zainuddin	130,000	78,200	208,200
Datuk Wira Roslan bin Ab Rahman	129,600	77,900	207,500
Dato' Muhammad Razif bin Abdul Rahman	125,200	75,200	200,400
Dato' Nor Azman bin Mufti @ Jaafar	124,600	74,800	199,400
Datuk Ir. Baharin bin Din	121,400	72,900	194,300
Datuk Zainudin bin Ibrahim	114,500	68,600	183,100
Dato' Ir. Ho Peng Choong	103,100	66,800	169,900
Fazil bin Ibrahim	87,900	56,600	144,500
Nazmi bin Othman	70,100	63,100	133,200

* PS - Performance Share Grant

** RS - Restricted Share Grant

None of the subsidiaries' employees were granted offering representing 133,200 or more ordinary shares under the LTIP scheme.

DIRECTORS

The Directors who have held office during the financial year and during the period from the end of the financial year to the date of the report are:

Tan Sri Leo Moggie	
Datuk Seri Ir. Azman bin Mohd	
Datuk Ahmad Badri bin Mohd Zahir	Appointed w.e.f. 1 November 2018
Amran Hafiz bin Affudin	
Gee Siew Yoong	
Noraini binti Che Dan	
Juniwati Rahmat binti Hussin	
Gopala Krishnan K. Sundaram	Appointed w.e.f. 4 July 2018
Ong Ai Lin	Appointed w.e.f. 1 August 2018
Dato' Roslina binti Zainal	Appointed w.e.f. 15 March 2019
Tan Sri Dato' Seri Chor Chee Heung	Resigned w.e.f. 30 June 2018
Badrul Ilahan bin Abd Jabbar	Resigned w.e.f. 30 June 2018
Dato' Abd Manaf bin Hashim	Cessation of office w.e.f. 15 May 2018
Datuk Sakthivel Alagappan	Cessation of office w.e.f. 15 May 2018
Datuk Seri Hashmuddin bin Mohammad	Resigned w.e.f. 1 April 2018

The Directors of subsidiaries who have held office during the financial year and during the period from the end of the financial year to the date of the report are set out in the respective subsidiary's statutory accounts and the said information is deemed incorporated herein by such reference and made part thereof.

DIRECTORS' BENEFITS

During and at the end of the financial year, no arrangements subsisted to which the Company is a party, being arrangements with the object or objects of enabling Directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

Since the end of the previous financial period, no Director has received or become entitled to receive a benefit (other than benefits shown under Directors' Remuneration below and in Note 6 to the financial statements) by reason of a contract made by the Company or a related corporation with the Director or with a firm of which the Director is a partner, or with a company in which the Director has a substantial financial interest.

INDEMNITY AND INSURANCE COSTS

TNB Group and Company have their own Directors and Officers Liability Insurance at a premium of RM283,125 to cover the liability of Directors and Officers in discharging their duties for the period of 1 November 2018 until 31 October 2019.

DIRECTORS' INTERESTS IN SHARES AND DEBENTURES

According to the Register of Directors' Shareholdings required to be kept under Section 59 of the Companies Act 2016, none of the Directors who held office at the end of the financial year held any shares or debentures in the Company or its subsidiaries during the financial year except as follows:

	Number of ordinary shares			
	As at 1.1.2018	Acquired	Disposed	As at 31.12.2018
Datuk Seri Ir. Azman bin Mohd	54,600	276,100	0	330,700

Ordinary shares granted pursuant to the Company's LTIP granted to the Director during the financial year are as follows:

	Number of ordinary shares			
	As at 1.1.2018	Granted	Vested	As at 31.12.2018
Datuk Seri Ir. Azman bin Mohd				
<u>Performance Share Grant ('PS Grant')</u>				
PS Grant 1	109,200	0	*(217,300)	0
PS Grant 2	142,400	0	0	142,400
PS Grant 3	134,200	0	0	134,200
PS Grant 4	0	136,900	0	136,900
<u>Restricted Share Grant ('RS Grant')</u>				
RS Grant 1	16,100	0	(16,100)	0
RS Grant 2	44,400	0	(22,200)	22,200
RS Grant 3	61,400	0	(20,500)	40,900
RS Grant 4	0	59,200	0	59,200

* The final amount of vesting under PS Grant 1 amounting to 217,300 includes additional 108,100 in accordance with terms and condition approved by the Board Nomination and Remuneration Committee ('BNRC') LTIP/BOD.

DIRECTORS' REMUNERATION

	Group		Company	
	31.12.2018 RM	31.12.2017 RM	31.12.2018 RM	31.12.2017 RM
Directors' fees	2,390,753	1,038,280	2,057,419	911,613
Directors' other emoluments*	2,586,710	2,216,893	2,468,410	2,199,093
	4,977,463	3,255,173	4,525,829	3,110,706

* In respect of the Directors or past Directors of the Company, there were benefits receivable by the Directors from the Company and its subsidiaries as Directors' other emoluments for their services. The estimated monetary value of benefits received by the Directors was RM512,806 (FPE 31.12.2017: RM205,423) for the Group and Company.

STATUTORY INFORMATION ON THE FINANCIAL STATEMENTS

- (a) Before the financial statements of the Group and of the Company were prepared, the Directors took reasonable steps:
- (i) to ascertain that proper action had been taken in relation to the writing off of bad debts and the making of provision for doubtful debts and satisfied themselves that all known bad debts had been written off and that adequate provision had been made for doubtful debts; and
 - (ii) to ensure that any current assets, which were unlikely to be realised in the ordinary course of business, including the values of current assets as shown in the accounting records of the Group and of the Company had been written down to an amount which the current assets might be expected so to realise.
- (b) At the date of this report, the Directors are not aware of any circumstances:
- (i) which would render the amount written off for bad debts or the amount of the provision for doubtful debts inadequate to any substantial extent; or
 - (ii) which would render the values attributed to current assets in the financial statements of the Group and of the Company misleading; or
 - (iii) which have arisen which would render adherence to the existing method of valuation of assets or liabilities of the Group and of the Company misleading or inappropriate.
- (c) At the date of this report:
- (i) there are no charges on the assets of the Group and of the Company which have arisen since the end of the financial year which secures the liabilities of any other person; and
 - (ii) there are no contingent liabilities in the Group and in the Company which have arisen since the end of the financial year.
- (d) No contingent or other liability of any company in the Group has become enforceable or is likely to become enforceable within the period of twelve months after the end of the financial year which, in the opinion of the Directors, will or may affect the ability of the Group and its subsidiaries to meet their obligations when they fall due.
- (e) At the date of this report, the Directors are not aware of any circumstances not otherwise dealt with in this report or the financial statements of the Group and of the Company which would render any amount stated in the respective financial statements misleading.
- (f) In the opinion of the Directors:
- (i) the results of the operations of the Group and of the Company during the financial year were not substantially affected by any item, transaction or event of a material and unusual nature, except as disclosed in Notes 6, 15 and 17 to the financial statements; and
 - (ii) there has not arisen in the interval between the end of the financial year and the date of this report any item, transaction or event of a material and unusual nature likely to affect substantially the results of the operations of the Group and of the Company for the financial year in which this report is made.

AUDITORS

The auditors, PricewaterhouseCoopers PLT (LLP0014401-LCA & AF 1146), have expressed their willingness to accept re-appointment as auditors.

Details of the auditors' remuneration are set out in Note 6 to the financial statements.

This report was approved by the Board of Directors on 19 March 2019. Signed on behalf of the Board of Directors:



TAN SRI LEO MOGGIE
CHAIRMAN



DATUK SERI IR. AZMAN BIN MOHD
PRESIDENT/CHIEF EXECUTIVE OFFICER

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CONSOLIDATED STATEMENT OF PROFIT OR LOSS

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2018

	Note	Group		Company	
		Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
Revenue	5	50,392.5	15,692.2	47,063.3	14,718.2
Operating expenses	6	(43,854.7)	(13,027.4)	(41,845.5)	(12,275.1)
Net loss on impairment of financial instruments	45(b)	(487.3)	(163.4)	(466.7)	(135.6)
Other operating income	8	825.1	512.6	1,319.7	360.7
Operating profit		6,875.6	3,014.0	6,070.8	2,668.2
Foreign exchange (loss)/gain	9	(418.3)	310.2	(282.0)	421.6
Share of results of joint ventures	16(a)	27.2	7.7	0	0
Share of results of associates	17	(209.9)	(44.7)	0	0
Profit before finance cost		6,274.6	3,287.2	5,788.8	3,089.8
Finance income	10(a)	423.8	94.9	297.4	71.9
Finance cost	10(b)	(1,688.5)	(531.4)	(1,794.3)	(564.0)
Fair value changes of financial instruments	10(c)	36.7	(7.2)	22.2	27.7
Profit before taxation and zakat		5,046.6	2,843.5	4,314.1	2,625.4
Taxation and zakat	11	(1,301.6)	(235.0)	(1,095.5)	(173.1)
Profit for the financial year/period		3,745.0	2,608.5	3,218.6	2,452.3
Profit attributable to:					
- Owners of the Company		3,723.7	2,622.3	3,218.6	2,452.3
- Non-controlling interests		21.3	(13.8)	0	0
Profit for the financial year/period		3,745.0	2,608.5	3,218.6	2,452.3

		Sen	(Restated) Sen
Earnings per share:			
- Basic	12(a)	65.62	46.32
- Diluted	12(b)	65.39	46.21

The notes set out on pages 163 to 307 form an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2018

	Note	Group		Company	
		Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
Profit for the financial year/period		3,745.0	2,608.5	3,218.6	2,452.3
Other comprehensive (expense)/income					
Items that will not be reclassified subsequently to profit or loss:					
Defined benefit plan actuarial loss		(204.3)	(107.6)	(50.7)	(99.8)
Items that may be reclassified subsequently to profit or loss:					
Foreign currency translation differences		(13.1)	(219.8)	0	0
Available-for-sale ('AFS') financial assets		0	(2.6)	0	(2.6)
Financial assets at fair value through other comprehensive income ('FVOCI')		7.1	0	7.1	0
Share of other comprehensive income ('OCI') of associates accounted for using the equity method	17	74.3	94.2	0	0
Total other comprehensive expense		(136.0)	(235.8)	(43.6)	(102.4)
Total comprehensive income for the financial year/period		3,609.0	2,372.7	3,175.0	2,349.9
Attributable to:					
- Owners of the Company		3,587.7	2,386.5	3,175.0	2,349.9
- Non-controlling interests		21.3	(13.8)	0	0
Total comprehensive income		3,609.0	2,372.7	3,175.0	2,349.9

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2018

	Note	Group			Company		
		31.12.2018	31.12.2017	1.9.2017	31.12.2018	31.12.2017	1.9.2017
		RM'million	(Restated) RM'million	(Restated) RM'million	RM'million	(Restated) RM'million	(Restated) RM'million
NON-CURRENT ASSETS							
Property, plant and equipment	14	111,445.5	104,807.6	103,083.7	83,921.1	81,792.6	75,841.9
Subsidiaries	15	0	0	0	8,603.8	9,799.2	8,820.2
Joint ventures	16(a)	166.0	153.1	152.3	0	0	0
Associates	17	1,543.7	2,799.2	2,937.8	59.9	70.3	70.3
Goodwill on consolidation	18	240.7	211.0	211.0	0	0	0
Investment in unquoted debt security	19	326.7	318.5	275.7	8.7	0	0
Tax recoverable		1,765.1	1,765.1	1,765.1	1,765.1	1,765.1	1,765.1
Deferred tax assets	20	87.7	68.3	77.0	0	0	0
Long term receivables	21	1,245.5	829.4	549.7	260.5	197.0	200.6
Amounts due from subsidiaries	22(a)	0	0	0	1,052.0	1,213.4	2,209.8
Finance lease receivables	23(a)	12.4	13.4	13.8	0	0	0
Prepaid operating leases	24(a)	5,944.1	5,505.2	5,353.7	5,934.9	5,417.0	5,241.2
AFS financial assets	25	0	69.3	71.9	0	68.6	71.2
Financial assets at FVOCI	25	76.4	0	0	75.7	0	0
Contract cost assets	26(a)	0.5	0.1	0	0	0	0
Financial assets at fair value through profit or loss ('FVTPL')	27	90.9	0	0	90.9	0	0
Derivative financial instruments	28(c)	0.2	0	0	0	0	0
		122,945.4	116,540.2	114,491.7	101,772.6	100,323.2	94,220.3
CURRENT ASSETS							
Inventories	29	1,295.9	885.0	828.7	294.0	279.2	261.9
Receivables, deposits and prepayments	30	6,803.4	7,275.5	5,734.6	4,769.8	3,335.2	3,067.3
Contract assets	26(b)	3,361.8	3,059.3	3,222.3	3,205.0	2,925.7	3,051.8
Tax recoverable		422.6	104.7	83.8	247.1	0	0
Finance lease receivables	23(a)	1.0	0.8	0.7	0	0	0
Prepaid operating leases	24(a)	164.8	146.2	139.1	156.5	137.6	129.0
Amounts due from subsidiaries	22(b)	0	0	0	3,702.9	4,186.9	3,097.3
Amounts due from joint ventures		10.8	1.1	0.6	0	0	0
Amounts due from associates		364.9	332.0	226.3	7.5	9.2	1.0
Derivative financial instruments	28(a)	1.2	0	1.2	0	0	0
Financial assets at FVTPL	27	9,652.4	10,490.2	12,221.9	5,133.7	3,850.5	6,097.9
Deposits, bank and cash balances	31	8,670.8	5,415.0	5,056.2	5,852.4	3,001.3	3,335.4
		30,749.6	27,709.8	27,515.4	23,368.9	17,725.6	19,041.6

Consolidated Statement of Financial Position

	Note	Group			Company		
		31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)	31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)
		RM'million	RM'million	RM'million	RM'million	RM'million	RM'million
CURRENT LIABILITIES							
Payables	32	(9,797.5)	(9,036.4)	(10,228.8)	(6,237.2)	(5,819.8)	(6,641.1)
Contract liabilities	26(c)	(347.4)	(287.5)	(276.7)	(227.9)	(223.5)	(240.3)
Derivative financial instruments	28(a)	(44.0)	(47.3)	(10.9)	0	(0.2)	0
Finance lease payables	23(b)	(357.8)	(336.4)	(329.6)	(1,096.1)	(1,122.1)	(1,149.1)
Amounts due to subsidiaries	22(b)	0	0	0	(1,459.4)	(1,086.3)	(1,258.1)
Amounts due to associates		(656.3)	(691.2)	(636.9)	(646.4)	(683.0)	(628.9)
Amount due to joint ventures		(0.5)	0	0	0	0	0
Current tax liabilities		(96.2)	(132.9)	(85.2)	(72.2)	(109.7)	(58.7)
Employee benefits	33	(777.0)	(748.8)	(749.9)	(759.6)	(737.1)	(738.3)
Consumer deposits	34	(5,761.6)	(5,209.2)	(5,073.4)	(5,442.4)	(4,910.9)	(4,778.2)
Short term borrowings	35	(3,927.8)	(1,745.3)	(1,808.1)	(2,252.2)	(227.6)	(290.4)
		(21,766.1)	(18,235.0)	(19,199.5)	(18,193.4)	(14,920.2)	(15,783.1)
NET CURRENT ASSETS		8,983.5	9,474.8	8,315.9	5,175.5	2,805.4	3,258.5
TOTAL ASSETS LESS CURRENT LIABILITIES		131,928.9	126,015.0	122,807.6	106,948.1	103,128.6	97,478.8
NON-CURRENT LIABILITIES							
Borrowings	36	(43,904.6)	(39,698.4)	(37,038.4)	(19,384.8)	(15,120.5)	(15,686.6)
Derivative financial instruments	28(b)	(11.5)	0	0	0	0	0
Contract liabilities	26(c)	(2,902.9)	(2,450.0)	(2,194.3)	(2,354.9)	(2,082.6)	(1,836.1)
Government development grants	37	(1,005.0)	(964.1)	(977.8)	0	0	0
Finance lease payables	23(b)	(4,516.3)	(4,874.1)	(4,988.9)	(15,572.7)	(16,668.8)	(10,722.4)
Deferred tax liabilities	20	(8,009.3)	(7,645.7)	(7,728.4)	(6,665.4)	(6,289.9)	(6,339.9)
Other liabilities	38	(1,396.2)	(1,357.4)	(1,413.1)	(720.0)	(642.3)	(631.7)
Employee benefits	33	(11,131.2)	(11,036.3)	(10,887.3)	(10,520.2)	(10,581.7)	(10,442.5)
		(72,877.0)	(68,026.0)	(65,228.2)	(55,218.0)	(51,385.8)	(45,659.2)
TOTAL NET ASSETS		59,051.9	57,989.0	57,579.4	51,730.1	51,742.8	51,819.6
EQUITY							
Share capital	39	11,446.1	11,199.6	11,124.9	11,446.1	11,199.6	11,124.9
Other reserves	40	(6,392.7)	(6,373.0)	(6,128.8)	(5,324.0)	(5,301.7)	(5,190.9)
Retained profits		52,784.4	52,239.2	52,109.9	45,608.0	45,844.9	45,885.6
CAPITAL AND RESERVES ATTRIBUTABLE TO OWNERS OF THE COMPANY		57,837.8	57,065.8	57,106.0	51,730.1	51,742.8	51,819.6
NON-CONTROLLING INTERESTS		1,214.1	923.2	473.4	0	0	0
TOTAL EQUITY		59,051.9	57,989.0	57,579.4	51,730.1	51,742.8	51,819.6

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2018

	Note	Attributable to owners of the Company			Non-controlling interests RM'million	Total equity RM'million
		Ordinary shares RM'million	Other reserves RM'million	Retained profits RM'million		
Group						
At 31 December 2017 (restated)		11,199.6	(6,373.0)	52,239.2	923.2	57,989.0
Effects of adoption of MFRS 9	47	0	0	(189.4)	(3.4)	(192.8)
At 1 January 2018 (restated)		11,199.6	(6,373.0)	52,049.8	919.8	57,796.2
Profit for the financial year		0	0	3,723.7	21.3	3,745.0
Foreign currency translation reserve	40	0	(13.1)	0	0	(13.1)
Fair value of financial assets at OCI	40	0	7.1	0	0	7.1
Share of OCI of associates accounted for using the equity method	40	0	74.3	0	0	74.3
Employee benefits reserve	40	0	(204.3)	0	0	(204.3)
Total comprehensive (expense)/income for the financial year		0	(136.0)	3,723.7	21.3	3,609.0
LTIP share-based payment expense	7	0	267.8	0	0	267.8
LTIP shares issued	39	246.5	(246.5)	0	0	0
Dividends paid:						
- Final dividend for FPE 31.12.2017	13	0	0	(1,213.1)	0	(1,213.1)
- Interim dividend for FY2018	13	0	0	(1,718.8)	0	(1,718.8)
Dividend paid to NCI		0	0	0	(2.0)	(2.0)
Exercise of put option on shares of a subsidiary by NCI		0	95.0	(57.2)	(37.8)	0
Acquisition of additional equity by NCI		0	0	0	312.8	312.8
Total transactions with owners		246.5	116.3	(2,989.1)	273.0	(2,353.3)
At 31 December 2018		11,446.1	(6,392.7)	52,784.4	1,214.1	59,051.9

Consolidated Statement of Changes in Equity

	Note	Attributable to owners of the Company			Non-controlling interests RM'million	Total equity RM'million
		Ordinary shares	Other reserves	Retained profits		
		RM'million	RM'million	RM'million		
Group						
At 31 August 2017 (as previously reported)		11,124.9	(6,128.8)	52,115.3	473.4	57,584.8
Effects of adoption of MFRS 15	47	0	0	(5.4)	0	(5.4)
At 1 September 2017 (restated)		11,124.9	(6,128.8)	52,109.9	473.4	57,579.4
Profit for the financial period		0	0	2,622.3	(13.8)	2,608.5
Foreign currency translation reserve	40	0	(219.8)	0	0	(219.8)
Fair value of AFS financial assets	40	0	(2.6)	0	0	(2.6)
Share of OCI of associates accounted for using the equity method	40	0	94.2	0	0	94.2
Employee benefits reserve	40	0	(107.6)	0	0	(107.6)
Total comprehensive (expense)/income for the financial period		0	(235.8)	2,622.3	(13.8)	2,372.7
LTIP share-based payment expense	7	0	66.3	0	0	66.3
LTIP shares issued	39	74.7	(74.7)	0	0	0
Final dividend paid for FY2017		0	0	(2,493.0)	0	(2,493.0)
Subscription of shares in a subsidiary		0	0	0	4.9	4.9
Acquisition of additional equity by NCI		0	0	0	458.7	458.7
Total transactions with owners		74.7	(8.4)	(2,493.0)	463.6	(1,963.1)
At 31 December 2017 (restated)		11,199.6	(6,373.0)	52,239.2	923.2	57,989.0

Consolidated Statement of Changes in Equity

	Note	Attributable to owners of the Company			Total equity RM'million
		Ordinary shares RM'million	Other reserves RM'million	Retained profits RM'million	
Company					
At 31 December 2017 (restated)		11,199.6	(5,301.7)	45,844.9	51,742.8
Effects of adoption of MFRS 9	47	0	0	(523.6)	(523.6)
At 1 January 2018 (restated)		11,199.6	(5,301.7)	45,321.3	51,219.2
Profit for the financial year		0	0	3,218.6	3,218.6
Fair value of financial assets at FVOCI	40	0	7.1	0	7.1
Employee benefits reserve	40	0	(50.7)	0	(50.7)
Total comprehensive (expense)/income for the financial year		0	(43.6)	3,218.6	3,175.0
LTIP share-based payment expense		0	267.8	0	267.8
LTIP shares issued		246.5	(246.5)	0	0
Dividends paid:					
- Final dividend for FPE 31.12.2017		0	0	(1,213.1)	(1,213.1)
- Interim dividend for FY2018		0	0	(1,718.8)	(1,718.8)
Total transactions with owners		246.5	21.3	(2,931.9)	(2,664.1)
At 31 December 2018		11,446.1	(5,324.0)	45,608.0	51,730.1
At 1 September 2017					
		11,124.9	(5,190.9)	45,885.6	51,819.6
Profit for the financial period		0	0	2,452.3	2,452.3
Fair value of AFS financial assets	40	0	(2.6)	0	(2.6)
Employee benefits reserve	40	0	(99.8)	0	(99.8)
Total comprehensive (expense)/income for the financial period		0	(102.4)	2,452.3	2,349.9
LTIP share-based payment expense		0	66.3	0	66.3
LTIP shares issued	39	74.7	(74.7)	0	0
Final dividend paid for FY2017		0	0	(2,493.0)	(2,493.0)
Total transactions with owners		74.7	(8.4)	(2,493.0)	(2,426.7)
At 31 December 2017		11,199.6	(5,301.7)	45,844.9	51,742.8

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE FINANCIAL YEAR ENDED 31 DECEMBER 2018

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
CASH FLOWS FROM OPERATING ACTIVITIES				
Profit for the financial year/period	3,745.0	2,608.5	3,218.6	2,452.3
Adjustments for:				
Taxation and zakat	1,301.6	235.0	1,095.5	173.1
Property, plant and equipment:				
- Depreciation	6,491.3	2,049.9	5,507.6	1,785.3
- Written off	83.4	9.6	75.8	9.6
- Gain on disposals	(6.2)	(9.1)	(6.2)	(9.1)
- Abandoned projects	2.8	14.9	2.8	14.9
Provision for post-employment benefits	727.4	248.8	683.6	233.4
Provision for LTIP	267.8	66.3	205.5	50.1
Foreign exchange translation loss/(gain)	393.1	(329.7)	256.4	(421.5)
Gain on redemption of redeemable preference shares in subsidiaries	0	0	(213.9)	(30.6)
Gain on modification of Preferred Equity Certificate ('PEC')	(6.6)	0	0	0
Share of results of joint ventures	(27.2)	(7.7)	0	0
Share of results of associates	209.9	44.7	0	0
Dividend income	0	(0.9)	(90.4)	(18.9)
Interest income	(423.8)	(94.9)	(297.4)	(71.9)
Interest on:				
- Borrowings	914.0	246.6	503.4	144.8
- Finance leases	347.6	123.4	1,125.3	365.4
- Consumer deposits	136.4	44.0	128.9	41.6
- Others	317.9	124.2	36.7	12.2
Release of:				
- Customers' contributions	(263.4)	(115.6)	(229.4)	(96.1)
- Deferred income	(305.7)	(82.3)	0	0
- Government development grants				
- Other operating income	(51.5)	(190.0)	0	0
- Finance cost	(27.4)	(6.8)	0	0
Impairment losses on:				
- Receivables	482.1	121.5	428.5	96.9
- Contract assets	83.7	56.4	78.4	56.1
- Amounts due from subsidiaries	0	0	86.9	13.3
- Amounts due from joint ventures	0	5.5	0	0
- Amounts due from associates	7.1	0	0	0
- Financial guarantee	270.3	0	270.8	0

Consolidated Statement of Cash Flows

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
CASH FLOWS FROM OPERATING ACTIVITIES (CONTINUED)				
Adjustments for: (continued)				
Reversal of impairment losses on:				
- Receivables	(279.5)	(5.8)	(242.4)	(2.0)
- Contract assets	(76.1)	(14.2)	(75.8)	(14.2)
- Amounts due from subsidiaries	0	0	(79.4)	(14.5)
- Amounts due from associates	(0.3)	0	(0.3)	0
Impairment losses on investment in:				
- Subsidiaries	0	0	1,661.6	43.1
- Associates	802.7	0	0	0
Inventories:				
- Provision for obsolescence	293.4	69.9	292.9	69.9
- Write back of obsolescence	(278.6)	(62.9)	(278.6)	(62.9)
- Written off	27.6	0.2	23.1	0.2
Changes in fair value of financial instruments	(36.7)	7.2	(22.2)	(27.7)
Cash from operations before working capital changes	15,122.1	5,156.7	14,146.3	4,792.8
Inventories	(453.3)	(63.5)	(52.2)	(24.5)
Receivables	(721.6)	(2,142.1)	(1,985.0)	(581.5)
Contract assets	(302.5)	163.0	(279.3)	126.1
Payables	126.6	(905.0)	(58.1)	(995.2)
Subsidiaries balances	0	0	(402.1)	(1,263.3)
Associates balances	(75.4)	(51.4)	(35.0)	45.9
Joint ventures balances	(9.2)	(6.0)	0	0
Cash generated from operations	13,686.7	2,151.7	11,334.6	2,100.3
Post-employment benefits paid	(824.6)	(240.1)	(805.0)	(232.2)
Contract liabilities received	1,081.9	464.4	506.1	325.8
Consumer deposits received	415.9	91.8	402.6	91.1
Taxation and zakat paid	(1,324.5)	(250.6)	(887.1)	(140.6)
Net cash flows generated from operating activities	13,035.4	2,217.2	10,551.2	2,144.4
CASH FLOWS FROM INVESTING ACTIVITIES				
Acquisition of subsidiaries net of cash and cash equivalent	(401.1)	0	(28.0)	0
Additional investments in:				
- Subsidiaries	0	0	(23.9)	(5.1)
- FVTPL	(64,589.3)	(27,579.4)	(63,912.0)	(23,512.0)
- Joint venture	(1.0)	0	0	0
Proceeds from redemptions:				
- Redeemable preference shares in subsidiaries	0	0	700.0	100.0
- Redeemable preference shares in associate	10.4	0	10.4	0
Disposals of FVTPL	65,602.7	29,311.1	62,774.0	25,802.8
Dividend income received	44.9	24.9	90.4	18.0
Interest income received	203.9	96.6	57.4	22.5
Property, plant and equipment:				
- Additions	(11,287.1)	(3,768.6)	(7,407.9)	(1,424.5)
- Proceeds from disposals	27.6	29.0	54.1	10.6
Advances granted to subsidiaries	0	0	(426.6)	0
Repayment of advances from subsidiaries	0	0	158.9	0
Net cash flows (used in)/generated from investing activities	(10,389.0)	(1,886.4)	(7,953.2)	1,012.3

Consolidated Statement of Cash Flows

	Group		Company	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
	RM'million	RM'million	RM'million	RM'million
CASH FLOWS FROM FINANCING ACTIVITIES				
Government development grants received	5.6	174.7	0	0
Long term borrowings:				
- Drawdowns	7,309.4	3,757.6	6,326.1	0
- Repayments	(1,087.4)	(701.1)	(305.5)	(62.0)
Short term borrowings:				
- Drawdowns	897.0	434.0	0	0
- Repayments	(867.0)	(329.5)	0	0
Interests paid:				
- Borrowings	(1,986.9)	(575.4)	(681.4)	(278.8)
- Others	(8.9)	(9.8)	(8.9)	(9.8)
Repayment of finance lease obligations	(682.7)	(232.0)	(2,137.7)	(638.6)
Dividends paid to shareholders	(2,931.9)	(2,493.0)	(2,931.9)	(2,493.0)
Dividends paid to NCI	(2.0)	0	0	0
Purchase of shares by NCI	57.8	4.9	0	0
Exercise of put option on shares of a subsidiary by NCI	(90.6)	0	0	0
Net decrease in debt reserve accounts	3.8	0	0	0
Net decrease in cash at bank, held in trust	40.9	3.7	0	0
Net increase in restricted cash	(16.3)	0	0	0
Net increase in deposits maturing more than 90 days	(561.0)	0	0	0
Net cash flows generated from/(used in) financing activities	79.8	34.1	260.7	(3,482.2)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	2,726.2	364.9	2,858.7	(325.5)
EFFECTS OF CHANGES IN FOREIGN CURRENCY	(3.0)	(2.4)	(7.6)	(8.6)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE FINANCIAL YEAR/PERIOD	4,875.4	4,512.9	3,001.3	3,335.4
CASH AND CASH EQUIVALENTS AT THE END OF THE FINANCIAL YEAR/PERIOD (NOTE 31)	7,598.6	4,875.4	5,852.4	3,001.3

The changes in liabilities arising from financing activities have been disclosed in Notes 23(b), 36 and 37 respectively.

NOTES TO THE FINANCIAL STATEMENTS

31 DECEMBER 2018

1 GENERAL INFORMATION

The Group and Company are primarily involved in the business of the generation, transmission, distribution and sales of electricity and those tabulated in Note 15 to these financial statements, which also includes the details of the subsidiaries of the Group.

There have been no significant changes in these activities of the Group and Company during the financial year.

The Company is a public limited liability company, incorporated and domiciled in Malaysia and is listed on the Main Market of Bursa Malaysia Securities Berhad.

The address of the registered office of the Company is Pejabat Setiausaha Syarikat, Tingkat 2, Ibu Pejabat Tenaga Nasional Berhad, No. 129, Jalan Bangsar, 59200 Kuala Lumpur, Malaysia.

2 BASIS OF PREPARATION

The financial statements of the Group and Company have been prepared in accordance with the provisions of the Malaysian Financial Reporting Standards ('MFRS'), International Financial Reporting Standards ('IFRS') and the requirements of the Companies Act 2016 in Malaysia.

The financial statements have been prepared under the historical cost convention, except as disclosed in this summary of significant accounting policies.

The preparation of financial statements in conformity with MFRS requires the use of certain critical accounting estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. It also requires Directors to exercise their judgement in the process of applying the Group and Company's accounting policies. Although these estimates and judgement are based on the Directors' best knowledge of current events and actions, actual results may differ. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in Note 4.

(a) Change of financial year end

The Group and Company had changed its financial year end from 31 August to 31 December effective from the previous reporting period. Consequently, the comparative figures are the previous 4 months period from 1 September 2017 to 31 December 2017. The current financial statements are for a period of 12 months from 1 January 2018 to 31 December 2018. Due to the change in the financial year end, the amounts presented in the financial statements are not entirely comparable.

(b) New standards, amendments and improvements to published standards that are effective and applicable to the Group and Company.

The Group and Company have applied the following new standards, amendments and improvements to the published standards that are applicable to the Group and Company for the first time for the financial year beginning on 1 January 2018:

- (i) MFRS 9 'Financial Instruments' ('MFRS 9')
- (ii) MFRS 15 'Revenue from Contracts with Customers' ('MFRS 15')
- (iii) IC Interpretation 22 'Foreign Currency Transactions and Advance Consideration' ('IC 22')
- (iv) Amendments to MFRS 128 'Investments in Associates and Joint Ventures' ('MFRS 128') in 'Annual Improvements to MFRS Standards 2014-2016 Cycle'
- (v) Amendments to MFRS 2 'Share-Based Payment' ('MFRS 2') on 'Classification and Measurement of Share-Based Payment Transactions'

The Group and Company had to change its accounting policies and make certain retrospective adjustments following the adoption of MFRS 9 and MFRS 15. This is disclosed in Note 47. The other amendments listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

2 BASIS OF PREPARATION (CONTINUED)

- (c) New standards, amendments to published standards, interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective.

The Group and Company will apply the new standards, amendments to published standards, interpretations and improvements to existing standards in the following periods:

- (i) Financial year beginning on or after 1 January 2019

- MFRS 16 'Leases' ('MFRS 16') supersedes MFRS 117 'Leases' ('MFRS 117') and the related interpretations.

Under MFRS 16, a lease is a contract (or part of a contract) that conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

MFRS 16 eliminates the classification of leases by the lessee as either finance leases (on balance sheet) or operating leases (off balance sheet). MFRS 16 requires a lessee to recognise a 'right-of-use' of the underlying asset and a lease liability reflecting future lease payments. The only exceptions are short term and low-value leases.

The right-of-use asset is depreciated in accordance with the principle in MFRS 116 'Property, Plant and Equipment' ('MFRS 116') and the lease liability is accreted over time with interest expense recognised in the income statement.

The standard will affect primarily the accounting for the Group and Company's leases previously recognised as operating leases under MFRS 117 disclosed in Note 24 and Note 41(b) and other rentals of buildings and equipments.

The Group and Company will apply the standard from 1 January 2019 and intends to apply the simplified transition approach and will not restate comparatives for the year prior to first adoption. All right-of-use assets will be measured at the amount of the lease liability on adoption (adjusted for any prepaid or accrued lease expenses).

At 1 January 2019, the Group and Company is estimated to recognise lease liabilities of RM29,404.7 million and RM41,147.4 million respectively with a corresponding estimated ROU assets of RM35,358.7 million and RM47,065.7 million respectively.

For lessors, MFRS 16 retains most of the requirements in MFRS 117. Lessors continue to classify all leases as either operating leases or finance leases and account for them differently. As such, the Group and Company does not expect any significant impact from activities as a lessor on the financial statements. However, some additional disclosures will be required from next year.

- IC Interpretation 23 'Uncertainty over Income Tax Treatments' ('IC 23') provides guidance on how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment.

If an entity concludes that it is not probable that the tax treatment will be accepted by the tax authority, the effect of the tax uncertainty should be included in the period when such determination is made. An entity shall measure the effect of uncertainty using the method which best predicts the resolution of the uncertainty.

IC 23 shall be applied retrospectively. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 128 on Long-term Interests in Associates and Joint Ventures clarifies that MFRS 9, including its impairment requirements shall be applied when accounting for long-term interests in an associate or joint venture that, in substance, form part of the net investment in the associate or joint venture to which the equity method is not applied.

The amendments shall be applied retrospectively with transitional reliefs available. Earlier application is permitted and should be disclosed.

2 BASIS OF PREPARATION (CONTINUED)

- (c) New standards, amendments to published standards, interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective. (continued)

- (i) Financial year beginning on or after 1 January 2019 (continued)

- Amendments to MFRS 9 on Prepayment Features with Negative Compensation allows the measurement of prepayable financial assets with negative compensation to be at amortised cost or at FVOCI if certain conditions are met.

The amendments shall be applied retrospectively with transitional reliefs available. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 3 'Business Combinations' ('MFRS 3') in Annual Improvements to MFRS Standards 2015-2017 Cycle clarify that obtaining control of a business that is a joint operation (as defined in MFRS 11 'Joint Arrangements' ('MFRS 11')) is a business combination achieved in stages. The acquirer must remeasure its previously held interest in the joint operation at its acquisition-date fair value. Accordingly, the acquirer effectively:
 - derecognises its previously held interest in the joint operation; and
 - recognises a controlling interest in all of the assets and liabilities of the former joint operation.

These amendments shall be applied to business combinations with acquisition dates on or after 1 January 2019. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 11 in Annual Improvements to MFRS Standards 2015-2017 Cycle clarify that when the party that participates in (but does not have joint control over) a joint operation, obtains joint control over that joint operation that is a business (as defined in MFRS 3), it should not remeasure its previously held interest in the joint operation.

These amendments shall be applied to transactions resulting in obtaining joint control on or after 1 January 2019. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 112 'Income Taxes' ('MFRS 112') in Annual Improvements to MFRS Standards 2015-2017 Cycle clarify that all income tax consequences of dividends should be recognised either in profit or loss, other comprehensive income ('OCI') or equity, depending on where the past transactions or events that generated the distributable profits were recognised.

These amendments shall be applied to income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 123 'Borrowing Costs' ('MFRS 123') in Annual Improvements to MFRS Standards 2015-2017 Cycle clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of the funds an entity borrows generally.

Based on the assessment performed to date, the application of this amendment is expected to increase profit by 1.0% to 2.0% for the Group and Company. The amendment is also expected to not have a material impact on the property, plant and equipment ('PPE') for the Group and Company.

These amendments shall be applied prospectively. Earlier application is permitted and should be disclosed.

- Amendments to MFRS 119 'Employee Benefits' ('MFRS 119') on Plan Amendments, Curtailment or Settlement requires an entity to use updated actuarial assumptions to determine current service cost and net interest for the remainder of the annual reporting period after a plan amendment, curtailment or settlement. In addition, the amendments require the entity to recognise in profit or loss as part of past service cost, or a gain or loss on settlement, any reduction in a surplus, even if that surplus was not previously recognised because of the impact of the asset ceiling. These amendments shall be applied prospectively. Earlier application is permitted and should be disclosed.

2 BASIS OF PREPARATION (CONTINUED)

- (c) New standards, amendments to published standards, interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective. (continued)

- (ii) Financial year beginning on or after 1 January 2020

- Amendments to References to the Conceptual Framework in MFRS Standards are to update the references and quotations in these Standards so as to clarify the version of the Conceptual Framework these Standards refer to.

The Revised Conceptual Framework for Financial Reporting comprises of a comprehensive set of concepts for financial reporting. It is built on the previous version issued in 2011. The changes to the chapters on the objective of financial reporting and qualitative characteristics of useful information are limited, but with improved wording to give more prominence to the importance of providing information needed to assess management's stewardship of the entity's economic resources.

Other improvements include a new chapter on measurement, guidance on reporting financial performance, improved definitions and guidance – in particular the definition of a liability – and clarifications in important areas, such as the role of prudence and measurement uncertainty in financial reporting.

The amendments to the following Standards which are applicable to the Group and Company are as follows:

- Amendments to MFRS 2
- Amendment to MFRS 3
- Amendments to MFRS 101 'Presentation of Financial Statements' ('MFRS 101')
- Amendments to MFRS 108 'Accounting Policies, Changes in Accounting Estimates and Errors' ('MFRS 108')
- Amendments to MFRS 134 'Interim Financial Reporting' ('MFRS 134')
- Amendment to MFRS 137 'Provisions, Contingent Liabilities and Contingent Assets' ('MFRS 137')
- Amendment to MFRS 138 'Intangible Assets' ('MFRS 138')
- Amendment to IC Interpretation 12 'Service Concession Arrangements' ('IC 12')
- Amendment to IC Interpretation 19 'Extinguishing Financial Liabilities with Equity Instruments' ('IC 19')
- Amendment to IC 22
- Amendments to IC Interpretation 132 'Intangible Assets – Web Site Costs' ('IC 132')

The amendments are effective for annual periods beginning on or after 1 January 2020. Earlier application is permitted if at the same time an entity also applies all other amendments made by Amendments to References to the Conceptual Framework in MFRS Standards.

- Amendments to MFRS 3 on Definition of a Business clarifies the definition to determine whether a transaction should be accounted for as a business combination or as an asset acquisition. The distinction is important as an acquirer does not recognise goodwill in an asset acquisition.

The amendments clarify that to be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. The amendments also add an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business.

The amendments shall be applied to business combinations with acquisition dates on or after the beginning of the first annual reporting period beginning on or after 1 January 2020 and to asset acquisitions that occur on or after the beginning of that period. Earlier application is permitted and should be disclosed.

2 BASIS OF PREPARATION (CONTINUED)

- (c) New standards, amendments to published standards, interpretations and improvements to existing standards that are applicable to the Group and Company but not yet effective. (continued)

- (ii) Financial year beginning on or after 1 January 2020 (continued)

- Amendments to MFRS 101 and MFRS 108 on Definition of material refines the definition by including 'obscuring information' to address the issue of including immaterial information should not reduce the understandability of a company's financial statements. The prior definition focuses only on information that cannot be omitted (material information) and does not also consider the effect of including immaterial information.

The amendments also align the definition of material across MFRS Standards and other publications.

These amendments shall be applied prospectively. Earlier application is permitted and should be disclosed.

- (iii) Financial year beginning on or after 1 January 2021

- MFRS 17 'Insurance Contracts' ('MFRS 17') introduces consistent accounting for all insurance contracts based on a current measurement model. MFRS 17 requires entities that issue insurance contracts to recognise and measure a group of insurance contracts at: (i) a risk-adjusted present value of future cash flows that incorporates information that is consistent with observable market information; plus (ii) an amount representing the unearned profit in the group of contracts. Profits from the group of insurance contracts are recognised over the insurance coverage period. MFRS 17 also changes the financial statements presentations of insurance service results – insurance revenue is presented separately from insurance financial income or expenses.

For insurance contracts with coverage period of one year or less, MFRS 17 allows an entity to measure the amount relating to remaining service by allocating the premium over the coverage period.

MFRS 17 shall be applied with transitional reliefs available. Earlier application is permitted provided the entities have applied MFRS 9 and MFRS 15 on or before the date of initial application of MFRS 17. If MFRS 17 is applied earlier, that fact should be disclosed.

- (iv) Effective date yet to be determined by Malaysian Accounting Standards Board

- Amendments to MFRS 10 'Consolidated Financial Statements' ('MFRS 10') and MFRS 128 on Sale or Contribution of Assets between an Investor and its Associate or Joint Venture.

The adoption of the above applicable new standards, amendments to published standards, interpretations and improvements to existing standards are not expected to have a material impact on the financial statements of the Group and Company except for MFRS 16 and MFRS 123.

There are no other standards, amendments to published standards and interpretations to existing standards that are not effective that would be expected to have a material impact on the Group and Company.

3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Unless otherwise stated, the following accounting policies have been applied consistently in dealing with items that are considered material in relation to the financial statements. These policies have been consistently applied to all the year/period presented, unless otherwise stated.

(a) Subsidiaries and basis of consolidation

(i) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the relevant activities of the entity. The existence and effect of potential voting rights are considered only when such rights are substantive when assessing control.

The amounts due from subsidiaries of which the Company does not expect repayment in the foreseeable future are considered as part of the Company's investment in subsidiaries.

In the Company's separate financial statements, investments in subsidiaries are stated at cost less accumulated impairment losses. On disposal of such investments, the difference between net disposal proceeds and their carrying amounts is included in the statement of profit or loss.

(ii) Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. The financial statements of the subsidiaries are prepared for the same reporting date as the Company.

Subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases. In preparing the consolidated financial statements, intragroup balances, transactions and unrealised gains or losses are eliminated in full. Uniform accounting policies are adopted in the consolidated financial statements for like transactions and events in similar circumstances.

The Group applies the acquisition method to account for business combinations. The consideration transferred for acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement and fair value of any pre-existing equity interest in the subsidiary. Acquisition-related costs are expensed as incurred. Identifiable assets acquired, liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date.

In a business combination achieved in stages, the carrying value of the acquirer's previously held equity interest in the acquiree is remeasured at its acquisition date fair value and the resulting gain or loss is recognised in the statement of profit or loss.

The excess of the consideration transferred, the amount of any Non-Controlling Interest ('NCI') in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the gain is recognised in the statement of profit or loss. Refer to Note 18 for accounting policy on goodwill.

NCI is the equity in a subsidiary not attributable, directly or indirectly, to a parent. On an acquisition-by-acquisition basis, the Group measures any NCI in the acquiree either at fair value or at the NCI's proportionate share of the acquiree's identifiable net assets. At the end of reporting period, NCI consists of amount calculated on the date of combinations and its share of changes in the subsidiary's equity since the date of combination.

All earnings and losses of the subsidiary are attributed to the parent and the NCI, even if the attribution of losses to the NCI results in a debit balance in the shareholders' equity.

3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(a) Subsidiaries and basis of consolidation (continued)

(iii) Changes in ownership interest

When the Group ceases to consolidate because of a loss of control, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in the statement of profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in OCI in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in OCI are reclassified to profit or loss. Gains or losses on the disposal of subsidiaries include the carrying amount of goodwill relating to the subsidiaries sold.

(b) Transactions with NCI

Transactions with NCI that do not result in loss of control are accounted for as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and NCI to reflect their relative interests in the subsidiary. Any differences between the amount of the adjustment to NCI and any consideration paid or received are recognised in equity attributable to owners of the Group.

(c) Impairment of non-financial assets

Assets that are subject to amortisation are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Impairment loss is recognised in the statement of profit or loss for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of fair value less cost to sell and its value-in-use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Non-financial assets other than goodwill previously impaired are reviewed for possible reversal of the impairment at each reporting date. Any subsequent increase in recoverable amount is recognised in the statement of profit or loss.

(d) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the statement of profit or loss as an expense as incurred.

Expenditure on development activities, whereby the application research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalised only when all the following criteria are fulfilled:

- (i) it is technically feasible to complete the intangible asset so that it will be available for use or sale;
- (ii) management intends to complete the intangible asset and use or sell it;
- (iii) there is an ability to use or sell the intangible asset;
- (iv) it can be demonstrated how the intangible asset will generate probable future economic benefits;
- (v) adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
- (vi) the expenditure attributable to the intangible asset during its development can be reliably measured.

Capitalised development costs are recognised as intangible assets and amortised from the point at which the asset is ready for use on a straight line method over its useful life.

The expenditure capitalised includes the cost of materials, direct labour and overheads costs that are directly attributable to preparing the assets for its intended use. Other development expenditure is recognised in the statement of profit or loss as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

All other significant accounting policies are disclosed in their respective notes.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgements are continuously evaluated by the Directors and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group and Company make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, rarely equate to the related actual results. To enhance the information content of the estimates, certain key variables that are anticipated to have a material impact on the Group and Company's results and financial position are tested for sensitivity to changes in the underlying parameters.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below:

(a) Revenue recognition

Electricity revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the financial year end of the Group and Company (unread and unbilled). An assessment is also made on any factors that are likely to materially affect the ultimate economic benefits which will flow to the Group and Company, including bill cancellations and adjustments. These assessments will have a corresponding adjustment to trade receivables. To the extent that the economic benefits are not expected to flow to the Group and Company, the value of that revenue is not recognised.

Included in the receivables, deposits and prepayments balance in Note 30 is the estimated under-recovery of costs under the Imbalance Cost Pass-Through ('ICPT') mechanism. The Group and Company continuously assess the balances by considering factors such as changes in the applicable regulatory implementation guidelines and political environment, the ability to recover costs through regulated rates, and the status of any pending or potential deregulation legislation. Based on this continuous assessment, the Company believes the existing balances reflects the best estimate of the Company's receivable from the Government. This assessment reflects the current political and regulatory climate, and may be subject to change in the future.

Included in the revenue, is the Annual Regulatory Adjustment ('ARA') for the over recovery of revenue and other income earned during the financial year. The Company has taken into account the principles laid out in the Guidelines on Electricity Tariff Determination ('Guidelines') under the Incentive Based Regulation ('IBR') for Peninsular Malaysia 2018, where the allowed revenue in each year is calculated as the sum of actual revenue earned and any applicable adjustments, such as those related to the revenue-cap, price-cap and other income adjustment mechanisms as described in the Guidelines. Other Income which is earned from services not directly related to electricity supply, but which are provided using the assets and/or staff of a licensee is deducted from the revenues to be earned from regulated tariffs.

(b) Estimated useful lives of Property, Plant and Equipment ('PPE')

The Group and Company regularly reviewed the estimated useful lives of PPE based on factors such as business plans and strategies, expected level of usage and future technological developments. Future results of operations could be materially affected by changes in these estimates brought about by changes in the factors mentioned above. A reduction in the estimated useful lives of PPE would increase the recorded depreciation and decrease the net book value ('NBV') of PPE.

(c) Impairment of PPE

The Group and Company assess impairment of assets whenever the events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable, i.e., the carrying amount of the asset is more than the recoverable amount.

Recoverable amount is measured at the higher of the fair value less cost to sell for that asset and its value-in-use. The value-in-use is the net present value of the projected future cash flows derived from that asset discounted at an appropriate discount rate. Projected future cash flows are based on the Group and Company's estimates calculated based on historical, sector and industry trends, general market and economic conditions, changes in technology and other available information.

In particular for TNB Liberty Power Limited ('LPL'), as disclosed in Note 14(a), the appropriateness of the assumptions required for impairment purpose is dependent on the extension of the Gas Supply Agreement ('GSA') by the Government of Pakistan where the subsidiary is operating, till the end of the Power Purchase Agreement ('PPA') term. The Government of Pakistan through its Economic Coordination Committee ('ECC') has approved the extension for gas allocation from Oil and Gas Development Company Limited ('OGDCL') Qadirpur gas field until the end of the PPA in 2026. Accordingly, the Group is of the view that the carrying amount of the subsidiary's PPE is recoverable.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below: (continued)

(d) Impairment of subsidiaries and associates

The Group and Company assess impairment of its investment in subsidiaries and associates whenever the events or changes in circumstances indicate that the carrying amount may not be recoverable i.e. the carrying amount is more than the recoverable amount. Recoverable amount is measured at the higher of the fair value less cost to sell and its value-in-use. The value-in-use is the net present value of the projected future cash flow derived discounted at an appropriate discount rate.

Projected future cash flows are based on the Group and Company's estimates calculated based on historical, sector and industry trends, general market and economic conditions, changes in technology and other available information.

(e) Impairment of goodwill

The Group tests goodwill for impairment annually in accordance with its accounting policy and whenever events or change in circumstances indicate that this is necessary within the financial period. This requires an estimation of the value-in-use of the Group as the cash generating unit to which the goodwill is allocated. Estimating the value-in-use requires the Group to make an estimate of the expected future cash flows from the Group and also to apply a suitable discount rate in order to calculate the present value of those cash flows. The assumptions used, results and sensitivity of the impairment assessment of goodwill are disclosed in Note 18 to the financial statements.

(f) Measurement of expected credit loss ('ECL') allowance for financial assets

The loss allowances for financial assets are based on assumptions about risk of default and expected loss rates. The Group and Company use judgements in making these assumptions and selecting the inputs to the impairment calculation, based on the Group and Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period. Details of key assumptions and inputs used are disclosed in Note 45.

(g) Lease accounting

As a result of adopting IC Interpretation 4 'Determining Whether an Arrangement Contains a Lease' ('IC 4'), certain of the Group and Company's power purchase agreements have been accounted for as a finance lease rather than the normal sale and purchase arrangements. This has resulted in finance lease accounting being applied to these power purchase agreements.

To apply finance lease accounting, a number of assumptions in the lease models have been made, such as the determination of minimum lease payments, implicit interest rates and residual values of the power plants at the end of contract periods. Any changes to these assumptions will affect the lease income and expenses.

(h) Fair value of derivatives and other financial instruments

Certain financial instruments such as investments and derivative financial instruments are carried on the statement of financial position at fair value, with changes in fair value reflected in the statement of profit or loss.

Fair values are estimated by reference in part to published price quotations and in part by using valuation techniques. The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques.

The Group and Company use its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting periods, as disclosed in Note 45 to the financial statements.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below: (continued)

(i) Estimation of income taxes

(i) Income tax

Income tax is estimated based on the rules governed under the Income Tax Act, 1967.

Differences in determining the capital allowances, deductibility of certain expenses and subsequent utilisation of reinvestment allowance may arise during the estimation of the provision for income tax between tax calculated at the statement of financial position date, and the final submission to the tax authority as a result of obtaining further detailed information that may become available subsequent to the statement of financial position date.

Where the final tax outcome of these matters is different from the amounts that were initially recognised, such differences will impact the income tax provisions and deferred tax balance in the period in which such determination is made.

The Group and Company have recorded tax recoverable for which the Group and Company believe that there is a reasonable basis for recognition. Where the final tax outcome of this matter is different from the amount that was initially recorded, such difference may cause a material adjustment to the carrying amount of the tax recoverable balance recorded in the period in which such determination is made.

On 23 November 2015, Inland Revenue Board ('IRB') had disallowed the Company's reinvestment allowance ('RIA') claims for Year Assessment 2013 and 2014 and had issued notices of additional assessments ('Notices') of RM2,068.2 million to the Company. The Company had filed an appeal to the Special Commissioners of the Income Tax ('SCIT') on the Notices.

As at 31 December 2018, the Group and Company recorded a tax recoverable of RM1,765.1 million from Inland Revenue Board ('IRB') arising from the resubmission of tax computations in the financial year ended 31 August 2014, pursuant to the explicit approval given by IRB on 21 January 2013 on the eligibility of the Company in claiming the RIA.

In addition, the Group and Company have not recorded the potential additional tax liability arising from the tax impact if the RIA claimed is disallowed and the Company loses its appeal. The realisation of this tax recoverable and the potential tax liability is dependent on the outcome of judgement on the RIA claims by the SCIT and by the Kuala Lumpur High Court, including if there is a subsequent appeal by either party, as disclosed in Note 42 to the financial statements.

The Directors have performed an assessment on the tax recoverable of RM1,765.1 million and the potential tax liability based on a legal view obtained from external legal counsel and the facts surrounding its RIA claims. The Directors have exercised judgement that there is sufficient evidence and case law to support the Company's appeal against the Notices.

(ii) Deferred tax assets

Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences or unused tax losses can be utilised. This involves judgement regarding the future financial performance of the particular entity in which the deferred tax asset has been recognised.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (CONTINUED)

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are outlined below: (continued)

(j) Post-employment employee benefits

The Group and Company provide both Retirement Benefit Plan and Post Retirement Medical Plan for certain employees. The present value of the employee benefits obligations depends on a number of factors that are determined on an actuarial basis using certain assumptions. The key assumptions used in determining the net cost/(income) for the employee benefits include discount rate, medical claim inflation rate and salary increment rate. Any changes in these assumptions will impact the carrying amount of employee benefits obligations, as disclosed in Note 33.

- Discount rate

The Group and Company determine the appropriate discount rate at the end of each financial period. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group and Company consider the interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related employee benefits obligation.

- Medical claim inflation rate

The medical claim inflation rate for general practitioner, hospitalisation, specialist and dialysis medical claims, as determined by the Group and Company are based on the annualised increase in average claims over the past 7 years.

- Salary increment rate

The salary increment rate for employees receiving the Retirement Benefit Plan as determined by the Group and Company is based on the average salary increment rate for the past 8 years and considerations for price inflation, real salary increase, promotions and Collective Agreement ('CA') negotiation.

(k) Fair value of LTIP

The Group introduces an equity-settled share-based compensation plan under which the entity receives services from employees as consideration for equity instruments of the Group.

The Group and Company measure the equity-settled share-based payments by reference to the fair value of the equity instruments at the date which they are granted, and revise the estimated number of shares that are expected to vest at the reporting period.

Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model (i.e. Monte Carlo simulation model). The estimate requires determining the most appropriate inputs to the valuation model including the expected life of the share scheme, volatility and dividend yield and making assumptions about them, as disclosed in Note 7 to the financial statements.

5 REVENUE

Accounting Policy

Revenue which represents income arising in the course of the Group's and Company's ordinary activities is recognised by reference to each distinct performance obligation promised in the contract with customer. Revenue from contracts with customers is measured at its transaction price, being the amount of consideration which the Group and Company expect to be entitled in exchange for transferring promised goods or services to a customer, net of goods and service tax, returns, rebates and discounts. Transaction price is allocated to each performance obligation on the basis of the relative stand-alone selling prices of each distinct good or services promised in the contract. Depending on the substances of the respective contract with the customer, revenue is recognised when the performance obligation is satisfied, which may be at a point in time or over time.

The Group and Company do not expect any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group and Company do not adjust any of the transaction prices for the time value of money.

(a) Electricity revenue

Revenue from the supply of electricity in Peninsular Malaysia is regulated based on certain formulae and parameters as set out in the regulatory implementation guidance under the Incentive Based Regulation ('IBR') framework and as agreed with the Ministry of Energy, Science, Technology, Environment and Climate Change.

The contract with customers is for the supply of electricity in accordance to the Tariff rates pursuant to the provision of the Electricity Supply Act 1990. Collection of the contract consideration from customers is considered probable.

The promise to supply electricity represents a promise to transfer a series of distinct goods that are substantially the same and that have the same pattern of transfer to the customer. The performance obligation to deliver electricity is satisfied over time as the customers simultaneously received and consumed the benefits provided by the Group and Company's performance. Hence, electricity revenue is recognised over time by the Group and Company when electricity is consumed by customers.

Generally, customers are billed on a monthly basis. As the amount at which the Group and Company have a right to invoice, corresponds directly with the value to the customer, the revenue from electricity sales is also recognised on a monthly basis. Payment should be made by customers within 30 days from the date the bill is issued. A penalty charge will be imposed if payment is made later than 30 days after the bill date.

Electricity revenue includes an estimated value of the electricity consumed by customers from the date of their last meter reading and reporting period end. Accrued unbilled revenues recognised as contract assets are reversed the following month when actual billings occur.

ICPT, a mechanism established under the IBR allows the Company to pass through the volatility in fuel and other generation specific costs (termed as the 'Single Buyer Generation Cost') to the consumers, such that the Company remains financially neutral. The Company's claims and undertakings under the ICPT mechanism are such that any over or under-recovery of costs would be payable to or reimbursable from the Government, and would be recognised as part of revenue in the period the costs are incurred. Actual base tariff billed to the customer remains unchanged.

Included in the revenue, is the ARA for the over recovery of revenue and other income earned during the year. The Company has taken into account the principles laid out in the Guidelines on Electricity Tariff Determination under the IBR for Peninsular Malaysia 2018, where the allowed revenue in each year is calculated as the sum of actual revenue earned and any applicable adjustments, such as those related to the revenue-cap, price-cap and other income adjustment mechanisms as described in the Guidelines. Other income which is earned from services not directly related to electricity supply, but which are provided using the assets and/or staff of a licensee is deducted from the revenues to be earned from regulated tariffs.

(b) Goods and services

(i) Sale of goods

Sale of goods is recognised when control of the products has transferred, being when the products are delivered to the customer and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been transported to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has objective evidence that all criteria for acceptance have been satisfied.

5 REVENUE (CONTINUED)

Accounting Policy (continued)

(b) Goods and services (continued)

(i) Sale of goods (continued)

Revenue from these sales is recognised based on the price specified in the contract, net of the estimated discounts. Accumulated experience is used to estimate and provide for the discounts, using the expected value method, and revenue is only recognised to the extent that it is highly probable that a significant reversal will not occur. No element of financing is deemed present as the sales are made with a credit term of on average 30 to 60 days, which is consistent with market practice. The Group's obligation to repair or replace faulty products under the standard warranty terms is recognised as a provision.

A receivable is recognised when the goods are delivered as this is the point in time that the consideration is unconditional because only the passage of time is required before the payment is due.

(ii) Rendering of services

Revenue from providing services is recognised over the period in which the services are rendered. Revenue is recognised based on the actual service provided to the end of the reporting period as a proportion of the total services to be provided because the customer received and uses the benefits simultaneously.

In cases of fixed-price contracts, the customer pays the fixed amount based on a payment schedule. If the services rendered exceed the payment, a contract asset is recognised. If the payments exceed the services rendered, a contract liability is recognised.

If the contract includes hourly fees, revenue is recognised in the amount to which the Group has a right to invoice. The amounts are billed within 60 to 180 days from satisfying the performance obligation and payment is expected within 30 days from the billing date.

(c) Construction contracts

Construction contracts revenue is recognised over time or at a point in time in accordance to performance obligations satisfied. Where revenue is recognised over time, the satisfaction of performance obligation is by reference to the stage of completion which is assessed by reference to the contract costs incurred over the total estimated costs for each contract as at the reporting date. Otherwise, revenue is recognised at a point in time when the customer obtains control of the assets. The related costs are recognised in profit or loss when they are incurred.

Where the contracts include multiple performance obligations, the transaction price will be allocated to each performance obligation based on the stand-alone selling prices. Where these are not directly observable, they are estimated based on expected cost plus margin. If contracts include sale of goods as a separate performance obligation, revenue from this sale is recognised at a point in time when the goods are delivered, the legal title has passed and the customer has accepted the goods.

When the consideration of a construction contract cannot be estimated reliably, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in the statement of profit or loss.

Estimates of revenues, costs or extent of progress toward completion are revised if circumstances change. Any resulting increases or decreases in estimated revenues or costs are reflected in profit or loss in the period in which the circumstances that give rise to the revision become known by management.

Advances received are now included in contract liabilities.

The amounts will be billed within 60 to 180 days for satisfying the performance obligations and payment is expected within 30 days from billing date.

5 REVENUE (CONTINUED)

Accounting Policy (continued)

(d) Customers' contributions

Contributions received from customers consist of cash and assets in the form of PPE. It is an upfront capital contributions for the construction of assets, used to connect the customers to a network or to provide them with the service.

Contributions received prior to 1 January 2011 are amortised over 15 years, being the average useful life of the asset.

From 1 January 2011 to the adoption of MFRS 15, in compliance with IC Interpretation 18 'Transfers of Assets from Customers' ('IC18'), all contributions received from customers, where that amount of contributions must be used only to construct or acquire an item of PPE, and the item of PPE is used to either connect the customer to a network or to provide the customer with ongoing access to supply of electricity, or to do both, the contributions received are recognised as revenue.

Under MFRS 15, the customers' contribution are viewed as indirectly related to the promise of providing supply of electricity to the customers. Supply of electricity and customers' contributions are not distinct because the customers cannot benefit from these two services on their own. The connection infrastructures are to fulfil the obligation to supply electricity to the customers. Both the supply of electricity and customers' contribution are substantially the same, and have the same pattern of transfer to the customers.

Therefore, connection and the supply of electricity are one performance obligation. It is considered as part of the transaction price for the overall service provided to the customers' revenue and is recognised over time. The customers' contributions are deferred and recognised over the period the constructed assets used to provide electricity to the customers. In compliance with MFRS 15, the assets are recognised as contract liabilities and amortised over 20 years, being the revised estimate of the average useful life of the assets.

Disaggregation of revenue from contracts with customers for the Group and Company are categorised as follows:

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
Sales:				
- Electricity*	49,487.4	15,380.4	46,833.9	14,622.1
- Goods and services	554.7	192.0	0	0
Construction contracts	87.0	4.2	0	0
Customers' contributions	263.4	115.6	229.4	96.1
	50,392.5	15,692.2	47,063.3	14,718.2
Over time	50,283.3	15,658.7	47,063.3	14,718.2
At a point in time	109.2	33.5	0	0
	50,392.5	15,692.2	47,063.3	14,718.2

* Included in the sales of electricity are the net ICPT and other regulatory adjustments amounting to RM1,689.8 million (FPE 31.12.2017: RM50.4 million) and Government subsidy for tariff reduction for Sabah Electricity Sdn. Bhd. ('SESB') amounting to RM32.2 million (FPE 31.12.2017: RM19.2 million). SESB also received tariff support subsidy from Federal Government amounting to RM272.3 million (FPE 31.12.2017: NIL).

The revenue of the Group and Company are predominantly derived in Malaysia. The revenue derived from outside of Malaysia is regarded as not material.

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Notes to the Financial Statements

6 OPERATING EXPENSES

	Group		Company	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
	RM'million	RM'million	RM'million	RM'million
Cost of sales:				
- Energy cost	30,654.9	9,214.2	30,303.8	9,077.9
- Transmission cost	1,788.1	521.3	1,650.7	476.5
- Distribution cost	5,832.8	1,837.0	5,531.1	1,761.0
	38,275.8	11,572.5	37,485.6	11,315.4
Administrative expenses	2,441.1	839.7	1,535.7	571.3
Other operating expenses	3,137.8	615.2	2,824.2	388.4
	43,854.7	13,027.4	41,845.5	12,275.1

Operating expenses include the following items:

	Group		Company	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
	RM'million	RM'million	RM'million	RM'million
Purchases from Independent Power Producers ('IPPs')^	16,057.7	4,970.4	25,349.8	7,621.2
Fuel costs	11,634.0	3,378.2	2,714.7	778.8
Operating lease expenses	3,978.5	1,308.0	4,694.7	1,551.4
Directors' remuneration:				
- Fees and allowances	4.4	1.3	4.0	1.2
- Other emoluments	0.5	0.2	0.5	0.2
Auditors' remuneration:				
- Statutory audit:				
- PricewaterhouseCoopers PLT, Malaysia	3.5	2.5	1.5	1.1
- Others	1.1	0.1	0	0
- Audit related services	2.6	1.0	2.6	0.5
- Non-audit services:				
- Tax related services	2.8	0.1	2.4	0.1
- Other non-audit services	4.8	3.1	4.4	3.1
Staff costs (Note 7)	3,685.8	1,288.5	2,833.0	1,054.8
Property, plant and equipment:				
- Depreciation	6,491.3	2,049.9	5,507.6	1,785.3
- Written off	83.4	9.6	75.8	9.6
- Abandoned projects	2.8	14.9	2.8	14.9

6 OPERATING EXPENSES (CONTINUED)

Operating expenses include the following items: (continued)

	Group		Company	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
	RM'million	RM'million	RM'million	RM'million
Impairment losses on investment in:				
- Subsidiaries	0	0	1,661.6	43.1
- Associates	802.7	0	0	0
Inventories:				
- Provision for obsolescence	293.4	69.9	292.9	69.9
- Write back of obsolescence	(278.6)	(62.9)	(278.6)	(62.9)
- Written off	27.6	0.2	23.1	0.2
Rental of land and buildings	53.0	18.8	51.0	16.0
Rental of plant and machinery	71.4	12.1	71.3	12.1
Research and development expenses	157.7	35.9	157.7	34.7
Receipt of Government subsidies [#]	(124.7)	(70.5)	0	0

[^] These include amounts related to the Electricity Industry Fund amounting to RM43.6 million (FPE 31.12.2017: RM11.2 million).

[#] This represents the subsidies that SESB received for diesel and medium fuel oil from the Government of Malaysia. The total amount credited in the current year/period has been offsetted against energy cost.

The estimated monetary value of benefits received by the Directors was RM506,806 (FPE 31.12.2017: RM202,090) for the Group and Company.

All non-audit services were procured competitively in accordance with TNB Procurement Policies and Procedures. Non-audit services can be offered by the external auditors of the Group if there are clear efficiencies and value added benefits to the Group.

7 STAFF COST

	Group		Company	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017	Financial year ended 31.12.2018	Financial period ended 31.12.2017
	RM'million	RM'million	RM'million	RM'million
Wages, salaries and bonuses	1,939.6	771.5	1,348.2	605.3
Defined contribution retirement plan	403.8	106.1	327.3	87.1
Long Term Incentive Plan	267.8	66.3	205.5	50.1
Retirement benefit plan	165.6	59.3	145.2	51.7
Post retirement medical plan	561.8	189.5	538.4	181.7
Other employee benefits	347.2	95.8	268.4	78.9
	3,685.8	1,288.5	2,833.0	1,054.8

7 STAFF COST (CONTINUED)

Details of the retirement benefit and retirement medical plans of the Group and Company are set out in Note 33 to the financial statements.

Long Term Incentive Plan ('LTIP')

The Group operates an equity-settled share-based compensation plan under which the entity receives services from employees as consideration for equity instruments of the Group.

The fair value of the employee services received in exchange for the grant of the Company's shares is recognised as an expense in the statement of profit or loss over the vesting period of the grant, with a corresponding increase in share-based payment reserve in equity.

The total amount to be expensed over the vesting period is determined by reference to the fair value of the shares granted.

Non-market vesting conditions are included in the assumptions to arrive at the number of shares that are expected to vest. At the end of the reporting period, the Group and Company revise its estimate of the number of shares that are expected to vest. The impact of the revision of original estimates, if any, is recognised in the statement of profit or loss, with a corresponding adjustment to share-based payment reserve in equity.

The fair value of shares granted to employees of subsidiaries is allocated to the subsidiaries.

The Company implemented a LTIP on 30 April 2015 for a period of 10 years. The LTIP is governed by the by-laws, which was approved by the shareholders at an Extraordinary General Meeting on 18 December 2014. LTIP is intended to allow the Company to award the grant of new shares to be vested to selected employees for the attainment of identified performance objectives.

(a) The main features of the LTIP

The LTIP comprises a Restricted Share Grant ('RS Grant') and a Performance Share Grant ('PS Grant'). The main difference in the features of the RS Grant and the PS Grant is the eligibility of the selected employees in terms of their job grades in the Group and the performance targets and/or performance conditions to be met prior to the offer and vesting of the grant to the selected employees.

The details of the grant are as follows:

(i) RS Grant

The RS Grant is a restricted share grant for all eligible employees selected on a basis designated by the LTIP Committee. The RS Grant will be awarded annually to the selected employees to be vested over a period of 3 years on pro-rata basis and after fulfillment of individual performance targets based on the Group's performance management system (such as individual performance rating) and certain performance conditions (such as financial targets) as determined by the LTIP Committee from time to time at its discretion in accordance with the terms and conditions of the LTIP.

(ii) PS Grant

The PS Grant is a performance share grant for senior executives of the Group and Executive Director as well as key employees of the Group selected on a basis designated by the LTIP Committee. The PS Grant will be awarded annually to the selected employees to be vested at the end of the 3-year period and after fulfilment of certain performance targets and/or conditions at the time of grant and vesting, which may include, among other factors, total shareholders' return and the long term financial performance targets/ratios of the Group as determined by the LTIP Committee from time to time at its discretion in accordance with the terms and conditions of the LTIP. At the point of vesting, the final award of the PS Grant is based on a multiple of the initial grant whereby the multiple is determined according to the performance targets and/or conditions. In the event the performance targets and/or conditions are not met by the selected employees, the grant will not be vested to them at the end of the performance period.

The new ordinary shares to be allotted and issued upon the vesting of the ordinary shares pursuant to the RS Grant and PS Grant will not be subjected to any retention period or restriction on transfer.

7 STAFF COST (CONTINUED)

Long Term Incentive Plan ('LTIP') (continued)

(a) The main features of the LTIP (*continued*)

The details of the grant are as follows: (*continued*)

(ii) PS Grant (*continued*)

In implementing the LTIP, the grant will be satisfied by way of allotment and issuance of new ordinary shares to the respective RS and PS grantees upon vesting of the grant.

The LTIP Committee shall decide from time to time at its discretion to determine or vary the terms and conditions of the offer, such as the eligibility criteria and allocation in each grant, the timing and frequency of the award of the grant, the performance targets and/or performance conditions to be met prior to the offer and vesting of the grant and the vesting period.

(b) Maximum number of new ordinary shares available under the LTIP

The maximum number of new ordinary shares which may be made available under the LTIP and/or allotted and issued upon vesting of the new ordinary shares under the LTIP shall not be more than 10.0% of the issued and paid-up ordinary share capital of the Company (excluding treasury shares) at any point in time during the duration of the LTIP.

(c) Basis of allocation and maximum allowable allotment

The total number of new ordinary shares that may be offered to any one of the selected employees and/or to be vested in any one of the grantees under the LTIP at any time shall be at the discretion of the LTIP Committee (subject to the by-laws and any applicable law).

(d) Eligibility

Employees of the Group and Company (including the Executive Director) who meet the following criteria as at the date of offer shall be eligible to be considered as an eligible employee to participate in the LTIP:

- (i) has attained the age of 18 years;
- (ii) has entered into a full-time or fixed-term contract of employment with, and is on the payroll of any company within the Group and has not served a notice of resignation or received a notice of termination;
- (iii) whose service/employment has been confirmed in writing;
- (iv) is not a non-executive or independent director of the Company; and
- (v) has fulfilled any other eligibility criteria which has been determined by the LTIP Committee at its discretion from time to time, as the case may be.

The LTIP Committee may determine any other eligibility criteria for the purpose of selecting an eligible employee at any time and from time to time, at its discretion.

(e) Ranking of the new ordinary shares

The new ordinary shares to be allotted and issued pursuant to the LTIP shall, upon allotment and issuance, rank equally in all respects with the then existing issued ordinary shares.

The new ordinary shares to be allotted and issued pursuant to the vesting of the grant under the LTIP shall not be entitled to any dividends, rights, allotments and/or any other distributions, for which the entitlement date is prior to the date on which the new ordinary shares are credited into the Central Depository System ('CDS') accounts of the respective grantees upon vesting of the grant under the LTIP.

(f) Alteration of share capital and adjustment

If the LTIP Committee so decides (but not otherwise), in the event of any alteration in the capital structure of the Company during the duration of LTIP, which expires on 29 April 2025, such corresponding alterations (if any) may be made to the LTIP in:

- (i) the number of unvested new ordinary shares comprised in a grant; and/or
- (ii) the method and/or manner in the vesting of the new ordinary shares comprised in a grant.

7 STAFF COST (CONTINUED)

Long Term Incentive Plan ('LTIP') (continued)

The movement in the total number of share grants during the financial year/period is as follows:

Financial year ended 31 December 2018

	Group						Company					
	At 1.1.2018 '000	Granted '000	Additional* '000	Forfeited '000	Vested '000	At 31.12.2018 '000	At 1.1.2018 '000	Granted '000	Additional* '000	Forfeited '000	Vested '000	At 31.12.2018 '000
<u>LTIP 1</u>												
RS Grant	5,938.2	0	0	(398.6)	(5,539.6)	0	4,556.7	0	0	(365.0)	(4,191.7)	0
PS Grant	2,067.0	0	1,575.5	(473.9)	(3,168.6)	0	1,817.4	0	1,355.7	(416.7)	(2,756.4)	0
<u>LTIP 2</u>												
RS Grant	10,619.6	0	0	(667.8)	(5,386.3)	4,565.5	8,446.6	0	0	(602.8)	(4,270.5)	3,573.3
PS Grant	1,883.1	0	0	(282.2)	0	1,600.9	1,697.8	0	0	(268.6)	0	1,429.2
<u>LTIP 3</u>												
RS Grant	20,299.7	0	0	(1,663.7)	(6,808.0)	11,828.0	15,381.3	0	0	(1,322.6)	(5,238.0)	8,820.7
PS Grant	2,123.4	0	0	(209.5)	0	1,913.9	1,875.8	0	0	(202.7)	0	1,673.1
<u>LTIP 4</u>												
RS Grant	0	18,571.6	0	(540.7)	0	18,030.9	0	14,148.3	0	(463.2)	0	13,685.1
PS Grant	0	2,058.1	0	(73.4)	0	1,984.7	0	1,822.0	0	(63.2)	0	1,758.8

* The final amount of vesting under PS01 is in accordance with terms and condition approved by the Board Nomination and Remuneration Committee ('BNRC') LTIP/Board as stated in Note 7(a)(ii) above.

Financial period ended 31 December 2017

	Group					Company				
	At 1.9.2017 '000	Transfer '000	Forfeited '000	Vested '000	At 31.12.2017 '000	At 1.9.2017 '000	Transfer '000	Forfeited '000	Vested '000	At 31.12.2017 '000
<u>LTIP 1</u>										
RS Grant	13,177.8	0	(268.4)	(6,971.2)	5,938.2	10,229.7	(153.7)	(130.9)	(5,388.4)	4,556.7
PS Grant	2,067.0	0	0	0	2,067.0	1,815.7	1.7	0	0	1,817.4
<u>LTIP 2</u>										
RS Grant	10,815.6	0	(196.0)	0	10,619.6	8,679.2	(130.8)	(101.8)	0	8,446.6
PS Grant	1,883.1	0	0	0	1,883.1	1,692.8	5.0	0	0	1,697.8
<u>LTIP 3</u>										
RS Grant	20,609.9	0	(310.2)	0	20,299.7	15,785.3	(159.1)	(244.9)	0	15,381.3
PS Grant	2,123.4	0	0	0	2,123.4	1,879.5	(3.7)	0	0	1,875.8

7 STAFF COST (CONTINUED)

Long Term Incentive Plan ('LTIP') (continued)

The fair value of the share granted is estimated using the Monte Carlo Simulation Model with the following inputs:

	Group and Company							
	LTIP 1		LTIP 2		LTIP 3		LTIP 4	
	RS Grant	PS Grant	RS Grant	PS Grant	RS Grant	PS Grant	RS Grant	PS Grant
Fair value at grant date	RM10.46 - RM10.96	RM8.70 [^]	RM12.87 - RM13.53	RM12.04 [^]	RM12.33 - RM13.21	RM11.67 [^]	RM13.96 - RM15.21	RM12.60 [^]
Share price at grant date	RM11.18	RM11.18	RM13.88	RM13.88	RM13.74	RM13.74	RM15.92	RM15.92
Expected volatility*	18.5%	18.5%	18.9%	18.9%	16.5%	16.5%	13.3%	13.3%
Expected dividend yield	2.3%	2.3%	2.5%	2.5%	3.6%	3.6%	4.4%	4.4%
Risk-free interest rate**	3.8%	3.8%	3.0%	3.0%	3.5%	3.5%	3.4%	3.5%
Grant date	3 August 2015	3 August 2015	1 April 2016	1 April 2016	28 March 2017	28 March 2017	18 April 2018	18 April 2018
Vesting date		28 November 2018		30 April 2019		30 April 2020		30 April 2021
- Tranche 1	15 November 2016	-	2 May 2017	-	30 April 2018	-	30 April 2019	-
- Tranche 2	23 November 2017	-	30 April 2018	-	30 April 2019	-	30 April 2020	-
- Tranche 3	28 November 2018	-	30 April 2019	-	30 April 2020	-	30 April 2021	-

[^] Market considerations have been included in the consideration of fair value.

* Expected volatility is based on TNB's 3 year average daily historical volatility.

** Risk-free interest is based on Malaysian Government Securities yield.

8 OTHER OPERATING INCOME

Accounting Policy

Other operating income are the non-core revenue received for sales of goods and services rendered by the Group and Company. Leasing income is accrued, unless collectability is in doubt. Dividend income is recognised when the shareholders' rights to receive payment is established. All others are recognised upon completion of the rendering of services or sale not in ordinary course of the Group and Company's business.

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Dividend income from:				
- Quoted shares	0	0.9	0	0.9
- Subsidiaries	0	0	64.0	0
- Associates	0	0	26.4	18.0
Leasing income	27.1	13.1	19.4	11.2
Rental income	16.0	7.8	38.0	15.7
Release of Government development grants (Note 37)	51.5	190.0	0	0
Gain on disposals of PPE	6.2	9.1	6.2	9.1
Interest on late payments	247.6	84.0	240.6	82.4
Minimum charges	41.7	13.4	41.7	13.4
Gain on redemption of redeemable preference shares in subsidiaries	0	0	213.9	30.6
Sundry receipts	82.0	75.7	85.1	75.7
Project management and consultancy	0	0	277.1	0
Theft of electricity	163.1	46.0	162.2	45.0
Other income	189.9	72.6	145.1	58.7
	825.1	512.6	1,319.7	360.7

Other income comprises primarily of income from sales of scrap and rechargeable works.

9 FOREIGN EXCHANGE (LOSS)/GAIN

Accounting Policy

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The financial statements are presented in Ringgit Malaysia ('RM'), which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year/period end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss. However, exchange differences are deferred in OCI when they are attributable to items that form part of the net investment in a foreign operation.

(c) Group companies

The results and financial positions of the Group's entities (none of which has the currency of a hyperinflationary economy) that have functional currencies which are different from the presentation currency are translated into the presentation currency as follows:

- (i) assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
- (ii) income and expenses for each statement of profit or loss and OCI are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- (iii) all resulting exchange differences are recognised as a separate component of equity.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate. Exchange differences arising are recognised in OCI.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to shareholders' equity.

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a joint venture that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), the cumulative amount of the exchange differences relating to that foreign operation recognised in OCI, and accumulated in the separate component of equity, are reclassified from equity to profit or loss, as part of the gain or loss on disposal.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences recognised in OCI are re-attributed to NCI in that foreign operation, and are not recognised in profit or loss. For all other partial disposals (that is, reductions in the Group's ownership interest in associates or joint ventures that do not result in the Group losing significant influence or joint control) the proportionate share of the accumulated exchange difference is reclassified to profit or loss.

9 FOREIGN EXCHANGE (LOSS)/GAIN (CONTINUED)

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Foreign exchange (loss)/gain comprises:				
Translation (loss)/gain – foreign term loans	(185.8)	522.3	(185.8)	516.3
Translation loss – others	(207.3)	(192.6)	(70.6)	(94.8)
Total foreign exchange translation (loss)/gain	(393.1)	329.7	(256.4)	421.5
Transaction (loss)/gain – foreign term loans	(12.1)	2.4	(12.0)	2.4
Transaction loss – others	(13.1)	(21.9)	(13.6)	(2.3)
	(418.3)	310.2	(282.0)	421.6

10 FINANCE INCOME/COST AND FAIR VALUE CHANGES OF FINANCIAL INSTRUMENTS

Accounting Policy

Finance income are interests and dividends received from investments or financial instruments.

Investment income earned on the temporary investment of specific borrowing pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use. Qualifying assets are assets that necessarily takes substantial period of time to get ready for their intended use.

Other borrowing costs are expensed in the period in which they are incurred.

MFRS 9 requires the fair value of financial instruments to be calculated by using the effective interest method to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowances).

Accounting policy on finance cost for finance lease and government grants are disclosed in Note 23 and Note 37 respectively.

10 FINANCE INCOME/COST AND FAIR VALUE CHANGES OF FINANCIAL INSTRUMENTS (CONTINUED)

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
(a) Finance income:				
Interest from subsidiaries	0	0	46.0	16.0
Interest from deposits, staff loans and associates	531.8	259.2	251.4	55.9
Less: Reduction of borrowing costs capitalised into PPE	(108.0)	(164.3)	0	0
	423.8	94.9	297.4	71.9
(b) Finance cost:				
Interest on:				
- Borrowings	1,937.8	533.9	763.9	228.2
- Consumer deposits	136.4	44.0	128.9	41.6
- Others	317.9	124.2	36.7	12.2
Release of Government grants (Note 37)	(27.4)	(6.8)	0	0
Finance charges under finance leases (Note 23)	347.6	123.4	1,125.3	365.4
Less: Amount capitalised into PPE	(1,023.8)	(287.3)	(260.5)	(83.4)
	1,688.5	531.4	1,794.3	564.0
(c) Fair value changes of financial instruments:				
Gain on changes in fair value of financial assets	44.8	37.4	22.0	27.9
(Loss)/Gain on changes in fair value of financial liabilities	(8.1)	(44.6)	0.2	(0.2)
	36.7	(7.2)	22.2	27.7

11 TAXATION AND ZAKAT

Accounting Policy

(a) Income tax

Current tax expense is determined by the expected income taxes payable in respect of the taxable profit for the financial year and is measured using the applicable tax rates according to the tax laws of the countries in which the Company and its subsidiaries operate and generate the taxable profits.

Management periodically evaluates positions taken in tax returns with respect to situation in which applicable tax regulation is subject to interpretation. Provisions are established where appropriate on the basis of amounts expected to be paid to the tax authorities.

Tax is recognised in the profit or loss except to the extent that it relates to items recognised directly in OCI. In this case, the item is recognised in OCI, net of tax.

(b) Zakat

The Group and Company recognise its obligation towards the payment of zakat on business income in the statement of profit or loss. Zakat payment is an obligation and is accrued based on 2.5% of profit before tax and determined according to the percentage of Muslim shareholding in the Company.

11 TAXATION AND ZAKAT (CONTINUED)

The taxation and zakat for the Group and Company comprise:

	Note	Group		Company	
		Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Current tax:					
- Malaysian corporate income tax		960.5	277.4	597.5	191.6
Deferred tax	20	266.8	(42.4)	423.7	(18.5)
Tax expense		1,227.3	235.0	1,021.2	173.1
Zakat		74.3	0	74.3	0
		1,301.6	235.0	1,095.5	173.1
The analysis of the tax expense is as follows:					
Current tax:					
- Current financial year/period		962.8	277.4	581.4	191.6
- (Over)/Under accrual in prior financial years		(2.3)	0	16.1	0
		960.5	277.4	597.5	191.6
Deferred tax:					
- Origination and reversal of temporary differences	20	266.8	(42.4)	423.7	(18.5)
		1,227.3	235.0	1,021.2	173.1

The explanation of the relationship between tax expense and profit before taxation and zakat is as follows:

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
Profit before taxation and zakat	5,046.6	2,843.5	4,314.1	2,625.4
Tax calculated at the Malaysian corporate income tax rate of 24% (31.12.2017: 24%)	1,211.2	682.4	1,035.4	630.1
Tax effects of:				
- Share of results of associates and joint ventures	43.8	8.9	0	0
- Income not subject to tax	(284.2)	(253.0)	(215.5)	(204.3)
- Expenses not deductible for tax purposes	1,008.5	142.6	1,003.5	142.5
- Expenses qualifying for double deduction	(33.2)	(5.2)	(33.2)	(5.2)
- Current financial year/period unrecognised temporary differences and unused tax losses	27.6	12.6	0	0
- Foreign jurisdictions	31.8	0	0	0
(Over)/Under accrual of tax in prior financial years	(2.3)	0	16.1	0
Recognition and utilisation of previously unrecognised temporary differences	11.0	36.7	1.8	0
Zakat	74.3	0	74.3	0
Utilisation of reinvestment allowances	(786.9)	(390.0)	(786.9)	(390.0)
Tax and zakat charge	1,301.6	235.0	1,095.5	173.1
Average effective tax rate (%)	25.8	8.3	25.4	6.6

11 TAXATION AND ZAKAT (CONTINUED)

The tax charge relating to components of OCI is as follows:

	Financial year ended 31.12.2018			Financial period ended 31.12.2017		
	Before tax RM'million	Tax charged RM'million	After tax RM'million	Before tax RM'million	Tax charged RM'million	After tax RM'million
Group						
Defined benefit plan actuarial loss (Note 33)	(220.3)	16.0	(204.3)	(139.2)	31.6	(107.6)
Foreign currency translation differences	(13.1)	0	(13.1)	(219.8)	0	(219.8)
AFS financial assets	0	0	0	(2.6)	0	(2.6)
Financial assets at FVOCI	7.1	0	7.1	0	0	0
Share of OCI of associates accounted for using the equity method	74.3	0	74.3	94.2	0	94.2
	(152.0)	16.0	(136.0)	(267.4)	31.6	(235.8)
Company						
Defined benefit plan actuarial loss (Note 33)	(66.7)	16.0	(50.7)	(131.3)	31.5	(99.8)
AFS financial assets	0	0	0	(2.6)	0	(2.6)
Financial assets at FVOCI	7.1	0	7.1	0	0	0
	(59.6)	16.0	(43.6)	(133.9)	31.5	(102.4)

12 EARNINGS PER SHARE ('EPS')

(a) Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company for the financial year/period by the weighted average number of ordinary shares issued during the financial year/period.

	Group	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
Profit attributable to owners of the Company (RM'million)	3,723.7	2,622.3
Weighted average number of ordinary shares in issue ('000)	5,674,992	5,661,204
Basic earnings per share (sen)	65.62	46.32

12 EARNINGS PER SHARE ('EPS') (CONTINUED)

(b) Diluted earnings per share

For the purpose of calculating diluted earnings per share, the profit attributable to owners of the Company for the financial year/period and the weighted average number of ordinary shares issued during the financial year/period has been adjusted for the dilutive effects of all potential ordinary shares such as the LTIP granted to employees.

	Group	
	Financial year ended 31.12.2018	Financial period ended 31.12.2017 (Restated)
Profit attributable to owners of the Company (RM'million)	3,723.7	2,622.3
Weighted average number of ordinary shares in issue ('000)	5,674,992	5,661,204
Adjustment for LTIP ('000)	19,726	13,597
Weighted average number of ordinary shares for diluted earnings per share ('000)	5,694,718	5,674,801
Diluted earnings per share (sen)	65.39	46.21

13 DIVIDENDS

	Group and Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Interim single tier dividend for the financial year 2018 of 30.27 sen per share on 5,678,180,571 ordinary shares (FPE 31.12.2017: interim single tier dividend of NIL)	1,718.8	0
Proposed final single tier dividend for the financial year 2018 of 23.0 sen per share on 5,686,888,771 ordinary shares (FPE 31.12.2017: final single tier dividend of 21.41 sen per share on 5,665,986,271 ordinary shares)	1,308.0	1,213.1
	3,026.8	1,213.1

Interim dividends are paid and accounted for in shareholders' equity as an appropriation of retained profits in the financial year.

The Directors have proposed a final single tier dividend of 23.0 sen per share, on 5,686,888,771 ordinary shares in respect of the financial year ended 31 December 2018 amounting to a total of RM1,308.0 million. The books closure and payment dates will be announced in due course.

14 PROPERTY, PLANT AND EQUIPMENT ('PPE')

Accounting Policy

PPE are stated at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditure that is directly attributable to the construction or acquisition of the items and bringing them to the location and condition so as to render them operational in the manner intended by the Group. The Group allocates the cost of an item of PPE to its significant system and component parts.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised.

The cost of major overhaul/inspection is recognised in the asset's carrying amount as a replacement and the remaining carrying amount of the previous major overhaul/inspection is derecognised.

Major spare parts and standby equipment are recognised as assets when the Group expects to use them during more than one period. Similarly, if the spare parts and servicing equipment can be used only in connection with an item of PPE, they are accounted for as PPE.

Gains or losses on disposal of PPE are determined by reference to their carrying amount and are included in profit or loss.

Freehold land and capital work-in-progress are not depreciated. Leasehold land classified as finance lease (Note 23) is amortised over the remaining period of the respective leases ranging from 5 to 99 years on the straight line method. Land with lease period less than 50 years is classified as short leasehold land and land with lease period greater than or equal to 50 years is classified as long leasehold land.

Other property, plant and equipment are depreciated on the straight line method to allocate the cost to their residual values over their estimated useful lives, summarised as follows:

Buildings and civil works	10 - 60 years
Plant and machinery	3 - 40 years
Lines and distribution mains	10 - 60 years
Distribution services	20 years
Meters	10 - 15 years
Public lighting	15 - 20 years
Furniture, fittings and office equipment	3 - 15 years
Motor vehicles	5 - 15 years

Residual values and useful lives of assets are reviewed, and adjusted if appropriate, at the end of the reporting period.

At the end of the reporting period, the Group assesses whether there is any indication of impairment. If such indication exist, an analysis is performed to assess whether the carrying amount of the asset is fully recoverable. A write down is made if the carrying amount exceeds the recoverable amount (Note 3(c)).

Notes to the Financial Statements

14 PROPERTY, PLANT AND EQUIPMENT ('PPE') (CONTINUED)

31.12.2018	As at 1.1.2018 RM'million	Exchange rate adjustments RM'million	Acquisition of subsidiaries RM'million	Additions RM'million	Disposals RM'million	Transfers/ Adjustments/ Reclassi- fication/ Write offs RM'million	As at 31.12.2018 RM'million
Group							
<u>Cost</u>							
Freehold land	1,478.2	(0.3)	0	405.1	0	0	1,883.0
Long leasehold land	1,889.1	0	0	100.0	(12.0)	1.0	1,978.1
Short leasehold land	186.6	0	0	0	0	3.1	189.7
Buildings and civil works	20,884.8	(0.5)	0	21.4	(131.0)	1,293.5	22,068.2
	24,438.7	(0.8)	0	526.5	(143.0)	1,297.6	26,119.0
Plant and machinery:							
- Owned	69,948.6	(112.2)	1,039.0	381.7	(1,324.3)	2,141.8	72,074.6
- Leased	8,163.6	0	0	0	0	0	8,163.6
Lines and distribution mains	44,215.2	0	0	72.8	(25.5)	2,251.3	46,513.8
Distribution services	4,411.7	0	0	8.2	0	210.8	4,630.7
Meters	2,812.3	0	0	6.1	(15.9)	177.0	2,979.5
Public lighting	688.4	0	0	0.1	(0.2)	215.3	903.6
Furniture, fittings and office equipment	2,221.3	(1.2)	0.2	386.1	(10.6)	5.9	2,601.7
Motor vehicles	647.3	0.8	0	26.8	(25.6)	5.5	654.8
	157,547.1	(113.4)	1,039.2	1,408.3	(1,545.1)	6,305.2	164,641.3
Capital work-in-progress	18,820.4	0	0	11,087.1	(35.8)	(6,547.6)	23,324.1
	176,367.5	(113.4)	1,039.2	12,495.4	(1,580.9)	(242.4)	187,965.4

31.12.2018	As at 1.1.2018 RM'million	Charged for the financial year RM'million	Released on disposals/ Transfers/ Write offs RM'million	As at 31.12.2018 RM'million
Group				
<u>Accumulated depreciation</u>				
Long leasehold land	332.2	28.4	(11.7)	348.9
Short leasehold land	117.0	7.2	0	124.2
Buildings and civil works	6,536.9	528.4	(99.2)	6,966.1
	6,986.1	564.0	(110.9)	7,439.2
Plant and machinery:				
- Owned	32,079.0	3,157.1	(1,353.2)	33,882.9
- Leased	2,393.2	512.4	0	2,905.6
Lines and distribution mains	22,507.3	1,663.0	(14.0)	24,156.3
Distribution services	2,664.8	175.2	0	2,840.0
Meters	1,797.4	145.8	(8.6)	1,934.6
Public lighting	356.8	46.1	(0.2)	402.7
Furniture, fittings and office equipment	1,859.0	186.3	(18.2)	2,027.1
Motor vehicles	530.7	41.4	(26.2)	545.9
	71,174.3	6,491.3	(1,531.3)	76,134.3
<u>Accumulated impairment losses</u>				
Plant and machinery - owned	385.6	0	0	385.6

14 PROPERTY, PLANT AND EQUIPMENT ('PPE') (CONTINUED)

31.12.2017	As at 1.9.2017 RM'million	Exchange rate adjustments RM'million	Additions RM'million	Disposals RM'million	Transfers/ Adjustments/ Reclassi- fication/ Write offs RM'million	As at 31.12.2017 RM'million
Group						
<u>Cost</u>						
Freehold land	1,353.9	(0.2)	103.6	(1.4)	22.3	1,478.2
Long leasehold land	1,759.4	0	126.8	0	2.9	1,889.1
Short leasehold land	186.6	0	0	0	0	186.6
Buildings and civil works	20,814.9	(0.3)	2.8	(3.8)	71.2	20,884.8
	24,114.8	(0.5)	233.2	(5.2)	96.4	24,438.7
Plant and machinery:						
- Owned	64,377.1	(71.6)	17.5	(22.5)	5,648.1	69,948.6
- Leased	8,163.6	0	0	0	0	8,163.6
Lines and distribution mains	43,517.8	0	4.8	0	692.6	44,215.2
Distribution services	4,373.8	0	2.3	0	35.6	4,411.7
Meters	2,780.6	0	1.2	(0.5)	31.0	2,812.3
Public lighting	664.4	0	0	0	24.0	688.4
Furniture, fittings and office equipment	2,193.9	(1.1)	31.2	(1.0)	(1.7)	2,221.3
Motor vehicles	657.8	(0.2)	0.7	(4.0)	(7.0)	647.3
	150,843.8	(73.4)	290.9	(33.2)	6,519.0	157,547.1
Capital work-in-progress	21,819.7	0	3,498.6	(29.4)	(6,468.5)	18,820.4
	172,663.5	(73.4)	3,789.5	(62.6)	50.5	176,367.5

31.12.2017	As at 1.9.2017 RM'million	Charged for the financial period RM'million	Released on disposals/ Transfers/ Write offs RM'million	As at 31.12.2017 RM'million
Group				
<u>Accumulated depreciation</u>				
Long leasehold land	324.2	8.0	0	332.2
Short leasehold land	114.6	2.4	0	117.0
Buildings and civil works	6,365.4	173.4	(1.9)	6,536.9
	6,804.2	183.8	(1.9)	6,986.1
Plant and machinery:				
- Owned	31,151.5	979.6	(52.1)	32,079.0
- Leased	2,222.4	170.8	0	2,393.2
Lines and distribution mains	21,970.7	536.6	0	22,507.3
Distribution services	2,609.4	55.4	0	2,664.8
Meters	1,752.4	45.4	(0.4)	1,797.4
Public lighting	346.1	10.7	0	356.8
Furniture, fittings and office equipment	1,810.6	52.8	(4.4)	1,859.0
Motor vehicles	526.9	14.8	(11.0)	530.7
	69,194.2	2,049.9	(69.8)	71,174.3
<u>Accumulated impairment losses</u>				
Plant and machinery - owned	385.6	0	0	385.6

Notes to the Financial Statements

14 PROPERTY, PLANT AND EQUIPMENT ('PPE') (CONTINUED)

31.12.2018	As at 1.1.2018 RM'million	Additions RM'million	Disposals RM'million	Transfers/ Adjustments/ Reclassi- fication/ Write offs RM'million	As at 31.12.2018 RM'million
Company					
<u>Cost</u>					
Freehold land	1,480.5	405.1	0	0	1,885.6
Long leasehold land	1,431.7	26.7	(0.4)	0.1	1,458.1
Short leasehold land	4.5	0	0	0	4.5
Buildings and civil works	17,099.5	0	(130.6)	304.2	17,273.1
	20,016.2	431.8	(131.0)	304.3	20,621.3
Plant and machinery:					
- Owned	42,865.6	0	(1,203.2)	2,452.0	44,114.4
- Leased	25,018.6	0	0	0	25,018.6
Lines and distribution mains	42,040.1	0	(25.2)	2,219.1	44,234.0
Distribution services	4,118.3	0	0	197.5	4,315.8
Meters	2,710.5	0	(15.6)	177.0	2,871.9
Public lighting	688.4	0	(0.2)	215.3	903.5
Furniture, fittings and office equipment	1,892.8	362.0	(6.9)	(0.1)	2,247.8
Motor vehicles	520.2	21.3	(20.2)	5.1	526.4
	139,870.7	815.1	(1,402.3)	5,570.2	144,853.7
Capital work-in-progress	7,868.7	6,962.4	(44.4)	(5,588.3)	9,198.4
	147,739.4	7,777.5	(1,446.7)	(18.1)	154,052.1

31.12.2018	As at 1.1.2018 RM'million	Charged for the financial year RM'million	Released on disposals/ Transfers/ Write offs RM'million	As at 31.12.2018 RM'million
Company				
<u>Accumulated depreciation</u>				
Long leasehold land	320.7	19.5	0	340.2
Short leasehold land	2.6	0.1	0	2.7
Buildings and civil works	5,451.3	356.3	(98.5)	5,709.1
	5,774.6	375.9	(98.5)	6,052.0
Plant and machinery:				
- Owned	22,832.4	1,850.9	(1,175.4)	23,507.9
- Leased	9,067.5	1,176.3	0	10,243.8
Lines and distribution mains	21,645.9	1,578.1	(14.0)	23,210.0
Distribution services	2,498.8	159.8	0	2,658.6
Meters	1,735.9	138.8	(8.4)	1,866.3
Public lighting	356.8	46.1	(0.2)	402.7
Furniture, fittings and office equipment	1,594.1	152.7	(6.9)	1,739.9
Motor vehicles	440.8	29.0	(20.0)	449.8
	65,946.8	5,507.6	(1,323.4)	70,131.0

14 PROPERTY, PLANT AND EQUIPMENT ('PPE') (CONTINUED)

31.12.2017	As at 1.9.2017 RM'million	Additions RM'million	Disposals RM'million	Transfers/ Adjustments/ Reclassi- fication/ Write offs RM'million	As at 31.12.2017 RM'million
Company					
<u>Cost</u>					
Freehold land	1,356.0	103.6	(1.4)	22.3	1,480.5
Long leasehold land	1,426.4	5.3	0	0	1,431.7
Short leasehold land	4.5	0	0	0	4.5
Buildings and civil works	17,028.9	0	(0.1)	70.7	17,099.5
	19,815.8	108.9	(1.5)	93.0	20,016.2
Plant and machinery:					
- Owned	43,273.2	0	(21.9)	(385.7)	42,865.6
- Leased	18,763.1	6,255.5	0	0	25,018.6
Lines and distribution mains	41,349.5	0	0	690.6	42,040.1
Distribution services	4,084.0	0	0	34.3	4,118.3
Meters	2,679.5	0	0	31.0	2,710.5
Public lighting	664.3	0	0	24.1	688.4
Furniture, fittings and office equipment	1,868.6	28.7	(0.4)	(4.1)	1,892.8
Motor vehicles	524.9	0.1	(4.0)	(0.8)	520.2
	133,022.9	6,393.2	(27.8)	482.4	139,870.7
Capital work-in-progress	7,608.0	1,648.8	0	(1,388.1)	7,868.7
	140,630.9	8,042.0	(27.8)	(905.7)	147,739.4

31.12.2017	As at 1.9.2017 RM'million	Charged for the financial period RM'million	Released on disposals/ Transfers/ Write offs RM'million	As at 31.12.2017 RM'million
Company				
<u>Accumulated depreciation</u>				
Long leasehold land	313.8	6.9	0	320.7
Short leasehold land	2.6	0	0	2.6
Buildings and civil works	5,322.5	128.8	0	5,451.3
	5,638.9	135.7	0	5,774.6
Plant and machinery:				
- Owned	22,861.3	590.5	(619.4)	22,832.4
- Leased	8,675.4	392.1	0	9,067.5
Lines and distribution mains	21,136.7	509.2	0	21,645.9
Distribution services	2,448.2	50.6	0	2,498.8
Meters	1,692.8	43.1	0	1,735.9
Public lighting	346.1	10.7	0	356.8
Furniture, fittings and office equipment	1,554.7	42.9	(3.5)	1,594.1
Motor vehicles	434.9	10.5	(4.6)	440.8
	64,789.0	1,785.3	(627.5)	65,946.8

14 PROPERTY, PLANT AND EQUIPMENT ('PPE') (CONTINUED)

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
<u>Net book value</u>				
Freehold land	1,883.0	1,478.2	1,885.6	1,480.5
Long leasehold land	1,629.2	1,556.9	1,117.9	1,111.0
Short leasehold land	65.5	69.6	1.8	1.9
Buildings and civil works	15,102.1	14,347.9	11,564.0	11,648.2
Total land and buildings	18,679.8	17,452.6	14,569.3	14,241.6
Plant and machinery:				
- Owned	37,806.1	37,484.0	20,606.5	20,033.2
- Leased	5,258.0	5,770.4	14,774.8	15,951.1
Lines and distribution mains	22,357.5	21,707.9	21,024.0	20,394.2
Distribution services	1,790.7	1,746.9	1,657.2	1,619.5
Meters	1,044.9	1,014.9	1,005.6	974.6
Public lighting	500.9	331.6	500.8	331.6
Furniture, fittings and office equipment	574.6	362.3	507.9	298.7
Motor vehicles	108.9	116.6	76.6	79.4
	88,121.4	85,987.2	74,722.7	73,923.9
Capital work-in-progress	23,324.1	18,820.4	9,198.4	7,868.7
	111,445.5	104,807.6	83,921.1	81,792.6

The title deeds of certain lands are in the process of being registered in the name of the Company and certain subsidiaries.

Net book value of PPE pledged as security for borrowings are disclosed in Note 36.

Inclusive in the capital work-in-progress is interest capitalised during FY2018 for the Group and the Company of RM915.8 million (FPE 31.12.2017: RM123.0 million) and RM260.5 million (FPE 31.12.2017: RM83.4 million) respectively.

The capitalisation rate used to determine the amount of borrowing cost eligible for capitalisation is 5.8% (FPE 31.12.2017: 6.0%).

(a) Impairment test for PPE

TNB Liberty Power Limited ('LPL') has recognised in prior years, a provision for impairment totalling RM385.6 million. Current financial period assessment showed that no further impairment loss is required for the carrying amount of PPE assessed. The carrying value of the PPE at statement of financial position date is RM227.2 million (FPE 31.12.2017: RM233.5 million). The recoverable amount of the PPE is determined based on value in use.

15 SUBSIDIARIES

	Note	Company		
		31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million
At cost:				
Unquoted ordinary shares	(a)(b)(c)	2,344.5	2,293.4	2,288.3
Redeemable preference shares	(d)(e)(f)(g)	8,728.9	8,376.1	7,375.3
Shares/Options granted to employees of subsidiaries		206.1	143.8	127.6
		11,279.5	10,813.3	9,791.2
Less: Accumulated impairment losses	(i)	(2,675.7)	(1,014.1)	(971.0)
		8,603.8	9,799.2	8,820.2

Movement in investments in subsidiaries:

- (a) On 3 January 2018, the Company subscribed to an additional 3,000,000 new ordinary shares issued by TNB Fuel Services Sdn. Bhd. by conversion of amounts due from TNB Fuel Services Sdn. Bhd. amounting to RM3.0 million.
- (b) On 8 March 2018, the Company had completed the acquisition of 100.0% equity interest in Allo Technology Sdn. Bhd. (formerly known as Setia Haruman Technology Sdn. Bhd.) from Setia Haruman Sdn. Bhd. ('SHSB'), for a cash consideration of RM28.0 million (Note 48).
- (c) On 4 April 2018, the Company subscribed to an additional 20,000,000 new ordinary shares issued by Universiti Tenaga Nasional Sdn. Bhd. ('UNITEN'), a wholly owned subsidiary by conversion of amounts due from UNITEN amounting to RM20.0 million.
- (d) On 5 March 2018, the Company subscribed to 23,875,283 new Redeemable Preference Shares ('RPS') issued by Southern Power Generation Sdn. Bhd. by cash of RM23.9 million.
- (e) On 30 July 2018, TNB Janamanjung Sdn. Bhd. had redeemed 4,861,111 units of RPS from the Company for RM700.0 million.
- (f) On 27 August 2018, the Company subscribed an additional 5,950 RPS issued by Jimah East Power Sdn. Bhd. ('JEP') for RM595.0 million via conversion of amounts due from JEP.
- (g) On 11 December 2018, the Company subscribed to 5,000,000 RPS issued by TNB Pasir Gudang Energy Sdn. Bhd. via transfer of asset and materials amounting to RM220.0 million.
- (h) During the financial year, the Group completed the acquisitions of 100.0% economic interest in GVO Wind Limited ('GVO') and Bluemerang Capital Limited ('BCL') (companies incorporated in the United Kingdom) for a total consideration of RM498.6 million (Note 48).
- (i) Impairment of investment in subsidiary
 - (i) Impairment test on Aruna Servicios Integrales S.L.U. ('ASI')

During the financial year, the Company had undertaken the impairment assessment of its investment in ASI, an investment holding company, following an impairment done to its indirect associate Gama Enerji Anonîm Şirketi ('Gama Enerji'). The impairment made was due to impairment indicator arising from the adverse foreign exchange movements which resulted in volatility of electricity prices and fuel prices and translation losses arising from borrowings of Gama Enerji denominated in foreign currencies. An impairment charge of RM1,085.8 million was recognised for the carrying amount of ASI as at 31 December 2018 as its recoverable amount is lower than its carrying amount.

Key assumptions used

The recoverable amount was determined based on value in use ('VIU') calculation, which apply a discounted cash flow model based on management's forecasts and projections. These forecasts and projections reflect management's expectations based on the current assessment of macroeconomics trends, currency movement, expectations of market growth and industry growth as benchmarked with external sources.

15 SUBSIDIARIES (CONTINUED)

Movement in investments in subsidiaries (continued)

(i) Impairment of investment in subsidiary (continued)

(i) Impairment test on ASI (continued)

Key assumptions used (continued)

The key assumptions used in determining the VIU are:

Assumptions:	%
Cost of equity	16.3 - 31.5
Terminal growth rate	2.4 - 2.8

The Company's review includes on impact assessment of changes in key assumptions. The effect of the movement in the key assumptions to the recoverable amount is as follows:

Key assumptions:	Changes in assumptions	Impact to recoverable amount	
		Increase RM'million	Decrease RM'million
Discount rate	1.0%	(11.5)	13.1
Terminal growth rate	1.0%	8.8	(8.1)

(ii) Impairment test on Power and Energy International (Mauritius) Ltd. ('PEIM')

During the financial year, the Company had undertaken the impairment assessment of its investment in PEIM, an investment holding company, following an impairment done to its associate GMR Energy Limited ('GEL'). The impairment made was due to an impairment indicator arising from the delay in commencement of operations for certain power plants in GEL group and the shortage of fuel supply. An impairment loss of RM535.6 million was required for the carrying amount of PEIM as at 31 December 2018 as its recoverable amount is lower than its carrying amount.

Key assumptions used

The recoverable amount was determined based on VIU calculation, which apply a discounted cash flow model of PEIM for the period of the remaining useful lives of the respective power plants of the group which range between 15 to 40 years. The cash flows used are the most recent forecast and projections approved by management of PEIM.

The key assumptions used in determining the VIU are:

Assumptions:	%
Average Plant Availability Factor	47.2 - 51.2
Average Plant Load Factor	50.0 - 85.0
Cost of equity	14.1 - 19.3

The cash flows are discounted using cost of equity based on the risk specific to the investments. The key assumptions take into account the macroeconomic environment in India.

The Company's review includes on impact assessment of changes in key assumptions. The effect of the movement in the key assumptions to the recoverable amount is as follows:

Key assumptions:	Changes in assumptions	Impact to recoverable amount	
		Increase RM'million	Decrease RM'million
Plant Availability Factor	5.0%	27.7	(13.9)
Plant Load Factor	10.0%	169.0	(178.7)
Discount rate	1.0%	(55.6)	72.6

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows:

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
TNB Janamanjung Sdn. Bhd.	100%	100%	Generate and deliver electricity energy and maintain generating capacity to TNB	Malaysia
TNB Power Daharki Ltd.#	100%	100%	Investment holding company	Mauritius
TNB Fuel Services Sdn. Bhd.	100%	100%	Supplying fuel and coal for power generation	Malaysia
TNB Energy Services Sdn. Bhd.	100%	100%	Generating, distributing, supplying, dealing, selling of different kinds of energy sources and related technical services	Malaysia
TNB Research Sdn. Bhd.	100%	100%	Research and development, consultancy and other services	Malaysia
TNB Ventures Sdn. Bhd.	100%	100%	Investment holding company	Malaysia
TNB Engineering Corporation Sdn. Bhd.	100%	100%	Principally engaged as turnkey contractors, energy project development specialising in district cooling system and co-generation including operation and maintenance works	Malaysia
TNB Repair And Maintenance Sdn. Bhd.	100%	100%	Providing repair and maintenance services to heavy industries and other related services	Malaysia
TNB Capital (L) Ltd.	100%	100%	Investment holding company	Malaysia
Universiti Tenaga Nasional Sdn. Bhd.	100%	100%	Providing higher education	Malaysia
Malaysia Transformer Manufacturing Sdn. Bhd.	100%	100%	Principally engaged in the business of manufacturing, selling and repairing distribution, power and earthing transformers	Malaysia
Power and Energy International (Mauritius) Ltd.*	100%	100%	Investment holding	Mauritius
Orion Mission Sdn. Bhd.	100%	100%	Investment holding company	Malaysia
Sabah Electricity Sdn. Bhd. ('SESB')	83%	83%	Business of generation, transmission, distribution and sale of electricity and services in Sabah and the Federal Territory of Labuan	Malaysia
Tenaga Switchgear Sdn. Bhd.	60%	60%	Principally engaged in the business of assembling and manufacturing of high voltage switchgears and contracting of turnkey transmission substations	Malaysia
Kapar Energy Ventures Sdn. Bhd. ('KEV')	60%	60%	Generate and deliver electricity energy and generating capacity to TNB	Malaysia
TNB Integrated Learning Solution Sdn. Bhd.	100%	100%	Providing training courses	Malaysia
TNB Prai Sdn. Bhd.	100%	100%	Generate and deliver electricity energy and maintain generating capacity to TNB	Malaysia
TNB Pasir Gudang Energy Sdn. Bhd.	100%	100%	Carry business of any matter relating to electricity especially the business of generation and supply of electricity for any purpose in Malaysia	Malaysia
TNB Manjung Five Sdn. Bhd.	100%	100%	Generate and deliver electricity energy and maintain generating capacity to TNB	Malaysia
TNB Connaught Bridge Sdn. Bhd.	100%	100%	To generate and deliver electricity energy and maintain generating capacity to TNB	Malaysia

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
Integrax Berhad	100%	100%	Investment holding company	Malaysia
Jimah East Power Sdn. Bhd. ('JEP')	70%	70%	Involved in power generation	Malaysia
Yayasan Tenaga Nasional	-	-	A trust established under the provision of Trustees (Incorporation) Act 1952 (Act 258), for promotion and advancement of education and for charitable purposes	Malaysia
Manjung Island Energy Berhad	-	-	Special purpose company to raise Islamic securities under the Islamic Securities Programme	Malaysia
TNB Global Ventures Capital Berhad	100%	100%	Investment holding company	Malaysia
Aruna Servicios Integrales S.L.U.*	100%	100%	Investment holding	Spain
TNB-IT Sdn. Bhd.	100%	100%	To provide telecommunication and IT infrastructure solution and services, focusing on engineering design and consultancy, project management and development, operation and maintenance ('O&M') and training for telecommunication services	Malaysia
TNB International Sdn. Bhd.	100%	100%	Investment holding company	Malaysia
TNB Sepang Solar Sdn. Bhd.	100%	100%	Operation of generation facilities that produce electric energy	Malaysia
Southern Power Generation Sdn. Bhd.	51%	51%	To construct a 1,440MW combine cycle gas fired power plant in Pasir Gudang, Johor	Malaysia
TNBX Sdn. Bhd.	100%	100%	To act as the single-fronting entity for customers to purchase/obtain solutions beyond the meter. The solutions comprises of non-regulated products and services such as energy efficiency, renewable energy and smart cities	Malaysia
TNB Renewables Sdn. Bhd.	100%	-	To carry on business of an investment holding company	Malaysia
Allo Technology Sdn. Bhd. (Formerly known as Setia Haruman Technology Sdn. Bhd.)*	100%	-	Information technology related services	Malaysia
TNB Global Captive (L) Ltd.	100%	-	Insurance and reinsurance related business	Malaysia
TNB Topaz Energy Sdn. Bhd.	100%	-	Investment holding for developing and investing in overseas power generation projects	Malaysia
TNB Transmission Network Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Distribution Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Quantum Solutions Sdn. Bhd. (Dissolved w.e.f. 9.7.2018)	-	100%	Dormant	Malaysia
TNB Risk Management Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Engineers Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Generation Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Hidro Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNB Properties Sdn. Bhd.	100%	100%	Dormant	Malaysia

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
Selangor Power Sdn. Bhd.	70%	70%	Dormant	Malaysia
TNB Coal International Limited*	100%	100%	Dormant	Mauritius
<u>Subsidiary of TNB Power Daharki Ltd.</u>				
TNB Liberty Power Limited#	100%	100%	Operation of power plant and generation of electricity	Pakistan
<u>Subsidiaries of TNB Energy Services Sdn. Bhd.</u>				
MAEVI Sdn. Bhd.	70%	-	Providing infrastructure for hosting, data processing services and related activities research and development on engineering and technology	Malaysia
Tenaga E Mobility Solutions Sdn. Bhd.	100%	-	Operation of parking facilities for motor vehicles, (parking lots), operation of generation facilities that produce electric energy and engineering services	Malaysia
<u>Subsidiary of TNB Research Sdn. Bhd.</u>				
TNB LABS Sdn. Bhd. (Formerly known as TNBR QATS Sdn. Bhd.)	100%	100%	Technical and laboratory services, consultancy and other services	Malaysia
<u>Subsidiary of TNB Ventures Sdn. Bhd.</u>				
Tenaga Cable Industries Sdn. Bhd.	76%	76%	Manufacturing and distribution of power and general cables, aluminium rods and related activities	Malaysia
<u>Subsidiaries of TNB Engineering Corporation Sdn. Bhd.</u>				
Bangsar Energy Systems Sdn. Bhd.	100%	100%	Operating an integrated district cooling system for air conditioning systems of office buildings	Malaysia
TNEC Construction Sdn. Bhd.	100%	100%	Dormant	Malaysia
TNEC Operations And Maintenance Sdn. Bhd.	100%	100%	The company ceased business and has remained as investment holding company	Malaysia
<u>Subsidiary of Bangsar Energy Systems Sdn. Bhd.</u>				
Selesa Energy Systems Sdn. Bhd.	70%	70%	Dormant	Malaysia
<u>Subsidiary of TNEC Operations And Maintenance Sdn. Bhd.</u>				
Tomest Energy Management Sdn. Bhd. (In members' voluntary winding up)	51%	51%	Operating an integrated district cooling system for air conditioning systems of office buildings	Malaysia
<u>Subsidiaries of TNB Repair And Maintenance Sdn. Bhd.</u>				
Trichy Power Limited*	100%	100%	Dormant	India
Trichy Energy Limited*	100%	100%	Dormant	India

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Subsidiaries of TNB Repair And Maintenance Sdn. Bhd. (continued)</u>				
TNB Operations & Maintenance International Ltd.	100%	100%	Investment holding	Mauritius
TNB REMACO Pakistan (Private) Limited [#]	100%	100%	Providing repair and maintenance services to heavy industries and other related services	Pakistan
Tenaga WHR 1 Sdn. Bhd.	100%	100%	To carry on the business of establishing, constructing, commissioning, setting up, operating and maintaining electric power generation systems, transmission systems/ networks, power systems, generating stations/ plants based on waste heat recovery and/or power efficiency technology	Malaysia
<u>Subsidiary of TNB Operations & Maintenance International Ltd.</u>				
Oasis Parade Sdn. Bhd.	100%	100%	Investment company	Malaysia
<u>Subsidiaries of Universiti Tenaga Nasional Sdn. Bhd.</u>				
UNITEN R&D Sdn. Bhd.	100%	100%	Providing research and development in areas related to engineering, information technology, business, accountancy, liberal studies and other services	Malaysia
Yayasan Canselor Universiti Tenaga Nasional	-	-	A trust established under the provision of Trustees (Incorporation) Act 1952 (Act 258) to receive and administer funds for educational and charitable purposes	Malaysia
<u>Subsidiary of Power and Energy International (Mauritius) Ltd.</u>				
Independent Power International Ltd.*	100%	100%	Investment holding	Mauritius
<u>Subsidiary of Orion Mission Sdn. Bhd.</u>				
Lahad Datu Holdings Sdn. Bhd.	100%	100%	Investment holding company	Malaysia
<u>Subsidiary of Lahad Datu Holdings Sdn. Bhd.</u>				
Lahad Datu Energy Sdn. Bhd.	100%	100%	Dormant	Malaysia
<u>Subsidiary of Sabah Electricity Sdn. Bhd.</u>				
Elopura Power Sdn. Bhd.	100%	100%	Dormant	Malaysia

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Subsidiaries of Tenaga Switchgear Sdn. Bhd.</u>				
TSG Ormazabal Sdn. Bhd.	60%	60%	Assembling, manufacture, test, reconditioning, distribution and other sources of medium voltage switchgear and control gear for transmission and distribution of electric power	Malaysia
PT. Tenaga Nusa Bakti*	95%	95%	Dormant	Indonesia
<u>Subsidiary of TNB Prai Sdn. Bhd.</u>				
TNB Northern Energy Berhad	100%	100%	Principally to construct a 1,071MW gas fired power plant in Seberang Perai Tengah, Seberang Perai, Pulau Pinang	Malaysia
<u>Subsidiary of TNB Manjung Five Sdn. Bhd.</u>				
TNB Western Energy Berhad	100%	100%	Principally engaged in the construction of 1,000MW coal fired power plant in Lumut, Perak, Malaysia	Malaysia
<u>Subsidiaries of Integrax Berhad</u>				
Pelabuhan Lumut Sdn. Bhd.	100%	100%	Investment holding	Malaysia
LBT Two Sdn. Bhd.	100%	100%	Dormant	Malaysia
Segmen Kembara Sdn. Bhd.	100%	100%	Dormant	Malaysia
Trek Kembara Sdn. Bhd.	100%	100%	Dormant	Malaysia
<u>Subsidiary of Pelabuhan Lumut Sdn. Bhd.</u>				
Lekir Bulk Terminal Sdn. Bhd.	100%	80%	Development, ownership and management of a dry bulk terminal	Malaysia
<u>Subsidiary of Aruna Servicios Integrales S.L.U.</u>				
Global Power Enerji Sanayi Ve Ticaret Anonim Şirketi*	100%	100%	To engage in activities related to building and operating electricity production facilities, producing electricity and/or capacity and distributing the generated electricity and/or capacity to customers and/or to legal entities with wholesale trade licences and to free consumers	Turkey
<u>Subsidiary of TNB International Sdn. Bhd.</u>				
Tenaga Investments UK Ltd.*	100%	100%	Investment company	United Kingdom
<u>Subsidiary of Tenaga Investments UK Ltd.</u>				
Tenaga Wind Ventures UK Ltd. *	100%	100%	Investment company	United Kingdom

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Subsidiaries of Tenaga Wind Ventures UK Ltd.</u>				
GVO Wind Limited^*	100%	-	Direct investment holding company of assets involved in generation and sale of power through renewable energy (wind turbines) in the UK	United Kingdom
Bluemerang Capital Ltd.^*	100%	-	Direct investment holding company of assets involved in generation and sale of power through renewable energy (wind turbines) in the UK	United Kingdom
<u>Subsidiaries of GVO Wind Limited</u>				
GVO Wind F-1 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 1 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 2 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 3 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 4 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 5 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 6 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 7 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Boghead WT Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 9 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 10 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 11 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 12 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 13 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 14 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 16 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Subsidiaries of GVO Wind Limited</u> (continued)				
GVO/CME Wind No. 17 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO/CME Wind No. 18 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 20 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 21 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 22 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 23 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 24 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 25 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 27 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 28 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 29 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 30 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 31 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 32 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 35 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 36 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 39 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 40 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Subsidiaries of GVO Wind Limited</u> (continued)				
GVO Wind No. 41 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 42 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 43 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
GVO Wind No. 44 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Durpley WT Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
OGPW No.1 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Warren WT Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Weston Town WT Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
<u>Subsidiaries of Bluemerang Capital Ltd.</u>				
BCL Murex Bennacott Ltd*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
BLC Hunday Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
BCL Caslterigg Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
LE18 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
LE19 Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Murex Bennacott Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
Ili (Wellgreen) Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
BCL Harmeston Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
BCL Gwynt Limited*	100%	-	Operation of wind assets for the generation and sale of electricity in the UK	United Kingdom
<u>Subsidiaries of TNB Renewables Sdn. Bhd.</u>				
TNB Bukit Selambau Solar Sdn. Bhd.	100%	-	Operation of generation facilities that produce electric energy	Malaysia
GSPARX Sdn. Bhd.	100%	-	Operation of generation facilities that produce electric energy	Malaysia

15 SUBSIDIARIES (CONTINUED)

The details of the subsidiaries are as follows: (continued)

Name of subsidiary	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
Subsidiary of TNB Properties Sdn. Bhd. TNP Construction Sdn. Bhd.	100%	100%	Dormant	Malaysia
Subsidiary of TNB Coal International Limited Dynamic Acres Sdn. Bhd.* (Dissolved w.e.f. 15.12.2018)	-	100%	Dormant	Malaysia

Audited by a member firm of PricewaterhouseCoopers International Limited which is a separate and independent legal entity from PricewaterhouseCoopers PLT, Malaysia.

* Not audited by PricewaterhouseCoopers PLT.

& Company has completed the acquisition of 100.0% equity interest in Allo Technology Sdn. Bhd. ('Allo') (formerly known as Setia Haruman Technology Sdn. Bhd. ('SHTech')) from Setia Haruman Sdn. Bhd. ('SHSB') on 8 March 2018.

^ On 1 March 2018, Tenaga Wind Ventures ('TWV') UK Ltd. acquired 100.0% of economic interest in GVO and BCL for a purchase consideration of GBP77.4 million in cash and future consideration of GBP13.4 million through Share Purchase Agreements ('SPAs').

Capital and other commitments for the subsidiaries are disclosed in Note 41. There are no material contingent liabilities relating to the subsidiaries.

The NCI is not material to the financial performance, financial position and cash flows of the Group. The NCI information for KEV, SESB and JEP, which contribute to substantial portion of total NCI is set out below:

	KEV		SESB		JEP		Other individually immaterial NCI		Total	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Carrying amount of NCI	186.5	218.7	231.5	175.6	688.6*	449.6	107.5	79.3	1,214.1	923.2
Financial year/ period ended										
Total comprehensive (expenses)/ income allocated to NCI	(32.2)	(12.0)	55.9	25.5	(16.0)	(3.6)	13.6	(23.7)	21.3	(13.8)

* Included in carrying amount of NCI in JEP is a subscription of RPS by NCI via conversion of amount due to NCI amounting to RM255.0 million.

15 SUBSIDIARIES (CONTINUED)

The summarised financial information of KEV, SESB and JEP before inter-company eliminations are as follows:

	KEV		SESB		JEP	
	31.12.2018	31.12.2017	31.12.2018	31.12.2017 (Restated)	31.12.2018	31.12.2017
	RM'million	RM'million	RM'million	RM'million	RM'million	RM'million
Summarised statement of financial position						
Non-current assets	1,904.3	2,086.0	7,552.8	7,358.0	10,683.2	8,207.2
Current assets	1,988.9	1,759.7	1,580.4	1,345.8	1,306.2	2,885.4
Non-current liabilities	(1,843.3)	(2,267.4)	(6,244.3)	(6,194.5)	(8,980.6)	(8,962.3)
Current liabilities	(1,591.0)	(1,034.6)	(2,170.4)	(1,792.6)	(793.2)	(714.1)
Net assets/(liabilities)	458.9	543.7	718.5	716.7	2,215.6	(1,416.2)
Summarised statement of comprehensive income						
<u>Financial year/period ended</u>						
Revenue	2,244.9	747.6	2,148.4	622.5	0	0
(Loss)/Profit after tax	(80.4)	(29.9)	174.4	161.5	(53.4)	(11.9)
Other comprehensive (expense)/income	0	0	(154.0)	(7.5)	0	0
Total comprehensive (expense)/income	(80.4)	(29.9)	20.4	154.0	(53.4)	(11.9)
Summarised statement of cash flows						
<u>Financial year/period ended</u>						
Net cash flows generated from/(used in) operating activities	494.0	277.1	1,108.9	376.9	352.1	(194.3)
Net cash flows generated from/(used in) investing activities	29.9	2.2	(878.3)	(158.3)	(168.4)	167.1
Net cash flows (used in)/generated from financing activities	(385.4)	(4.8)	(222.0)	(65.4)	(98.2)	57.3
Net increase in cash and cash equivalents	138.5	274.5	8.6	153.2	85.5	30.1

16 JOINT ARRANGEMENTS

Accounting Policy

A joint arrangement is an arrangement over which there is contractually agreed sharing of control by the Group with one or more parties where decisions about the relevant activities relating to the joint arrangement require unanimous consent of the parties sharing control. The classification of a joint arrangement as a joint operation or a joint venture depends upon the rights and obligations of the parties to the arrangement. A joint venture is a joint arrangement whereby the joint venturers have rights to the net assets of the arrangement. Joint operations are joint arrangements whereby the Company has the rights to the assets and obligations for the liabilities. In respect of its interests in joint operations, the Company shall recognise in its financial statements the assets that it controls and the expenses and liabilities that it incurs and its share of the income that it earns from the sale of goods or services.

The Group's interest in joint ventures is accounted for in the consolidated financial statements using the equity method of accounting.

Equity accounting involves recognising in the consolidated statement of profit or loss, consolidated statement of OCI and consolidated statement of changes in equity, the Group's share of profits less losses of the joint ventures based on the latest audited financial statements or management accounts of the joint ventures, made up to the financial year end of the Group. Where necessary, adjustments are made to the results and net assets of the joint ventures to ensure consistency of accounting policies with those of the Group. The Group's investments in joint ventures are recorded at cost inclusive of goodwill and adjusted thereafter for accumulated impairment losses and the post-acquisition change in the Group's share of net assets of the joint ventures.

Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in joint ventures. Unrealised losses are also eliminated on the same basis but only to the extent of the costs that can be recovered, and the balances that provide evidence of reduction in net realisable value or an impairment of the asset transferred are recognised in the consolidated statement of profit or loss.

(a) Joint ventures

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Unquoted shares	82.7	81.7	7.9	7.9
Share of post-acquisition results and reserves	91.2	79.3	0	0
	173.9	161.0	7.9	7.9
Less: Accumulated impairment losses	(7.9)	(7.9)	(7.9)	(7.9)
	166.0	153.1	0	0
Share of net assets of joint ventures	166.0	153.1		

None of the joint ventures are material individually to the financial position, financial performance and cash flows of the Group.

The aggregated financial information of the Group's joint ventures is as follows:

	Total	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Group's share of results:		
Profit after tax and total comprehensive income	27.2	7.7
Dividend received	15.3	6.9

16 JOINT ARRANGEMENTS (CONTINUED)

(a) Joint ventures (continued)

The details of the Group's joint ventures are as follows:

Name of joint venture	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
Seatrac Sdn. Bhd.	50%	50%	Dormant	Malaysia
<u>Joint ventures of TNB Energy Services Sdn. Bhd.</u>				
FTJ Bio Power Sdn. Bhd.	40%	40%	Generation and distribution of electricity using palm empty fruit bunches as its main fuel source	Malaysia
Metrosphere Hydro Tersat Sdn. Bhd.	49%	-	Business related in hydro power plant and general trading	Malaysia
<u>Joint venture of TNB Engineering Corporation Sdn. Bhd.</u>				
Airport Cooling Energy Supply Sdn. Bhd.	77%	77%	To develop, design, engineer, procure, construct, finance district cooling projects in the airport sector, to undertake the comprehensive operational maintenance of district cooling projects in the airport sector and to carry on the business of producing, distributing, applying, dealing and selling of chilled water	Malaysia

(b) Joint operations

The details of the Group's joint operations are as follows:

Name of joint operation	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Joint operations of TNB Repair And Maintenance Sdn. Bhd.</u>				
TNB Repair And Maintenance Sdn. Bhd. & Kharafi National KSC JV (Closed) ('TNB REMACO & KN JV')	50%	50%	Operation and maintenance services in the State of Kuwait	Malaysia
TNB Repair And Maintenance Sdn. Bhd. & Al-Dhow Engineering General Trading & Contracting Co. W.L.L JV ('TNB REMACO & Al-Dhow JV')	50%	-	Maintenance works for instrumentation & control systems and mechanical equipment services in the State of Kuwait	Malaysia

The impact of the Group's joint operations to the Group is immaterial.

17 ASSOCIATES

Accounting Policy

Associates are all entities over which the Group has significant influence but not control or joint control, generally accompanying a shareholding of between 20.0% and 50.0% of the voting rights.

Investments in associates are accounted for in the consolidated financial statements using the equity method of accounting and are initially recognised at cost. Equity accounting is discontinued when the Group ceases to have significant influence over the associates.

The Group's share of its associates' post-acquisition profits or losses is recognised in the statement of profit or loss, and its share of post-acquisition movements is recognised in OCI. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interests in the associate, including any long-term interests that, in substance, form part of the Group's net investment in the associate, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate. If the associate subsequently reports profits, the Group resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised. The Group's investments in associates include goodwill identified on acquisition, net of any accumulated impairment losses (Note 3(c)).

Profits and losses resulting from upstream and downstream transactions between the Group and its associates are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

Dilution of gains and losses in associates are recognised in the consolidated statement of profit or loss.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in OCI is reclassified to profit or loss where appropriate.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Unquoted shares	2,736.4	2,736.4	50.6	50.6
Share of post-acquisition results and reserves	(492.1)	(49.7)	0	0
Redeemable preference shares	102.1	112.5	9.3	19.7
	2,346.4	2,799.2	59.9	70.3
Less: Accumulated impairment losses	(802.7)	0	0	0
Share of net assets of associates	1,543.7	2,799.2	59.9	70.3

The aggregated financial information of the Group's associates is as follows:

	Total	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Group's share of results:		
Loss after tax	(209.9)	(44.7)
Total OCI	74.3	94.2
Dividend received	29.6	18.0
Foreign exchange loss	(277.2)	(170.1)

17 ASSOCIATES (CONTINUED)

In the opinion of the Directors, the associates that are material to the Group are Gama Enerji and GEL. The following summarises the financial information of material associates to the Group and reconciles the information to the carrying amount of the Group's interest in the associates.

- (a) The summarised statement of comprehensive income from material associates that is significant to the Group:

	Gama Enerji		GEL	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Revenue	2,149.4	826.0	1,221.2	963.7
Loss after tax from:				
- Continued operation	(1,677.6)	(7.2)	(82.2)	(227.0)
- Discontinued operation	0	0	(174.8)	0
Other comprehensive income/(expense)	514.5	289.0	(4.9)	44.0
Total comprehensive (expense)/income	(1,163.1)	281.8	(261.9)	(183.0)

- (b) The summarised statement of financial position from material associates that is significant to the Group:

	Gama Enerji		GEL	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Non-current assets	6,017.0	7,092.9	5,354.0	5,974.6
Current assets	897.6	896.1	554.0	702.8
Non-current liabilities	(4,997.2)	(4,430.2)	(2,812.0)	(3,496.5)
Current liabilities	(1,071.2)	(1,083.0)	(1,277.0)	(1,096.9)
Less: NCI	1.2	(66.5)	(108.0)	(119.2)
	847.4	2,409.3	1,711.0	1,964.8

- (c) Reconciliation of the summarised financial information of material associates presented to the carrying amount of its interest in the associates:

	Gama Enerji		GEL	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Group's share of net assets	254.2	722.8	513.3	589.4
Goodwill	152.3	207.1	523.4	557.8
Less: Share of loss not equity accounted:				
- Loss after tax	274.8	0	0	0
- Other comprehensive income	(94.7)	0	0	0
Less: Impairment losses	(498.0)	0	(304.7)	0
Foreign exchange	(88.6)	0	0	0
Carrying amount	0	929.9	732.0	1,147.2

17 ASSOCIATES (CONTINUED)

(d) Put option over shares held by NCI in Gama Enerji

The Company via the shareholders agreement, granted the other NCI of Gama Enerji a put option which allows the NCI to sell all or part of their equity interest respectively to the majority shareholder and the Company at a price based on the fair market value at the exercised date (exercisable at any time for the period from 1 July 2019 to 31 December 2020) or at a price determined at higher of Earnings Before Interest, Tax, Depreciation and Amortisation ('EBITDA') with a fixed multiple or the adjusted initial cost of investment of the NCI (exercisable at any time if the Company defaults on the shareholders agreement). The fair value of the put option is not significant as at 31 December 2018.

Individually immaterial associates:

	31.12.2018 RM'million	31.12.2017 RM'million
Aggregate carrying amount of individually immaterial associates	811.7	722.1
Aggregate amounts of the Group's share of profit:		
- Profit after tax	95.7	25.6
- Other comprehensive income/(expense)	16.1	(5.7)

The details of the Group's associates are as follows:

Name of associate	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
Teknologi Tenaga Perlis Consortium Sdn. Bhd.	20%	20%	Design, construction, divesting, operation and maintenance of electricity generating facility	Malaysia
GB3 Sdn. Bhd.	20%	20%	Design, construction, operation and maintenance of electricity generating facility	Malaysia
Fibrecomm Network (M) Sdn. Bhd.	49%	49%	Provision of fibre optic transmission network services	Malaysia
Jimah Energy Ventures Holdings Sdn. Bhd.	20%	20%	Investment holdings	Malaysia
<u>Associate of TNB Properties Sdn. Bhd.</u> KM Metro-TNB Properties Sdn. Bhd.	40%	40%	Dormant	Malaysia
<u>Associate of TNB Ventures Sdn. Bhd.</u> Northern Utility Resources Sdn. Bhd. (Dissolved w.e.f 5.12.2018)	-	20%	Dormant	Malaysia
<u>Associate of Independent Power International Ltd.</u> Malaysian Shoaiba Consortium Sdn. Bhd.	20%	20%	Acquiring and hold for investment, shares, stocks, debentures in Malaysia or elsewhere	Malaysia
<u>Associate of Power and Energy International (Mauritius) Ltd.</u> GMR Energy Limited	30%	30%	Development, operation and maintenance of power generation projects and sale of power to off-takers	India
<u>Associate of Oasis Parade Sdn. Bhd.</u> Saudi-Malaysia Operation And Maintenance Services Company Limited	30%	30%	Operation and maintenance of electricity generation stations and water desalination plants	Kingdom of Saudi Arabia

17 ASSOCIATES (CONTINUED)

The details of the Group's associates are as follows: (continued)

Name of associate	Group's interest		Principal activities	Country of incorporation
	31.12.2018	31.12.2017		
<u>Associates of TNB Energy Services Sdn. Bhd.</u>				
Jana Landfill Sdn. Bhd.	20%	20%	Generation and distribution of heat and electricity using methane gas from landfill sites	Malaysia
Sime Darby TNBES Renewable Energy Sdn. Bhd.	49%	49%	To develop, set up, construct, install, operate and maintain renewable energy or biogas power plant which uses the palm oil mill effluent as its main source of fuel	Malaysia
<u>Associate of TNB Engineering Corporation Sdn. Bhd.</u>				
Abraj Cooling LLC	49%	49%	Contracting works for the construction of district cooling plants	United Arab Emirates
<u>Associate of TNB Research Sdn. Bhd.</u>				
Gunung Tenaga Sdn. Bhd.	40%	40%	Environmental services and research	Malaysia
<u>Associate of Orion Mission Sdn. Bhd.</u>				
Eastern Sabah Power Consortium Sdn. Bhd.	50%	50%	To develop, construct and operate a gas-fired power plant and to generate and sell electricity. The company has not commenced its operation since the date of incorporation	Malaysia
<u>Associate of Global Power Enerji Sanayî Ve Ticaret Anonîm Şirketi</u>				
Gama Enerji Anonîm Şirketi	30%	30%	To enter into commitments related to energy investments and to carry out industrial, commercial and business activities	Turkey
<u>Associate of Pelabuhan Lumut Sdn. Bhd.</u>				
Lumut Maritime Terminal Sdn. Bhd.	50% less 1 share	50% less 1 share	Development of an integrated privatised project encompassing ownership and operations of multi-purpose port facilities, operation and maintenance of a bulk terminal, sales and rental of port related land and other ancillary activities	Malaysia
<u>Associate of TNB International Sdn. Bhd.</u>				
Vortex Solar Investment S.A.R.L.	50%	50%	Investment holding company	Luxembourg

17 ASSOCIATES (CONTINUED)

The list of contingent liabilities of material associates are as follows:

	Potential exposure 31.12.2018 RM'million	Potential exposure 31.12.2017 RM'million
<u>Gama Enerji</u>		
Letters of guarantee	345.2	493.3
The letters of guarantee are mainly provided to certain regulators within the energy market and Ministry of Water and Irrigation of Jordan.		
<u>GEL</u>		
(a) Corporate guarantees	357.6	381.1
(b) Bank guarantees outstanding/Letter of credit outstanding	226.4	880.8
(c) Claims against the GEL Group not acknowledged as debts	1,039.4	165.2
(d) Matters relating to income tax under dispute	52.4	55.8
(e) Disputed arrears of electricity charges	6.2	0
(f) Disputed entry tax liabilities	95.9	0
(g) Disputed demand for deposit of fund setup by Water Resource department	31.3	0
(h) Custom duties refunds	35.2	37.5
In 2010, a subsidiary of GEL was granted a refund of customs duty which was paid earlier towards the import of plant and machinery. In 2011, the subsidiary received an intimation from the Office of the Joint Director General of Foreign Trade ('DGFT') for cancellation of duty drawback refund order granted thereby seeking refund of the amount that has been received earlier.		
In the opinion of experts, the management is confident that the duty drawback refund granted earlier was appropriate and that the cancellation of the duty drawback refund is not tenable. During the financial year ended 31 March 2015, the matter has been transferred to the Hon'ble Supreme Court of India and will be concluded along with other similar cases and is pending finalisation.		
(i) Payment of electricity duty towards Chief Electrical Inspectorate, Government of Andhra Pradesh ('GoAP')	46.3	49.4
The associate and a subsidiary received demands from the Chief Electrical Inspectorate, GoAP for electricity duties on generation and sale of electrical energy since the commencement of commercial operations date of its plants.		
Based on internal assessment and expert legal opinion, the management of GEL is confident that the provisions of Electricity Duty Act and Rules, 1939 in respect of payment of electricity duty are not applicable to GEL.		
(j) Appeals and disputes	162.5	173.2
GEL is in dispute with its fuel supplier which is currently being heard at the District Civil Court of Bangalore. Based on independent legal opinion and internal assessment, the management of GEL is confident that it has a strong defense against these claims.		
(k) Amount payable to vendors	14.6	0
GEL group has an amount payable in foreign currency to certain vendors, which is outstanding for more than 3 years. The Group has applied for condonation of delay with the Reserve Bank of India.		
Total exposure	2,067.8	1,743.0
Total exposure of the Group	723.9	670.9

17 ASSOCIATES (CONTINUED)

(a) Impairment test on Gama Enerji

During the financial year, the Group had undertaken the impairment assessment of its investment in Gama Enerji following an impairment indicator arising from the adverse foreign exchange movements which resulted in volatility of electricity prices and fuel prices and translation losses arising from borrowings denominated in foreign currencies. An impairment charge of RM498.0 million was recognised for the carrying amount of Gama Enerji as at 31 December 2018 as its recoverable amount is lower than its carrying amount.

Key assumptions used

The recoverable amount was determined based on VIU calculation, which apply a discounted cash flow model based on management's forecasts and projections. These forecasts and projections reflect management's expectations based on the current assessment of macroeconomics trends, currency movement, expectations of market growth and industry growth as benchmarked with external sources.

The key assumptions used in determining the VIU are:

Assumptions:	%
Cost of equity	16.3 - 31.5
Terminal growth rate	2.4 - 2.8

The Group's review includes impact assessment of changes in key assumptions. The effect of the movement in the key assumptions to the recoverable amount is as follows:

Key assumptions:	Changes in assumptions	Impact to recoverable amount	
		Increase RM'million	Decrease RM'million
Discount rate	1.0%	(11.5)	13.1
Terminal growth rate	1.0%	8.8	(8.1)

(b) Impairment test on GEL

During the financial year, the Group had undertaken the test of impairment of its investment in GEL following an impairment indicator arising from the delay in commencement of operations for certain power plants in GEL group and the shortage of fuel supply. An impairment loss of RM304.7 million was required for the carrying amount of GEL as at 31 December 2018 as its recoverable amount is lower than its carrying amount.

Key assumptions used

The recoverable amount was determined based on VIU calculation, which apply a discounted cash flow model of GEL for the period of the remaining useful lives of the respective power plants of the group which range between 15 to 40 years. The cash flows used are the most recent forecast and projections approved by management of GEL.

17 ASSOCIATES (CONTINUED)

(b) Impairment test on GEL (continued)

The key assumptions used in determining the VIU are:

Assumptions:	%
Average Plant Availability Factor	47.2 - 51.2
Average Plant Load Factor	50.0 - 85.0
Cost of equity	14.1 - 19.3

The cash flows are discounted using cost of equity based on the risk specific to the investments. The key assumptions take into account the macroeconomic environment in India.

The Group's review includes impact assessment of changes in key assumptions. The effect of the movement in the key assumptions to the recoverable amount is as follows:

Key assumptions:	Changes in assumptions	Impact to recoverable amount	
		Increase RM'million	Decrease RM'million
Plant Availability Factor	5.0%	27.7	(13.9)
Plant Load Factor	10.0%	169.0	(178.7)
Discount rate	1.0%	(55.6)	72.6

18 GOODWILL ON CONSOLIDATION

Accounting Policy

Goodwill arises from a business combination and represents the excess of the aggregate of fair value of consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of any previous equity interest in the acquiree over the fair value of the net identifiable assets acquired and liabilities assumed on the acquisition date. If the fair value of consideration transferred, the amount of non-controlling interest and the fair value of previously held interest in the acquiree are less than the fair value of the net identifiable assets of the acquiree, the resulting gain is recognised in profit or loss.

Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that it might be impaired, and carried at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash generating units ('CGU's), or groups of CGUs, that is expected to benefit from synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately to the statement of profit or loss and is not subsequently reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity disposed.

	Group	
	31.12.2018 RM'million	31.12.2017 RM'million
As at the beginning of the financial year/period	211.0	211.0
Acquisition of subsidiaries (Note 48)	29.7	0
As at the end of the financial year/period	240.7	211.0

18 GOODWILL ON CONSOLIDATION (CONTINUED)

Impairment tests for goodwill

Annual impairment test is conducted on the Group as a whole excluding its operations and investments in overseas, as it is treated as a CGU. No impairment loss was required as at 31 December 2018 as the recoverable amount exceeded the carrying amount.

The recoverable amount of the CGU including goodwill, is determined based on its VIU. This VIU calculation applies a discounted cash flow model using cash flow projection based on forecast approved by management covering a five-year period. The forecast reflects management's expectation of revenue growth, operating costs and margins for the Group based on current assessment of market share, expectations of market growth and industry growth. Cash flows beyond the fifth year are extrapolated using an estimated terminal growth rate.

The discount rate applied to the cash flow forecast refers to the industry's pre-tax Weighted Average Cost of Capital ('WACC').

The following key assumptions have been applied in the VIU calculation:

	31.12.2018 %	31.12.2017 %
Revenue growth rate	3.1	3.8
Pre-tax discount rate	9.6	9.6
Terminal growth rate	3.1	3.8

The Group's review includes an impact assessment of changes in key assumptions used. Based on the sensitivity analysis performed, it was concluded that no reasonable change in the base case assumptions would cause the carrying amount of the CGU to exceed its recoverable amount.

No impairment assessment performed on goodwill which arose from the acquisition of the newly acquired foreign subsidiaries as the amount is not material.

19 INVESTMENT IN UNQUOTED DEBT SECURITY

Accounting Policy

Investment in unquoted debt security is a financial instrument and the accounting policy is disclosed in Note 45.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Preferred Equity Certificate ('PEC')	318.0	318.5	0	0
Unsecured Loan Notes	8.7	0	8.7	0
Total	326.7	318.5	8.7	0

The PEC earns interest of 8.0% (FPE 31.12.2017: 8.0%) per annum and has a maturity period of 12 years.

Credit risks relating to debt instruments above are disclosed in Note 45(b) to the financial statements.

20 DEFERRED TAXATION

Accounting Policy

Deferred tax is recognised on temporary difference arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements including those arising from business combinations. Deferred tax is not recognised on goodwill and those arising from initial recognition of an asset or liability which at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, unused tax losses and unutilised tax credits can be utilised. Deferred tax is recognised on temporary differences arising on investment in subsidiaries, joint ventures and associates except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Under the Malaysia Finance Act 2018 which was gazetted on 27 December 2018, the Group's unutilised tax losses with no expiry period amounting to RM2,598.3 million as at 31 December 2018 will be imposed with a time limit of utilisation. Any accumulated unutilised tax losses brought forward from year of assessment 2018 can be carried forward for another 7 consecutive years of assessment (i.e. from year of assessments 2019 to 2025).

Tax benefit from reinvestment allowance is recognised when the tax credit is utilised and no deferred tax asset is recognised when the tax credit is receivable.

Deferred tax is measured at the tax rates (and laws) that have been enacted or substantially enacted at the end of the reporting period and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when the deferred taxes relate to the same tax authority. The following amounts, determined after appropriate offsetting, are shown in the statement of financial position:

	Group			Company	
	31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)	31.12.2018	31.12.2017
	RM'million	RM'million	RM'million	RM'million	RM'million
Deferred tax assets:					
- Deferred tax assets to be realised after more than 12 months	47.9	42.1	37.4	0	0
- Deferred tax assets to be realised within 12 months	39.8	26.2	39.6	0	0
	87.7	68.3	77.0	0	0
Deferred tax liabilities:					
- Deferred tax liabilities to be realised after more than 12 months	(7,755.8)	(7,258.6)	(7,086.6)	(6,414.0)	(5,905.7)
- Deferred tax liabilities to be settled within 12 months	(253.5)	(387.1)	(641.8)	(251.4)	(384.2)
	(8,009.3)	(7,645.7)	(7,728.4)	(6,665.4)	(6,289.9)
Deferred tax assets	87.7	68.3	77.0	0	0
Deferred tax liabilities	(8,009.3)	(7,645.7)	(7,728.4)	(6,665.4)	(6,289.9)
Net total	(7,921.6)	(7,577.4)	(7,651.4)	(6,665.4)	(6,289.9)

20 DEFERRED TAXATION (CONTINUED)

The movements during the financial year/period relating to deferred tax are as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 RM'million
As at the beginning of the financial year/period	(7,577.4)	(7,651.4)	(6,289.9)	(6,339.9)
Adjustment on adoption of MFRS 9 (Note 47)	32.5	0	32.2	0
As at the beginning of the financial year/period (Restated)	(7,544.9)	(7,651.4)	(6,257.7)	(6,339.9)
(Charged)/Credited to statement of profit or loss: (Note 11)				
- Property, plant and equipment	(254.5)	(0.4)	(268.1)	38.5
- Provisions and allowances	72.6	(5.0)	29.9	(32.9)
- Unbilled revenue	(76.4)	48.2	(76.4)	48.2
- Finance leases	111.1	49.0	14.7	7.6
- Prepaid operating leases	(119.6)	(49.4)	(123.8)	(42.9)
	(266.8)	42.4	(423.7)	18.5
Credited to OCI:				
- Provisions and allowances	16.0	31.6	16.0	31.5
Acquisition of subsidiaries	(125.9)	0	0	0
As at the end of the financial year/period	(7,921.6)	(7,577.4)	(6,665.4)	(6,289.9)

	Group			Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 RM'million
<u>Subject to income tax</u>					
Deferred tax assets (before offsetting):					
- Provisions and allowances	4,611.2	4,490.1	4,463.5	3,236.0	3,157.9
- Finance leases	377.7	266.6	217.6	412.7	398.0
- Property, plant and equipment	41.8	36.7	30.1	0	0
Offsetting	(4,943.0)	(4,725.1)	(4,634.2)	(3,648.7)	(3,555.9)
Deferred tax assets (after offsetting)	87.7	68.3	77.0	0	0
Deferred tax liabilities (before offsetting):					
- Property, plant and equipment	(10,594.6)	(10,209.1)	(10,202.1)	(8,105.7)	(7,837.6)
- Unbilled revenue	(788.0)	(711.6)	(759.8)	(788.0)	(711.6)
- Prepaid operating leases	(1,569.7)	(1,450.1)	(1,400.7)	(1,420.4)	(1,296.6)
Offsetting	4,943.0	4,725.1	4,634.2	3,648.7	3,555.9
Deferred tax liabilities (after offsetting)	(8,009.3)	(7,645.7)	(7,728.4)	(6,665.4)	(6,289.9)

20 DEFERRED TAXATION (CONTINUED)

The amount of deductible temporary differences, unused tax losses, reinvestment allowance and investment tax allowance for which no deferred tax asset is recognised in the statement of financial position are as follows:

	Group			Company	
	31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)	31.12.2018	31.12.2017
	RM'million	RM'million	RM'million	RM'million	RM'million
Deductible temporary differences	1,516.1	1,482.9	1,446.9	0	0
Tax losses*	1,570.8	1,488.9	1,472.2	0	0
Reinvestment allowance and investment tax allowance*	5,328.9	6,243.3	8,049.9	0	914.4

* The amount of unused tax losses, reinvestment allowance and investment tax allowance as at 31 December 2018 will expire in year of assessment 2025.

21 LONG TERM RECEIVABLES

Accounting Policy

Long term receivables is a financial instrument and the accounting policy is disclosed in Note 45.

	Note	Group		Company		
		31.12.2018	31.12.2017	31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)
		RM'million	RM'million	RM'million	RM'million	RM'million
Financial assets:						
- Other receivables	(a)	102.7	249.5	86.1	197.0	200.6
Non-financial assets:						
- Advance payment to contractors	(b)	292.8	319.0	0	0	0
- Indirect tax	(c)	850.0	260.9	174.4	0	0
		1,245.5	829.4	260.5	197.0	200.6

(a) Included in the Group and Company are advances given to staff and other non-trade receivables, which are not expected to be received within 12 months from the statement of financial position date.

In the previous financial period/year, other debtors include loans to students. These balances have been reclassified to FVTPL on adoption of MFRS 9.

Credit risks are disclosed in Note 45(b) to the financial statements.

(b) Advance payment to contractors primarily relates to construction of plants which will be utilised against milestone payment invoices, which is more than 12 months.

(c) Included in the Group and Company are indirect tax receivables which are not expected to be received within 12 months from the statement of financial position date.

22 AMOUNTS DUE FROM/(TO) SUBSIDIARIES

	Note	Company		
		31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million
<u>Non-current</u>				
Amounts due from subsidiaries		2,494.6	2,467.1	3,460.0
Less: Loss allowances		(1,442.6)	(1,253.7)	(1,250.2)
	(a)	1,052.0	1,213.4	2,209.8
<u>Current</u>				
Amounts due from subsidiaries		4,674.7	4,990.9	3,906.0
Less: Loss allowances		(971.8)	(804.0)	(808.7)
	(b)	3,702.9	4,186.9	3,097.3
Amounts due to subsidiaries	(b)	(1,459.4)	(1,086.3)	(1,258.1)

- (a) Amount due from SESB is subject to interest rates of 6.0% (FPE 31.12.2017: 6.0%) per annum, is unsecured and has no fixed term of repayment.

Amount due from KEV relating to the Redeemable Unsecured Loan Stocks ('RULS') bears interest at 8.0% (FPE 31.12.2017: 8.0%) per annum on the outstanding nominal value of the principal. The principal and interest due from KEV are amounting to RM744.6 million (FPE 31.12.2017: RM781.4 million). Refer to Note 36(c) for the RULS terms.

- (b) Amounts due from/(to) all subsidiaries are classified as current are unsecured, interest free and repayable on demand.

Credit risks are disclosed in Note 45(b) to the financial statements.

23 FINANCE LEASES

Accounting Policy

A lease is an agreement whereby the lessor conveys to the lessee in return for a payment, or series of payments, the right to use an asset for an agreed period of time.

The Group and Company enter into lease agreements as lessees for certain PPE. Leases of PPE where the Group and Company have substantially transferred all the risks and rewards of ownership (i.e. the Group is the lessor), and leases of PPE where the lessors have substantially transferred all the risks and rewards of ownership to the Group and Company (i.e. the Group is the lessee), are classified as finance leases.

When assets are leased out under finance lease, the Group derecognises the leased asset and recognises the net investment in the lease as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease using the net investment method, which reflects a constant periodic rate of return.

When external assets are leased, finance leases are capitalised at the leases' commencement at the lower of the fair value of the leased assets and the present value of the minimum lease payments. Each lease payment is allocated between the liability and finance charges so as to achieve a constant rate on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in other short term and long term payables. The interest element of the finance cost is charged to the statement of profit or loss within finance cost over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The PPE acquired under finance leases are depreciated or amortised over the lease term. Initial direct costs incurred by the Group in negotiating and arranging finance leases are added to the carrying amount of the leased assets and recognised as an expense in the statement of profit or loss over the lease term on the same basis as the lease expense.

(a) Finance lease receivables

The Group's finance lease receivables arises predominantly from a Cooling Energy Supply Agreement ('CESA'). This CESA is accounted for as a finance lease in accordance with IC 4 and MFRS 117.

	Group			
	Minimum lease payments		Present value of minimum lease payments	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Within 1 year	2.4	2.1	1.0	0.8
After 1 year and not later than 5 years	9.1	9.7	4.9	4.7
After 5 years	9.6	11.6	7.5	8.7
	18.7	21.3	12.4	13.4
	21.1	23.4	13.4	14.2
Less: Unearned finance income	(7.7)	(9.2)		
Present value of minimum lease payment receivable	13.4	14.2		

The effective interest rate implicit in the finance lease is approximately 9.5% (FPE 31.12.2017: 9.5%). The carrying amount of the finance lease receivable approximate to its fair value.

23 FINANCE LEASES (CONTINUED)

(b) Finance lease payables

	Note	Group		Company	
		31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Finance lease liabilities	(i)	4,868.0	5,200.7	16,668.8	17,790.9
Hire purchase creditors	(ii)	6.1	9.8	0	0
		4,874.1	5,210.5	16,668.8	17,790.9

- (i) The Group and Company's obligations under finance lease liabilities arise predominantly from the power purchase agreements with several IPPs. These power purchase agreements are accounted for as a finance lease in accordance with IC 4 and MFRS 117.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Minimum lease payments:				
- Within 1 year	694.8	693.8	2,142.1	2,247.5
- 1 to 2 years	696.0	694.9	1,932.5	2,142.1
- 3 to 5 years	2,078.7	2,093.1	5,270.8	5,703.5
- More than 5 years	4,031.7	4,713.2	17,149.2	18,648.9
	6,806.4	7,501.2	24,352.5	26,494.5
Total minimum lease payments	7,501.2	8,195.0	26,494.6	28,742.0
Future finance charges	(2,633.2)	(2,994.3)	(9,825.8)	(10,951.1)
	4,868.0	5,200.7	16,668.8	17,790.9
Amount payable under finance lease:				
- Within 1 year	354.0	332.7	1,096.1	1,122.1
- After 1 year and not later than 5 years	1,647.1	1,562.7	3,741.2	4,102.4
- After 5 years	2,866.9	3,305.3	11,831.5	12,566.4
	4,514.0	4,868.0	15,572.7	16,668.8
	4,868.0	5,200.7	16,668.8	17,790.9
Average effective interest rate (%)	7.1	7.0	6.5	6.6

The finance charges associated with the finance leases were charged to the statement of profit or loss in the financial year/period in which they were actually incurred. As at 31 December 2018, the net book value of assets under finance leases for the Group and Company are as disclosed in Note 14 to the financial statements. The fair value of the finance lease liabilities are RM5,213.8 million (FPE 31.12.2017: RM6,808.8 million) for the Group and RM18,435.7 million (FPE 31.12.2017: RM19,486.5 million) for the Company.

23 FINANCE LEASES (CONTINUED)

(b) Finance lease payables (continued)

(ii) This represents future instalments under hire purchase of motor vehicles, repayable as follows:

	Group	
	31.12.2018 RM'million	31.12.2017 RM'million
Minimum lease payments:		
- Within 1 year	4.0	4.1
- After 1 year and not later than 5 years	2.4	6.4
Total minimum lease payments	6.4	10.5
Future finance charges	(0.3)	(0.7)
	6.1	9.8
Amount payable under hire purchase:		
- Within 1 year	3.8	3.7
- After 1 year and not later than 5 years	2.3	6.1
	6.1	9.8

Hire purchase liabilities are effectively secured as the rights to the assets revert to the lessors in the event of default.

The weighted average effective interest rate applicable to the lease liabilities as at the financial year end is 5.1% (FPE 31.12.2017: 5.1%) per annum and interest for the financial year is at 2.7% (FPE 31.12.2017: 2.7%) per annum for the Group. The carrying amounts of the hire purchase payables approximate to their fair values.

Reconciliation of finance lease payables during the financial year/period is as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
As at beginning of the financial year/period	5,210.5	5,318.5	17,790.9	11,871.5
Cash flows	(682.7)	(232.0)	(2,137.7)	(638.6)
Non-cash changes				
- Additional finance lease	0	0	0	6,255.5
- Transfer (to)/from payables	(1.3)	0.6	(109.7)	(62.9)
- Finance charges under finance leases (Note 10)	347.6	123.4	1,125.3	365.4
As at end of the financial year/period	4,874.1	5,210.5	16,668.8	17,790.9

24 PREPAID OPERATING LEASES

Accounting Policy

Operating leases - where the Group and Company are the lessees

Leases where substantially all of the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the statement of profit or loss within other operating expenses on the straight line basis over the period of the lease.

Operating leases - where the Group and Company are the lessor

Leases where substantially all of the risks and rewards of ownership are not transferred to the lessee (i.e. the Group is a lessor) are classified as operating leases. Payments received under operating leases that relate to sales of electricity are recognised in the statement of profit or loss within revenue on the straight line basis over the period of the lease. All other payments received under operating leases are presented in the statement of profit or loss within other operating income.

(a) Prepaid operating leases

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
<u>Non-current</u>				
Prepaid operating leases	5,944.1	5,505.2	5,934.9	5,417.0
<u>Current</u>				
Prepaid operating leases	164.8	146.2	156.5	137.6

Payments made in advance to IPPs are primarily to reserve generating capacity for future goods and services. There is no contractual right to receive a refund in cash or another financial instrument from the IPPs.

(b) Lease payables and prepayment by lessee

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
<u>Non-current</u>				
Lease payables* (Note 38)	139.3	128.6	157.5	140.0
Prepayment by lessee** (Note 38)	215.9	301.9	0	0
	355.2	430.5	157.5	140.0
<u>Current</u>				
Lease payables* (Note 32)	15.6	12.2	15.6	12.2
Prepayment by lessee** (Note 32)	32.4	39.4	0	0
	48.0	51.6	15.6	12.2

* The Group and Company as lessees

** The Group as lessor

25 FINANCIAL ASSETS AT FVOCI (2017: AVAILABLE-FOR-SALE FINANCIAL ASSETS)

Accounting Policy

Financial assets at FVOCI or previously classified as available-for-sale financial assets are financial instruments and the accounting policy is disclosed in Note 45.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Financial assets at FVOCI	76.4	0	75.7	0
Available-for-sale financial assets	0	69.3	0	68.6

The Group and Company have irrevocably elected non-trading equity securities above at initial recognition to present its fair value changes in OCI. The Group and Company consider this classification to be more relevant as these instruments are strategic investments of the Group and Company and not held for trading purposes. Previously, these investments were classified as available-for-sale.

During the financial year, no dividend income was recognised and no investment was disposed.

	Group	Company
	Fair value at 31.12.2018 RM'million	Fair value at 31.12.2018 RM'million
Labuan Reinsurance (L) Ltd.	75.7	75.7
Al-Imtiaz Operation and Maintenance Company Ltd.	0.4	0
Club Memberships		
- Sultan Salahuddin Abdul Aziz Shah Club	0.1	0
- Glenmarie Gold Country Club	0.1	0
- Leisure Holiday Bhd	0.1	0

These investments were classified as AFS in 2017.

26 CONTRACT BALANCES

Accounting Policy

With the adoption of MFRS 15, contract balances are disclosed separately in the statement of financial position.

(a) Contract cost assets

Costs to fulfil a contract

The Group recognises a contract cost that relate directly to a contract or to an anticipated contract as an asset when the cost generates or enhances resources of the Group which will be used in satisfying performance obligations in the future and it is expected to be recovered.

26 CONTRACT BALANCES (CONTINUED)

Accounting Policy (continued)

(a) Contract cost assets (continued)

Costs to fulfil a contract (continued)

These contract costs are initially measured at cost and amortised on a systematic basis that is consistent with the pattern of revenue recognition to which the asset relates. An impairment loss is recognised in the profit or loss when the carrying amount of the contract cost exceeds the expected revenue less expected cost that will be incurred. Where the impairment condition no longer exists or has improved, the impairment loss is reversed to the extent that the carrying amount of the contract cost does not exceed the amount that would have been recognised had there been no impairment loss recognised previously.

(b) Contract assets

A contract asset is recognised when the Group and Company's right to consideration is conditional on something other than the passage of time. A contract asset is subject to impairment in accordance to MFRS 9 (Note 45). Typically, the amount will be billed within 30 days of the supply of electricity for electricity customers and 60 to 180 days from satisfying the performance obligation for other revenue streams. The amounts of the electricity supplied before the bills are issued is recognised as contract asset. Payment is expected within 30 days from the billing date for all trade receivables.

(c) Contract liabilities

A contract liability represents the obligation of the Group and Company to transfer goods or services to a customer for which consideration has been received (or the amount is due) from the customers.

Contract liabilities primarily relate to contributions paid in advance by electricity customers for the construction of electricity network assets. The customers' contribution are expected to be recognised as revenue over a period of 20 years, being the estimated average useful life of the electricity network assets used to connect the customers to the electricity supply. Other contract liabilities within the Group are relating to students fees. All other contract liabilities are expected to be recognised as revenue over the next 12 months.

The Group and Company have recognised the following assets and liabilities related to contracts with customers:

	Note	Group		Company	
		31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
(a) Contract cost assets	(i)				
- Cost to fulfil a contract		0.5	0.1	0	0
(b) Contract assets	(ii)				
As at the beginning of the financial year/period		3,059.3	3,222.3	2,925.7	3,051.8
Effects of adoption of MFRS 9		(19.7)	0	(19.7)	0
As restated		3,039.6	3,222.3	2,906.0	3,051.8
Performance obligations completed		3,425.6	3,099.0	3,283.4	2,981.8
Transfer to receivables		(3,019.7)	(3,205.6)	(2,906.0)	(3,051.8)
Loss allowances		(83.7)	(56.4)	(78.4)	(56.1)
As at the end of the financial year/period		3,361.8	3,059.3	3,205.0	2,925.7

26 CONTRACT BALANCES (CONTINUED)

The Group and Company have recognised the following assets and liabilities related to contracts with customers: (continued)

	Note	Group		Company	
		31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
(c) Contract liabilities	(iii)				
As at the beginning of the financial year/period		2,737.5	2,454.8	2,306.1	2,076.4
Effect of adoption of MFRS 15		0	16.2	0	0
As restated		2,737.5	2,471.0	2,306.1	2,076.4
Received during the financial year/period		1,081.9	464.4	506.1	325.8
Release to statement of profit or loss:					
- Customers' contributions		(263.4)	(115.6)	(229.4)	(96.1)
- Deferred income		(305.7)	(82.3)	0	0
As at the end of the financial year/period		3,250.3	2,737.5	2,582.8	2,306.1

	Group			Company		
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million
Contract liabilities analysed:						
Realised within 12 months	347.4	287.5	276.7	227.9	223.5	240.3
Realised after 12 months	2,902.9	2,450.0	2,194.3	2,354.9	2,082.6	1,836.1
	3,250.3	2,737.5	2,471.0	2,582.8	2,306.1	2,076.4

(i) Assets recognised from costs to fulfil a contract

In addition to the contract balances disclosed above, the Group and Company have also recognised assets in relation to costs to fulfil a contract.

	Group	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Assets recognised from costs incurred to fulfil a contract	0.5	0.1

26 CONTRACT BALANCES (CONTINUED)

(ii) Significant changes in contract assets and liabilities

Contract assets have increased as the Group and Company have provided more services ahead of the agreed payment schedules for fixed-price contracts. The Group and Company also recognised a loss allowance for contract assets following the adoption of MFRS 9, see Note 45(b)(i) for further information.

Contract liabilities have increased for the Group and Company due to larger prepayments or contributions received from customers.

(iii) Revenue recognised in relation to contract liabilities

The following table shows how much of the revenue recognised in the current financial year/period relates to carried-forward contract liabilities and how much relates to performance obligations that were satisfied in a prior financial year/period:

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 (Restated) RM'million
Revenue recognised, included in the contract liabilities balance at the beginning of the financial year/period	(569.1)	(197.9)	(229.4)	(96.1)

Unsatisfied performance obligations in long term contracts

The following table shows unsatisfied performance obligations resulting from long term contracts:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Aggregate amount of the transaction price allocated to contracts that are partially or fully unsatisfied	3,250.3	2,737.5	2,582.8	2,306.1

Management expects 8.8% of the transaction price allocated to the unsatisfied contracts as at 31 December 2018 will be recognised as revenue during the next financial year. The remaining 91.2% will be recognised from FY2020 to FY2039.

All contracts for periods of one year or less are billed based on services provided. As permitted under MFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

27 FINANCIAL ASSETS AT FVTPL

Accounting Policy

Financial assets at FVTPL is a financial instrument and the accounting policy is disclosed in Note 45.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Financial assets at FVTPL	9,743.3	10,490.2	5,224.6	3,850.5
Current	9,652.4	10,490.2	5,133.7	3,850.5
Non-current	90.9	0	90.9	0
	9,743.3	10,490.2	5,224.6	3,850.5

Financial assets at FVTPL represents investments in unit trusts and students' loan.

Note 47 explains the changes in accounting policy and reclassification of certain financial assets from loans and receivables to FVTPL following the adoption of MFRS 9.

Credit risks relating to financial assets at FVTPL are disclosed in Note 45(b) to the financial statements.

28 DERIVATIVE FINANCIAL INSTRUMENTS

Accounting Policy

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value at the end of each reporting period.

Fair value changes on derivatives that are not designated or do not qualify for hedge accounting are recognised in the statement of profit or loss when the changes arise.

	Note	National amount RM'million	Assets RM'million	Liabilities RM'million
Non-hedge accounting qualified derivative financial instruments:				
31.12.2018				
Group				
Forward foreign currency contracts - current	(a)	949.7	1.2	(44.0)
Interest rate swap contracts - non-current	(b)	622.4	0	(11.5)
Put option - non-current	(c)	14.2	0.2	0
31.12.2017				
Group				
Forward foreign currency contracts - current	(a)	975.1	0	(47.3)
Company				
Forward foreign currency contracts - current	(d)	19.8	0	(0.2)

- (a) The Group entered into forward foreign currency contracts with forward rates ranging from RM4.1627 to RM4.4100 (FPE 31.12.2017: RM4.0880 to RM4.4100) for 1 US Dollar, RM3.6540 to RM3.7890 (FPE 31.12.2017: RM3.6209 to RM3.8271) for 100 Japanese Yen and NIL (FPE 31.12.2017: RM4.8736) for 1 Euro.

28 DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

- (b) The Group entered into two Interest Rate Swap ('IRS') contracts transaction that entitled the Group to received interest at floating rates, and oblige to pay interest at fixed rate of 1.3% and 1.7% on aggregate notional principal of GBP30.7 million and GBP89.3 million respectively.
- (c) The put option is a right to sell back an asset as a protection to the Group against any unfulfilment in the stipulated conditions of agreements entered from the acquisition of GVO and BCL.
- (d) The Company entered into forward foreign currency contracts with forward rates RM4.0889 for 1 US Dollar.

There were no derivative financial instruments at Company level as at 31 December 2018.

Credit risks relating to derivations are disclosed in Note 45(b) to the financial statements.

29 INVENTORIES

Accounting Policy

Inventories are stated at the lower of cost and net realisable value.

Cost of work-in-progress and finished goods comprise raw materials, direct labour and a proportion of the production overheads. Cost is determined on the weighted average basis and comprises all costs of purchase and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business, less the costs of completion and selling expenses.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Fuel and consumables	1,262.7	872.4	294.0	279.2
Work-in-progress	18.4	6.8	0	0
Finished goods	14.8	5.8	0	0
	1,295.9	885.0	294.0	279.2

30 RECEIVABLES, DEPOSITS AND PREPAYMENTS

Accounting Policy

Trade and other receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. Other receivables generally arise from transactions outside the usual operating activities of the Group and Company. If collection is expected in one year or less (or in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and other receivables are recognised initially at fair value, which is the amount of consideration that is unconditional unless they contain significant financing components. The Group and Company hold the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost less accumulated impairment losses. The impairment is determined based on the expected credit loss ('ECL') model and is further disclosed in Note 45.

30 RECEIVABLES, DEPOSITS AND PREPAYMENTS (CONTINUED)

	Group			Company		
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million
Trade receivables	5,278.7	5,697.0	5,225.8	3,831.7	4,248.9	4,033.0
Staff advances/loans	65.2	60.0	62.9	59.7	51.5	54.1
Deposits and prepayments	480.5	296.7	269.7	289.1	84.7	89.6
Other receivables	2,423.2	1,595.7	1,427.4	1,869.1	181.8	232.2
Rechargeable job orders debtors	337.3	405.0	185.4	305.6	355.1	150.3
Partial payment to contractors	44.2	945.9	172.5	0.8	0.8	0.8
	8,629.1	9,000.3	7,343.7	6,356.0	4,922.8	4,560.0
Impairment losses on:						
Trade receivables (Note 45(b)(i))	(1,640.1)	(1,495.0)	(1,388.5)	(1,471.8)	(1,385.9)	(1,290.7)
Others (Note 45(b)(iii))	(185.6)	(229.8)	(220.6)	(114.4)	(201.7)	(202.0)
	(1,825.7)	(1,724.8)	(1,609.1)	(1,586.2)	(1,587.6)	(1,492.7)
	6,803.4	7,275.5	5,734.6	4,769.8	3,335.2	3,067.3

The Group and Company's credit policy provides trade receivables with a 30 days (FPE 31.12.2017: 30 days) credit period.

Credit risks relating to receivables are disclosed in Note 45(b)(i) to the financial statements.

Included in other receivables of the Group and Company are amounts due from the Government amounting to RM1,670.9 million under the ICPT mechanism.

31 DEPOSITS, BANK AND CASH BALANCES

Accounting Policy

For the purpose of the consolidated statement of cash flows, cash equivalents are held for the purpose of meeting short term cash commitments rather than for investment or other purposes. Cash and cash equivalents comprise cash in hand, deposits held at call with financial institutions, other short term investments with original maturity of 3 months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, and bank overdrafts. In the statement of financial position, bank overdrafts are shown within borrowings in current liabilities.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Cash in hand and at bank	3,430.1	1,488.0	1,798.9	361.0
Deposits with licensed banks	5,240.7	3,927.0	4,053.5	2,640.3
	8,670.8	5,415.0	5,852.4	3,001.3

31 DEPOSITS, BANK AND CASH BALANCES (CONTINUED)

The interest rates per annum of bank balances and deposits with licensed banks that were effective as at the end of the reporting date were as follows:

	Group		Company	
	31.12.2018 %	31.12.2017 %	31.12.2018 %	31.12.2017 %
Bank balances	0.1 - 3.3	0.1 - 3.3	0.1 - 3.3	0.1 - 3.3
Deposits with licensed banks	0.8 - 4.1	1.4 - 4.0	0.8 - 3.0	1.5 - 1.7

Deposits with licensed banks have maturity periods ranging from 1 to 90 days (31.12.2017: 14 to 90 days) for the Group and 1 to 85 days for the Company (31.12.2017: 32 to 90 days).

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Cash and cash equivalents at the end of the financial year/period comprise:				
Cash in hand and at bank	3,430.1	1,488.0	1,798.9	361.0
Deposits with licensed banks	5,240.7	3,927.0	4,053.5	2,640.3
Deposits, bank and cash balances	8,670.8	5,415.0	5,852.4	3,001.3
Debt reserve account* (Note 36(b)(iii))	(246.0)	(249.8)	0	0
Cash at bank held in trust**	(248.9)	(289.8)	0	0
Restricted cash	(16.3)	0	0	0
Deposits with maturity 90 days and more	(561.0)	0	0	0
Total cash and cash equivalents at the end of the financial year/period	7,598.6	4,875.4	5,852.4	3,001.3

* Debt reserve account relate to deposits placed with licensed financial institutions as part of security obligations for bond financing.

** The cash at bank held in trust is in respect of grants received from the Government of Malaysia by a subsidiary for designated capital projects.

32 PAYABLES

Accounting Policy

Trade and other payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Other payables generally arise from transactions outside the usual operating activities of the Group. Trade and other payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities.

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost, which is the fair value of the consideration to be paid in the future for the goods and services received.

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made.

Where the Group expects a provision to be reimbursed by another party, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

32 PAYABLES (CONTINUED)

	Group			Company	
	31.12.2018	31.12.2017 (Restated)	1.9.2017 (Restated)	31.12.2018	31.12.2017
	RM'million	RM'million	RM'million	RM'million	RM'million
Trade payables	6,455.4	6,392.6	7,600.9	4,127.8	4,289.1
Payroll liabilities	1,521.7	1,191.2	1,556.4	1,420.3	1,132.4
Deposits	16.5	16.6	16.9	10.2	10.3
Provisions	562.5	678.1	397.1	121.2	157.6
Financial guarantee contracts	270.3	0	0	272.7	0
Lease payables (Note 24(b))	15.6	12.2	11.1	15.6	12.2
Prepayment by lessee (Note 24(b))	32.4	39.4	43.7	0	0
Payable to Federal Government	42.5	25.7	25.7	0	0
Other payables and accruals	880.6	680.6	577.0	269.4	218.2
	9,797.5	9,036.4	10,228.8	6,237.2	5,819.8

Included in trade payables of the Group and Company are obligations amounting to RM662.3 million (FPE 31.12.2017: RM1,032.6 million) relating to the Electricity Industry Fund under IBR mechanism.

Credit terms of trade payables of the Group and Company vary from 30 to 60 days (FPE 31.12.2017: 30 to 60 days) depending on the terms of the contracts.

Included in provisions is an accrual amounting to RM124.1 million in relation to project management and consultancy services payable to NCI of a subsidiary.

The loss allowance on financial guarantee contracts are mainly from financial guarantee provided by the Company to an associate arising from the ECL model (Note 45(b)(iv)).

The movements in provision during the financial year/period is as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
As at beginning of the financial year/period	678.1	397.1	157.6	151.4
Provision during the financial year/period	746.3	672.6	127.1	124.7
Utilitised during the financial year/period	(861.9)	(391.6)	(163.5)	(118.5)
As at end of the financial year/period	562.5	678.1	121.2	157.6

33 EMPLOYEE BENEFITS

Accounting Policy

(a) Short term employee benefits

Wages, salaries, paid annual leave, bonuses, and non-monetary benefits that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related services are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled.

(b) Post employment benefits

The Group and Company have various post-employment benefit schemes which are either defined contribution or defined benefit plans. A defined contribution plan is a pension plan under which the Group and Company pay fixed contributions into a separate entity (a fund) on a mandatory, contractual or voluntary basis and the Group and Company have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees benefits relating to employee service in the current and prior periods.

Defined contribution plans

The Group and Company's contributions to the defined contribution plans are charged to the statement of profit or loss in the financial year to which they relate. Once the contributions have been paid, the Group and Company have no further payment obligations.

Defined benefit plans

The Group and Company make contributions to the Company's Retirement Benefit Plan, a defined benefit plan and approved fund independent of the Company's finances. A book provision is also provided by the Group and Company as the contribution rate required to fund the benefits under the said plan is in excess of the Inland Revenue maximum limit. The Group and Company also provide for a Post-Retirement Medical Plan for certain employees, which is unfunded.

The liability in respect of a defined benefit plan is the present value of the defined benefit obligation at the statements of financial position date minus the fair value of plan assets. The Group and Company determine the present value of the defined benefit obligation and the fair value of any plan assets with sufficient regularity such that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the end of reporting date.

The defined benefit obligation, calculated using the Projected Unit Credit Method, is determined by an independent actuarial firm, considering the estimated future cash outflows using market yields at statement of financial position date of high-quality corporate bonds which have currency and terms to maturity approximating the terms of the related liability.

The current service cost of the defined benefit plan reflects the increase in the defined benefit obligation resulting from employee service in the current year. It is recognised in the statement of profit or loss in employee benefits expense.

The net interest cost is calculated by applying the discount rate to the net balance of the defined benefits obligation and the fair value of plan assets. This cost is included in employee benefit expense in the statement of profit or loss. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised directly to the OCI in the period in which they arise. The actuarial gains and losses are not subsequently reclassified to the statement of profit or loss.

33 EMPLOYEE BENEFITS (CONTINUED)

Accounting Policy (continued)

(b) Post-employment benefits (continued)

Defined benefit plans (continued)

(i) Retirement Benefit Trust Fund ('RBTF')

The Group and Company operate a final salary defined benefit plan. The benefit is made as lump sum payment at retirement or earlier exits due to death and early retirement. The RBTF has been closed to new entrants since January 2008. Currently, there is no minimum funding requirement under the law.

The RBTF exposes the Group and Company to risks from interest rates from defined benefit being greater than expected due to assumptions such as salary increment or turnover rates not being borne out. The RBTF is also exposed to investment risks in relation to the assets of the plan.

The funding of the RBTF is based on recommendation of the actuary and approved by the Group and Company. The contribution by the Group and Company is based on 7.0% of the annual basic salaries of the members. The employees are not required to contribute to the plan.

The Group and Company expect to contribute 6.0% of the annual basic salaries of members to the plan in the next financial year.

(ii) Post-Retirement Medical Benefit Scheme ('PRMBS')

The Group and Company operate a post-retirement medical benefits plan in Malaysia. The PRMBS is closed to new entrants. There is no minimum funding requirement under the current law. The PRMBS is unfunded.

The PRMBS exposes the Group and Company to risk from interest rates and from defined benefit being greater than expected due to assumptions such as projection of medical benefit costs and mortality not being borne out.

There has not been any settlement or curtailment during the current financial year.

33 EMPLOYEE BENEFITS (CONTINUED)

The movements in the financial statements are as follows:

	RBTF			PRMBS RM'million	Total RM'million
	Defined benefit obligation RM'million	Fair value of plan asset RM'million	Net defined benefit liability RM'million		
Group					
At 1 January 2018	2,786.3	(1,600.5)	1,185.8	10,599.3	11,785.1
<u>Included in profit or loss</u>					
Current service costs	113.9	0	113.9	0	113.9
Interest cost/(income)	132.4	(80.7)	51.7	561.8	613.5
	246.3	(80.7)	165.6	561.8	727.4
<u>Included in OCI</u>					
Remeasurement of loss (Note 11):					
- Actuarial (loss)/gain arising from:					
- financial assumptions	(16.9)	0	(16.9)	225.0	208.1
- experience assumptions	20.7	0	20.7	(67.4)	(46.7)
- Return on plan assets excluding interest income	0	58.9	58.9	0	58.9
	3.8	58.9	62.7	157.6	220.3
<u>Others</u>					
Contribution paid by the employer	0	(361.8)	(361.8)	0	(361.8)
Benefits paid	(377.7)	375.0	(2.7)	(460.1)	(462.8)
	(373.9)	72.1	(301.8)	(302.5)	(604.3)
At 31 December 2018	2,658.7	(1,609.1)	1,049.6	10,858.6	11,908.2
Current			325.8	451.2	777.0
Non-current			723.8	10,407.4	11,131.2
			1,049.6	10,858.6	11,908.2

33 EMPLOYEE BENEFITS (CONTINUED)

The movements in the financial statements are as follows: (continued)

	RBTF			PRMBS RM'million	Total RM'million
	Defined benefit obligation RM'million	Fair value of plan asset RM'million	Net defined benefit liability RM'million		
Group					
At 1 September 2017	2,804.0	(1,562.5)	1,241.5	10,395.7	11,637.2
<u>Included in profit or loss</u>					
Current service costs	39.2	0	39.2	0	39.2
Interest cost/(income)	46.6	(26.5)	20.1	189.5	209.6
	85.8	(26.5)	59.3	189.5	248.8
<u>Included in OCI</u>					
Remeasurement of loss (Note 11):					
- Actuarial gain arising from financial assumptions	0	0	0	138.8	138.8
- Return on plan assets excluding interest income	0	0.4	0.4	0	0.4
	0	0.4	0.4	138.8	139.2
<u>Others</u>					
Contribution paid by the employer	0	(113.7)	(113.7)	0	(113.7)
Benefits paid	(103.5)	101.8	(1.7)	(124.7)	(126.4)
	(103.5)	(11.5)	(115.0)	14.1	(100.9)
At 31 December 2017	2,786.3	(1,600.5)	1,185.8	10,599.3	11,785.1
Current			337.6	411.2	748.8
Non-current			848.2	10,188.1	11,036.3
			1,185.8	10,599.3	11,785.1

33 EMPLOYEE BENEFITS (CONTINUED)

The movements in the financial statements are as follows: (continued)

	RBTF			PRMBS RM'million	Total RM'million
	Defined benefit obligation RM'million	Fair value of plan asset RM'million	Net defined benefit liability RM'million		
Company					
At 1 January 2018	2,749.1	(1,600.9)	1,148.2	10,170.6	11,318.8
<u>Included in profit or loss</u>					
Current service costs	95.0	0	95.0	0	95.0
Interest cost/(income)	130.9	(80.7)	50.2	538.4	588.6
	225.9	(80.7)	145.2	538.4	683.6
Charged to subsidiaries	15.7	0	15.7	0	15.7
	241.6	(80.7)	160.9	538.4	699.3
<u>Included in OCI</u>					
Remeasurement of loss (Note 11):					
- Actuarial (loss)/gain arising from:					
- financial assumptions	(16.5)	0	(16.5)	75.5	59.0
- experience assumptions	20.7	0	20.7	(71.9)	(51.2)
- Return on plan assets excluding interest income	0	58.9	58.9	0	58.9
	4.2	58.9	63.1	3.6	66.7
<u>Others</u>					
Contribution paid by the employer	0	(361.8)	(361.8)	0	(361.8)
Benefits paid	(375.0)	375.0	0	(443.2)	(443.2)
	(370.8)	72.1	(298.7)	(439.6)	(738.3)
At 31 December 2018	2,619.9	(1,609.5)	1,010.4	10,269.4	11,279.8
Current			325.8	433.8	759.6
Non-current			684.6	9,835.6	10,520.2
			1,010.4	10,269.4	11,279.8

33 EMPLOYEE BENEFITS (CONTINUED)

The movements in the financial statements are as follows: (continued)

	RBTF			PRMBS RM'million	Total RM'million
	Defined benefit obligation RM'million	Fair value of plan asset RM'million	Net defined benefit liability RM'million		
Company					
At 1 September 2017	2,767.2	(1,562.5)	1,204.7	9,976.1	11,180.8
<u>Included in profit or loss</u>					
Current service costs	32.2	0	32.2	0	32.2
Interest cost/(income)	46.0	(26.5)	19.5	181.7	201.2
	78.2	(26.5)	51.7	181.7	233.4
Charged to subsidiaries	5.5	0	5.5	0	5.5
	83.7	(26.5)	57.2	181.7	238.9
<u>Included in OCI</u>					
Remeasurement of loss (Note 11):					
- Actuarial gain arising from financial assumptions	0	0	0	131.3	131.3
<u>Others</u>					
Contribution paid by the employer	0	(113.7)	(113.7)	0	(113.7)
Benefits paid	(101.8)	101.8	0	(118.5)	(118.5)
	(101.8)	(11.9)	(113.7)	12.8	(100.9)
At 31 December 2017	2,749.1	(1,600.9)	1,148.2	10,170.6	11,318.8
Current			337.6	399.5	737.1
Non-current			810.6	9,771.1	10,581.7
			1,148.2	10,170.6	11,318.8

The latest actuarial revaluation for RBTF and PRMBS was carried out in February 2019. The principal actuarial assumptions used in respect of defined benefit plans were as follows:

	Group		Company	
	RBTF %	PRMBS %	RBTF %	PRMBS %
31.12.2018				
Discount rates	5.0 - 13.3	5.4 - 5.5	5.2	5.4
Salary increment rate	5.0 - 13.3	N/A	7.0	N/A
Medical cost inflation:				
- Inpatient	N/A	5.5	N/A	5.5
- Outpatient	N/A	4.5 - 5.8	N/A	4.5
Others:				
- Specialist	N/A	4.5	N/A	4.5
- Dialysis	N/A	5.5	N/A	5.5
31.12.2017				
Discount rates	5.0 - 7.8	5.4 - 5.5	5.1	5.4
Salary increment rate	5.0 - 7.8	N/A	7.0	N/A
Medical cost inflation:				
- Inpatient	N/A	5.5	N/A	5.5
- Outpatient	N/A	5.8	N/A	5.8
Others:				
- Specialist	N/A	4.5	N/A	4.5
- Dialysis	N/A	5.5	N/A	5.5

33 EMPLOYEE BENEFITS (CONTINUED)

The effect of a 1.0% movement in the key assumptions to the defined benefit obligation balances are as follows:

	RBTF		PRMBS	
	Increase RM'million	Decrease RM'million	Increase RM'million	Decrease RM'million
Group				
Medical cost trend rate	N/A	N/A	1,471.6	(1,232.2)
Discount rate	(155.3)	173.6	(1,256.9)	1,533.2
Salary increment rate	158.9	(145.1)	N/A	N/A
Company				
Medical cost trend rate	N/A	N/A	1,374.5	(1,153.3)
Discount rate	(155.3)	173.6	(1,176.9)	1,432.7
Salary increment rate	158.9	(145.1)	N/A	N/A

The sensitivity analysis has been provided based on membership data as at 31 December 2018 and considered a change of each principal assumption in isolation. The method and types of assumptions used in preparing the sensitivity analyses did not change compared to the previous period.

The weighted average duration of the Group and Company's liability is estimated at approximately 7 and 14 years for RBTF and PRMBS respectively.

Plan assets for RBTF comprise:

	Group and Company	
	31.12.2018 %	31.12.2017 %
Equity instruments - quoted	33.7	45.7
Debt instruments - quoted	20.0	18.6
- unquoted	19.5	18.5
Others	26.8	17.2
	100.0	100.0

The plan assets for RBTF did not include any ordinary share of the Company.

The Group and Company's RBTF are conditional on future employment of the members of the plan. The Group and Company's PRMBS is not conditional on future employment and has been fully vested as at 31 December 2018.

34 CONSUMER DEPOSITS

Consumers (with the exception of employees and government departments/agencies) are required to deposit a sum sufficient to cover charges for two months supply of energy as allowed under the regulation of the Licensee Supply (Amendment) regulations 2002. In default of payment of the deposit within the time specified, the supply to the consumer's installation may be disconnected, subject to certain conditions laid out in the regulations.

In January of every calendar year, the Company and SESB pay an interest of 2.5% per annum on the amount of cash deposits.

Consumer deposits are classified as current liabilities as the amounts shall be refunded within 30 days upon request for termination of electricity supply by the consumer.

35 SHORT TERM BORROWINGS

Accounting Policy

Borrowings are recognised initially at fair value, net of transaction costs incurred. In subsequent periods, borrowings are stated at amortised cost using the effective interest method, any differences between proceeds (net of transaction costs) and the redemption value are recognised in the statement of profit or loss over the period of the borrowings.

Borrowings are classified as current liabilities unless the Group and Company have an unconditional right to defer settlement of the liability for at least 12 months after the statement of financial position date.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facilities will be drawdown. In this case, the fee is deferred until the drawdown occurs.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. All other borrowing costs are recognised in the statement of profit or loss in the period in which they are incurred.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Portion of borrowings due within 1 year (Note 36):				
- Secured	1,076.2	1,046.9	0	0
- Unsecured	2,392.5	296.1	2,252.2	227.6
	3,468.7	1,343.0	2,252.2	227.6
Short term loans:				
- Secured	269.1	270.5	0	0
- Unsecured	105.6	61.5	0	0
Bankers' acceptances (unsecured)	84.4	70.3	0	0
	3,927.8	1,745.3	2,252.2	227.6

The short term borrowings carry interest at rates ranging from 0.8% to 10.2% (FPE 31.12.2017: 0.8% to 8.2%) per annum for the Group and from 0.8% to 8.0% (FPE 31.12.2017: 0.8% to 7.5%) per annum for the Company.

36 BORROWINGS

Accounting Policy

The accounting policy for borrowings is as disclosed in Note 35.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Secured:				
- Term loans (Note (a))	2,750.1	1,955.8	0	0
- Bonds (Note (b))	21,357.2	22,115.9	0	0
	24,107.3	24,071.7	0	0
Unsecured:				
- Term loans (Note (a))	6,700.4	6,664.3	6,578.0	6,562.5
- Bonds (Note (b))	16,052.2	9,784.5	15,059.0	8,785.6
- Redeemable Unsecured Loan Stocks (Note (c))	513.4	520.9	0	0
	23,266.0	16,969.7	21,637.0	15,348.1
	47,373.3	41,041.4	21,637.0	15,348.1
Payable within 1 year under short term borrowings excluding short term loans and bankers' acceptance (Note 35)	3,468.7	1,343.0	2,252.2	227.6
Borrowings repayable after 1 year:				
- After 1 and up to 2 years	2,257.1	6,741.1	819.9	2,031.4
- After 2 and up to 5 years	5,805.4	5,849.7	3,060.0	3,745.3
- After 5 and up to 10 years	13,626.6	8,818.7	8,870.0	5,660.4
- After 10 and up to 20 years	19,535.1	15,511.1	6,199.9	3,151.0
- After 20 and up to 30 years	2,365.6	2,475.8	120.2	230.4
- After 30 years	314.8	302.0	314.8	302.0
	43,904.6	39,698.4	19,384.8	15,120.5
	47,373.3	41,041.4	21,637.0	15,348.1
Add:				
- Short term loans	374.7	332.0	0	0
- Bankers' acceptances	84.4	70.3	0	0
Total borrowings	47,832.4	41,443.7	21,637.0	15,348.1

	Group	
	31.12.2018 RM'million	31.12.2017 RM'million
Net book values of PPE pledged as security for borrowings:		
Machinery, lines and equipment	5,080.1	4,918.7
Buildings	863.9	892.6
Long leasehold land	170.3	169.3
	6,114.3	5,980.6

36 BORROWINGS (CONTINUED)

(a) Term loans

(i) The Federal Government loans obtained by SESB are secured by the following:

- A debenture creating:
 - a first fixed charge over all present and future freehold and leasehold properties including all buildings and fixtures; and
 - a first floating charge over all present and future assets of SESB not effectively charged by way of the fixed charge.
- A deed of assignment transferring all SESB's present and future rights and interests in all sales proceeds or revenue derived from the sale of electricity generated from the projects funded.
- A deed of assignment transferring all SESB's present and future rights and interests in the bank accounts in which the loan proceeds are credited.

The tenure of the loans ranges from 20 to 25 years with a profit rate of between 0% to 4.0% per annum.

(ii) 15-Year RM73.3 Million Term Loan

On 20 December 2010, TNB Engineering Corporation Sdn. Bhd. ('TNEC') entered into a 15-year RM73.3 million secured loan, paying interest at a fixed rate of 5.9%. The loan will mature on 24 December 2025. The principal is payable in 12 annual instalments.

The term loan is secured by a corporate guarantee from the Company. The term loan also requires TNEC to comply with certain affirmative and restrictive non-financial covenants.

(iii) USD300.0 Million Term Loan

On 30 March 2016, the Company entered into a 3-year USD300.0 million unsecured loan, paying interest at a floating interest rate with margin of 0.7%. The loan will mature on 30 March 2019.

(iv) Commodity Murabahah Financing-I

On 2 May 2017, Malaysia Transformer Manufacturing Sdn. Bhd. entered into a RM25.0 million unsecured loan, with a floating interest rate of 1.6% plus prevailing Kuala Lumpur Interbank Offered Rate ('KLIBOR') to part finance the construction and development of a new plant at Kapar, Klang.

(v) Islamic Facility Agreement

On 19 July 2017, TNB Sepang Solar Sdn. Bhd. ('TSS') obtained a RM323.0 million Islamic facility agreement to finance the construction of a 50MW solar power plant. The tenure of the facility agreement is up to 20 years with a periodic distribution rate for pre Commercial Operation Date ('COD') (KLIBOR+1.2%) and post COD (KLIBOR+1.3%) per annum.

(vi) GBP120.0 Million Term Loan

On 23 March 2018, Tenaga Wind Ventures UK Ltd obtained bank loans and overdrafts which are secured by a fixed and floating charge over the assets held by Tenaga Investments UK Ltd and Tenaga Wind Ventures UK Ltd ('TWV'). TWV has bank loans with Bayerische Landesbank for the amount of GBP119.1 million with a tenure of 15 years. The rate of interest is at a margin of 1.8% over LIBOR subject to interest rate swap agreements.

36 BORROWINGS (CONTINUED)

(b) Bonds

(i) Islamic Securities Programme

On 25 November 2011, TNB Janamanjung Sdn. Bhd. ('TNBJ') obtained a RM4.9 billion Islamic Securities Programme to finance the construction of a 1,010MW coal fired power plant. The tenure of the Islamic Securities Programme ranging from 5 to 20 years with profit rates between 3.8% and 4.9% per annum.

The Islamic Securities Programme was issued by Manjung Island Energy Berhad ('MIEB') which is a special purpose vehicle company incorporated in Malaysia with a paid up ordinary share capital of RM2.00. All of the issued shares of MIEB are held by Equity Trust (Malaysia) Berhad as share trustee for the benefit of certain specified charities, under the terms of a declaration of trust.

The Islamic Securities Programme consists of 2 series and the details of the series are as follows:

- Series 1 consists of 15 tranches, with tenures ranging from 5 to 19 years.
- Series 2 consists of 1 tranche, with a tenure of 20 years.

The Islamic Securities Programme Series 1 is secured by the followings:

- a first ranking assignment of TNBJ's rights, interests, titles and benefits under PPA1 (Manjung 1, 2 & 3) and PPA2 (Manjung 4) inclusive of the proceeds therefrom; and
- a first ranking assignment of all designated accounts and the related credit balances.

The Islamic Securities Programme Series 2 is unsecured and has the benefit of unconditional and irrevocable guarantee from the Company, to meet the payment obligations of TNBJ.

(ii) Sukuk - Gas Fired Power Plant

On 22 May 2013, TNB Northern Energy Berhad ('TNEB') entered into a RM1.6 billion sukuk facility agreement to finance the construction of a 1,071MW gas fired power plant. The tenure of the facility agreement is 23 years with periodic distribution rates between 3.6% and 4.8% per annum. The sukuk facility agreement consists of 39 tranches with tenures ranging from 4 to 23 years.

(iii) Sukuk Ijarah

On 5 July 2013, Kapar Energy Ventures Sdn. Bhd. ('KEV') issued a sukuk facility based on the Shariah principles of Ijarah ('Sukuk Ijarah') of RM2.0 billion in nominal value. The tenure of the sukuk ranging from 1 to 13 years with profit rates of 3.8% to 5.0%.

The Sukuk Ijarah is secured by the followings:

- First fixed charge over the lease of the land owned by the Company where the power plant, coal yard and jetty are located;
- A first ranking debenture comprising fixed and floating charges over all present and future assets of KEV; and
- Assignment of all rights, titles, interests and benefits of:
 - the project documents;
 - the applicable Takaful/insurances; and
 - the designated accounts.

(iv) Sukuk - Coal Fired Power Plant

On 24 January 2014, TNB Western Energy Berhad ('TWEB') entered into a RM3.7 billion sukuk facility agreement to finance the construction of a 1,000MW coal fired power plant. The tenure of the facility agreement is 23 years with periodic distribution rates between 5.1% and 5.8% per annum. The sukuk facility agreement consists of 20 tranches with tenures ranging from 10 to 20 years.

36 BORROWINGS (CONTINUED)

(b) Bonds (continued)

(iv) Sukuk - Coal Fired Power Plant (continued)

On 4 December 2015, Jimah East Power Sdn. Bhd. ('JEP') issued a Sukuk Murabahah of RM9.0 billion nominal value. The proceeds from the Sukuk Murabahah shall be utilised by JEP for shariah-compliant purposes in connection with the financing, design, engineering, procurement, construction, installation, testing, commissioning, ownership, operation and maintenance of a 2,000MW coal fired power plant and associated facilities, including the transmission line and interconnection facilities. The tenure of the facility agreement is 23 years with periodic distribution rates between 5.0% and 6.8% per annum. The sukuk facility agreement consists of 36 tranches with tenures ranging from 6 to 23 years.

(v) RM2.0 Billion Islamic Medium Term Note Sukuk Wakalah

On 3 August 2017, the Company issued RM2.0 billion Islamic Medium Term Note Sukuk Wakalah to finance capital expenditure, investment, general corporate purpose, working capital requirements and equity injection into Tenaga Nasional Berhad's power plant projects. The issuance comprises RM500.0 million 15 years tranche and RM1.5 billion 20 years tranche, with periodic distribution rates between 5.0% and 5.2% respectively.

On 29 August 2018, the Company issued a RM1.0 billion 15 years tranche and RM2.0 billion 20 years tranche, with a fixed periodic distribution rate of 4.8% and 5.0% respectively.

(vi) Multi-Currency Sukuk Programme

On 19 October 2016, TNB Global Ventures Capital Berhad ('TGVC') established a USD2.5 billion Multi-Currency Medium Term Note Sukuk Programme to provide flexibility to Tenaga Nasional Berhad fund raising exercise for its future investment.

The Sukuk Programme is unsecured and has the benefit of unconditional and irrecoverable guarantee from Tenaga Nasional Berhad, to meet the payment obligations of TGVC.

On 19 October 2016, the Company issued a USD750.0 million sukuk with a tenure of 10 years with fixed periodic distribution rate of 3.2%.

On 1 November 2018, the Company had a second issuance of USD750.0 million for 10 years with a periodic distribution rate of 4.9%.

(vii) RM3.7 Billion Sukuk Wakalah

On 31 October 2017, Southern Power Generation Sdn. Bhd. ('SPG') issued a Sukuk Wakalah of RM3.7 billion in nominal value. The proceeds from the Sukuk Wakalah shall be utilised for the following shariah-compliant purposes in connection with the financing, design, engineering, procurement, construction, installation, testing, commissioning, ownership, operation and maintenance of a 1,440MW coal-fired power plant and associated facilities, including the transmission line and interconnection facilities.

The tenure of the facility agreement is 18 years with a periodic distribution rate between 4.7% and 5.6% per annum. The sukuk facility agreement consists of 28 tranches with tenures ranging from 4.5 years to 18 years.

(c) RULS

On 29 June 2004, KEV issued RM957.6 million of RULS to the Company and Malakoff Corporation Berhad to finance the acquisition of Stesen Janaelektrik Sultan Salahuddin Abdul Aziz, Kapar.

The main features of the RULS are as follows:

- (i) The RULS bears interest at 8.0% per annum on the outstanding nominal value of the RULS. The interest is repayable semi-annually on the last day of the relevant six month period from the issue date of RULS. No compounding interest will be charged on the unpaid interest after the due date.
- (ii) The RULS is repayable from the third year from the issue date of RULS as stipulated in the agreement dated 29 June 2004. The RULS has to be settled in full by the final maturity date of 8 July 2029.

36 BORROWINGS (CONTINUED)

Reconciliation of borrowings from financing activities during the financial year/period is as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
As at beginning of the financial year/period	41,443.7	38,846.5	15,348.1	15,977.0
Cash flows:				
- Drawdowns	8,206.4	4,191.6	6,326.1	0
- Repayments	(1,954.4)	(1,030.6)	(305.5)	(62.0)
- Interest paid	(1,986.9)	(575.4)	(681.4)	(278.8)
Non-cash changes:				
- Interest on borrowings	1,937.8	533.9	763.9	228.2
- Translation loss/(gain) - foreign term loans	185.8	(522.3)	185.8	(516.3)
As at end of the financial year/period	47,832.4	41,443.7	21,637.0	15,348.1

37 GOVERNMENT DEVELOPMENT GRANTS

Accounting Policy

Grants from the government are recognised at their fair values where there is a reasonable assurance that the grants will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the statement of profit or loss over the period necessary to match them with the costs they are intended to compensate.

Government grants relating to construction of PPE are included in non-current liabilities as deferred income and are credited to the statement of profit or loss on the straight line method over the expected lives of the related assets.

A subsidiary of the Group obtained Government loans at an interest rate which is below the market rate of interest. The differential between the initial carrying value of the loan based on market rate and the Government rate is recognised as a deferred income and is credited to the statement of profit or loss over the period necessary to match the interest costs.

	Group	
	31.12.2018 RM'million	31.12.2017 RM'million
As at the beginning of the financial year/period	964.1	977.8
Reclassification made from payables	8.7	0
Additions during the financial year/period:		
- Cash	5.6	174.7
- Assets	69.2	0
- Receivables	23.2	0
- In relation to Government loans	13.1	8.4
Released to statement of profit or loss:		
- Other operating income (Note 8)	(51.5)	(190.0)
- Finance cost (Note 10(b))	(27.4)	(6.8)
As at the end of the financial year/period	1,005.0	964.1

37 GOVERNMENT DEVELOPMENT GRANTS (CONTINUED)

The development grants are provided by the Government to a subsidiary mainly for the construction of PPE of RM728.8 million (FPE 31.12.2017: RM705.5 million) and government loan below market interest of RM244.4 million (FPE 31.12.2017: RM258.6 million).

Reconciliation of Government development grants from financing activities during the financial year/period is as follows:

	Group	
	31.12.2018 RM'million	31.12.2017 RM'million
As at the beginning of the financial year/period	964.1	977.8
Cash	5.6	174.7
Non-cash changes:		
- Reclassification made from payables	8.7	0
- Receivables from Government	23.2	0
- Assets	69.2	0
- Deferred income relating to Government loans	13.1	8.4
- Other operating income	(51.5)	(190.0)
- Finance cost (interest accretion)	(27.4)	(6.8)
As at the end of the financial year/period	1,005.0	964.1

38 OTHER LIABILITIES

	Note	Group		Company	
		31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Payable to:					
- Federal Government		0	15.3	0	0
- State Government		22.8	26.0	22.8	26.0
Lease payables	24(b)	139.3	128.6	157.5	140.0
Prepayment by lessee	24(b)	215.9	301.9	0	0
Retention monies		602.0	517.2	536.9	473.5
Others*		416.2	368.4	2.8	2.8
		1,396.2	1,357.4	720.0	642.3

* Included in Others is the deferred consideration arising from the acquisition of GVO and BCL by a subsidiary (Note 15) amounting to RM66.2 million.

39 SHARE CAPITAL

Accounting Policy

(a) Classification

Ordinary shares and non-redeemable preference shares with dividends are classified as equity. Other shares are classified as equity and/or liability according to the economic substance of the particular instrument.

Distributions to holders of a financial instrument classified as an equity instrument are charged directly to equity.

(b) Share issue costs

Incremental external costs directly attributable to the issuance of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(c) Dividends to shareholders of the Company

Dividends are recognised as liability in the period in which they are declared.

	Note	Group and Company	
		31.12.2018	31.12.2017
<u>Issued and fully paid:</u>			
Ordinary shares		5,686,888,771	5,665,986,271
Special Rights Redeemable Preference Share	(a)	1	1
Total share capital issued and fully paid as at the end of the financial year/period		5,686,888,772	5,665,986,272

	Note	Group and Company			
		Number of shares 31.12.2018 Million	Amount 31.12.2018 RM'million	Number of shares 31.12.2017 Million	Amount 31.12.2017 RM'million
<u>Issued and fully paid:</u>					
Ordinary shares					
As at the beginning of the financial year/period		5,666.0	11,199.6	5,659.0	11,124.9
LTIP shares issued during the financial year/period		(b) 20.9	246.5	7.0	74.7
As at the end of the financial year/period		5,686.9	11,446.1	5,666.0	11,199.6

39 SHARE CAPITAL (CONTINUED)

(a) Special Rights Redeemable Preference Share ('Special Share')

- (i) The Special Share would enable the Government of Malaysia through the Minister of Finance Incorporated ('MOF Incorporated') to ensure that certain major decisions affecting the operations of the Company are consistent with the Government's policies. The Special Shareholder, which may only be the Government or any representative or person acting on its behalf, is entitled to receive notices of meetings but not to vote at such meetings of the Company. However, the Special Shareholder is entitled to attend and speak at such meetings.

The Special Shareholder has the right to appoint any person, but not more than six at any time, to be a member of the Board of Directors of the Company.

- (ii) Certain matters, in particular the alteration of the Articles of Association of the Company relating to the rights of the Special Shareholder, creation and issue of additional shares which carry different voting rights, the dissolution of the Company, substantial disposal of assets, amalgamations, merger and takeover, require the prior consent of the Special Shareholder.

- (iii) The Special Shareholder does not have any right to participate in the capital or profits of the Company.

- (iv) The Special Shareholder has the right to require the Company to redeem the Special Share, at par, at any time.

- (b) The Company issued and allotted 12,194,300 on 30 April 2018 and 8,708,200 on 28 November 2018 ordinary shares in the Company to eligible executives or eligible employees, pursuant to the letter of offer dated 1 April 2016, 28 March 2017 and 3 August 2015 respectively in accordance with the By-laws of the LTIP scheme of the Company. Subsequent to the above, the issued and paid up share capital of the Company increased to 5,686,888,771 ordinary shares.

40 OTHER RESERVES

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
LTIP reserve	308.7	287.4	308.7	287.4
Employee benefits reserve	(6,034.8)	(5,830.5)	(5,670.4)	(5,619.7)
Foreign currency translation reserve	(705.0)	(766.2)	0	0
AFS reserve	0	31.3	0	30.6
Fair value of financial assets at FVOCI	38.4	0	37.7	0
Others*	0	(95.0)	0	0
	(6,392.7)	(6,373.0)	(5,324.0)	(5,301.7)

* This relates to put option to NCI on shares of a subsidiary which was exercised in the current financial year.

40 OTHER RESERVES (CONTINUED)

The movements in each category of reserves are as follows:

	LTIP reserve RM'million	Employee benefits reserve RM'million	Foreign currency translation reserve RM'million	FVOCI/ AFS reserve RM'million	Others RM'million	Total RM'million
Group						
31.12.2018						
As at the beginning of the financial year	287.4	(5,830.5)	(766.2)	31.3	(95.0)	(6,373.0)
Arising in the financial year	21.3	(204.3)	61.2	7.1	95.0	(19.7)
As at the end of the financial year	308.7	(6,034.8)	(705.0)	38.4	0	(6,392.7)
31.12.2017						
As at the beginning of the financial period	295.8	(5,722.9)	(640.6)	33.9	(95.0)	(6,128.8)
Arising in the financial period	(8.4)	(107.6)	(125.6)	(2.6)	0	(244.2)
As at the end of the financial period	287.4	(5,830.5)	(766.2)	31.3	(95.0)	(6,373.0)
	LTIP reserve RM'million	Employee benefits reserve RM'million	FVOCI/ AFS reserve RM'million	Total RM'million		
Company						
31.12.2018						
As at the beginning of the financial year	287.4	(5,619.7)	30.6	(5,301.7)		
Arising in the financial year	21.3	(50.7)	7.1	(22.3)		
As at the end of the financial year	308.7	(5,670.4)	37.7	(5,324.0)		
31.12.2017						
As at the beginning of the financial period	295.8	(5,519.9)	33.2	(5,190.9)		
Arising in the financial period	(8.4)	(99.8)	(2.6)	(110.8)		
As at the end of the financial period	287.4	(5,619.7)	30.6	(5,301.7)		

41 COMMITMENTS

(a) Capital commitments for 5 years

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Authorised capital expenditure not provided in the financial statements:				
Property, plant and equipment				
- Contracted	1,534.8	1,109.4	737.9	681.7
- Not contracted	69,393.4	36,641.7	61,384.9	35,937.4
	70,928.2	37,751.1	62,122.8	36,619.1

(b) Operating lease commitments - as lessee

The Group and Company lease a number of plant and machineries, office buildings and equipment under operating leases. These leases have average tenures between 3 and 25 years.

Future minimum rental payable under non-cancellable operating leases at the reporting date are as follows:

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Payable not later than 1 year	4,224.3	4,437.5	5,203.4	5,412.6
Payable later than 1 year and not later than 5 years	13,032.6	14,323.8	16,777.2	18,320.7
Payable more than 5 years	23,415.4	26,322.3	36,388.9	40,022.6
	40,672.3	45,083.6	58,369.5	63,755.9

(c) Operating lease commitments - as lessor

The Group and Company lease out its plant and equipment under non-cancellable operating leases. The lessees are required to pay absolute fixed lease payments during the lease period. Total future minimum lease receivables under non-cancellable operating leases contracted for at the reporting date but not recognised as receivables, are as follows:

	Group		Company	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Payable not later than 1 year	65.2	79.7	57.3	61.8
Payable later than 1 year and not later than 5 years	261.0	318.7	229.1	247.4
Payable more than 5 years	122.4	204.7	12.8	13.1
	448.6	603.1	299.2	322.3

42 CONTINGENT LIABILITIES

Accounting Policy

The Group and Company do not recognise contingent assets and liabilities other than those arising from business combinations, but disclose its existence in the financial statements. A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the Group and Company or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in the extremely rare case where there is a liability that cannot be recognised because it cannot be measured reliably. However, contingent liabilities do not include financial guarantee contracts. A contingent asset is a possible asset that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the Group and Company. The Group and Company do not recognise contingent assets but disclose its existence where inflows of economic benefits are probable, but not virtually certain.

Determination of the treatment of contingent liabilities is based on the Group and Company's view of the expected outcome of the contingencies after consulting legal counsel for litigation cases and internal and external experts to the Group and Company for matters in the ordinary course of business.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Claims by third parties:				
- Contractors	115.4	125.4	115.4	104.6
- Customers	18.0	78.7	18.0	78.7
- Others	176.7	136.8	120.0	120.9
	310.1	340.9	253.4	304.2
Trade guarantees and performance bonds	27.5	66.0	0	0
	337.6	406.9	253.4	304.2

All third party claims are being resolved and the Directors are of the opinion that their outcomes will not have a material adverse effect on the financial positions of both the Group and Company.

On 7 December 2016, the Company and the Inland Revenue Board ('IRB') entered into a consent judgement before the Kuala Lumpur High Court to substitute the judicial review proceedings with regard to the notices of additional assessment dated 23 November 2015 ('Notices') arising from the disallowance of the Company's re-investment allowance ('RIA') claims by filing an appeal to the Special Commissioners of Income Tax ('SCIT'). The consent judgement also provides that the IRB will not commence any proceedings relating to the Notices until this matter is determined by the SCIT and by the High Court, if there is a subsequent appeal by either party. On 15 December 2016, the Company filed notices of appeal against the Notices to the SCIT according to Section 99(1) of the Income Tax Act 1967. The appeals have since been registered before the SCIT. The Company has obtained legal advice from its tax solicitors on the merits of the appeals and on this basis, the Directors are of the opinion that no provision is required in the financial statements for the potential tax liability up to the reporting date.

43 SIGNIFICANT RELATED PARTY DISCLOSURES

For the purposes of these financial statements, parties are considered to be related to the Group or the Company if the Group or the Company has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group or the Company and the party are subject to common control or common significant influence.

The related parties of the Group and Company are:

(a) Subsidiary companies

Details of the subsidiary companies are shown in Note 15.

(b) Associate companies

Associate companies are those entities in which the Group has significant influence but not control as disclosed in Note 17.

(c) Key Management Personnel ('KMP')

KMP are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Group and Company either directly or indirectly. The KMP of the Group or of the Company includes Executive Directors and Non-Executive Directors of the Company and certain members of senior management of the Company.

Whenever exist, related party transactions also include transactions with entities that are controlled, jointly controlled or significantly influenced directly or indirectly by any key management personnel or their close family members.

(d) Government-related entities

Government-linked corporations are related to the Group and Company by virtue of the substantial shareholdings of Khazanah Nasional Berhad ('KNB'), with 28.8% (2017: 28.1%) equity interest. KNB is a wholly-owned entity of MoF Incorporated which is in turn owned by the Ministry of Finance. KNB and entities directly controlled by the Government of Malaysia are collectively referred to as government-related entities to the Group and Company.

The Government of Malaysia and bodies controlled or jointly controlled by the Government of Malaysia are related parties of the Group and Company. The Group and Company enter into transactions with many of these bodies, which include but are not limited to purchasing of goods, including use of public utilities and amenities, and the placing of bank deposits.

All the transactions entered into by the Group and Company with the government-related entities are conducted in the ordinary course of the Group and Company's businesses on negotiated terms or terms comparable to those with other entities that are not government-related, except otherwise disclosed elsewhere in the financial statements.

The Group and Company are principally involved in the provision of electricity as part of their ordinary operations. These services are carried out generally on commercial terms that are consistently applied to all customers. These transactions have been established on terms and conditions that are not materially different from those obtainable in transactions with unrelated parties.

Apart from the individually significant transactions and balances as disclosed elsewhere in the financial statements, the Group and Company have collectively, but not individually significant transactions with related parties.

43 SIGNIFICANT RELATED PARTY DISCLOSURES (CONTINUED)

In addition to the transactions detailed elsewhere in the financial statements, the Group and Company had the following significant transactions with the following related parties based on agreed terms during the financial year/period:

	Associate companies		KMP	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Group				
<u>Income:</u>				
- Sales of electricity	1.2	0.4	0	0
- Interest income	14.8	3.6	0	0
- Dividend income	29.6	18.0	0	0
- Rental income	8.4	4.7	0	0
- Leasing income	14.1	8.5	0	0
<u>Expenses:</u>				
- Purchase of electricity	3,736.5	1,269.9	0	0
- Key management compensations:				
- Salaries, allowances and bonuses	0	0	27.4	6.7
- Benefits-in-kind	0	0	1.7	0.2
- Defined contribution retirement plan	0	0	3.5	0.9
- Other staff benefits	0	0	0.7	0.6
- LTIP expense	0	0	11.6	2.4
- Leasing expense	18.2	5.6	0	0
Amounts due from	364.9	332.0		
Amounts due to	(656.3)	(691.2)		
Investment in unquoted debt securities	326.7	318.5		

43 SIGNIFICANT RELATED PARTY DISCLOSURES (CONTINUED)

In addition to the transactions detailed elsewhere in the financial statements, the Group and Company had the following significant transactions with the following related parties based on agreed terms during the financial year/period: (continued)

	Subsidiary companies		Associate companies		KMP	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Company						
<u>Income:</u>						
- Sales of electricity	42.8	13.5	1.2	0.4	0	0
- Interest income	45.9	16.0	0.6	3.6	0	0
- Dividend income	64.0	0	26.4	18.0	0	0
- Rental income	25.4	8.4	8.4	4.7	0	0
- Leasing income	0.1	0.3	14.1	8.5	0	0
- Redemption of RPS	213.9	30.6	0	0	0	0
- Project management and consultancy	277.1	0	0	0	0	0
<u>Expenses:</u>						
- Purchase of electricity	11,917.3	3,430.5	3,736.5	1,269.9	0	0
- Training fees	61.3	28.9	0	0	0	0
- Finance lease interest	1,025.1	329.9	0	0	0	0
- Key management compensations:						
- Salaries, allowances and bonuses	0	0	0	0	27.0	6.5
- Benefits-in-kind	0	0	0	0	1.7	0.2
- Defined contribution retirement plan	0	0	0	0	3.5	0.9
- Other staff benefits	0	0	0	0	0.6	0.6
- LTIP expense	0	0	0	0	11.6	2.4
- Leasing expense	14.5	0	18.2	5.6	0	0
Amounts due from	4,754.9	5,400.3	7.5	9.2		
Amounts due to	(1,459.4)	(1,086.3)	(646.4)	(683.0)		
Investment in unquoted debt securities	0	0	8.7	0		

44 SEGMENTAL REPORTING

Segmental reporting is not presented as the Group is principally engaged in the generation, transmission, distribution and sales of electricity and the provision of other related services, which are substantially within a single business segment and this is consistent with the current practice of internal reporting. The Group operates primarily in Malaysia.

45 FINANCIAL INSTRUMENTS

Accounting Policy

Financial assets

(a) Classification

From 1 January 2018, the Group and Company classify its financial assets in the following categories: at amortised cost ('AC'), at FVOCI and at FVTPL. The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

(i) Financial assets at AC:

- The asset is held within a business model whose objective is to collect the contractual cash flows; and
- The contractual terms give rise to cash flows that are solely payments of principal and interest.

(ii) Financial assets at FVOCI:

- equity securities which are not held for trading, and which the Group and Company have irrevocably elected at initial recognition to recognise in this category. These are strategic investments and the Group and Company consider this classification to be more relevant; and
- debt securities where the contractual cash flows are solely principal and interest and the objective of the Group and Company's business model is achieved both by collecting cash flows and selling financial assets.

(iii) Financial assets at FVTPL:

- debts instruments that do not qualify for measurement at either AC or FVOCI;
- equity instruments that are held for trading; and
- equity instruments for which the Group and Company have not elected to recognise fair value gains and losses through OCI.

The Group and Company reclassify debt investments when and only when its business model for managing those assets changes.

See Note 47 for the impact of the change in accounting policy following the adoption of MFRS 9 on the classification of financial assets.

(b) Recognition and derecognition

Regular purchases and sales of financial assets are recognised on the trade-date, the date on which the Group and Company commit to purchase or sell the assets. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group and Company have transferred substantially all the risks and rewards of ownership.

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Financial assets (continued)

(c) Measurement

(i) Initial recognition

At initial recognition, the Group and Company measure a financial asset at its fair value plus, in the case of a financial asset not at FVTPL, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVTPL are expensed in the statement of profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

(ii) Subsequent measurement

• Debt instruments

Subsequent measurement of debt instruments depends on the Group and Company's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group and Company classify its debt instruments:

- AC: Interest income from financial assets at AC is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss.
- FVOCI: Movements in the carrying amount of debt instruments classified under FVOCI are taken through OCI. Upon derecognition of the assets, the cumulative gain or loss previously recognised in OCI is recognised to the statement of profit or loss. The interest income from these financial assets is included in the finance income using the effective interest rate method. The foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as a separate line item in the statement of profit or loss.
- FVTPL: Financial assets that do not meet the criteria for AC or FVOCI are measured at FVTPL. A gain or loss on debt instruments which are measured at FVTPL are recognised in the profit or loss.

• Equity instruments

The Group and Company have elected to present fair value gains and losses on equity instruments in OCI. The fair value gains and losses of these instruments will not be reclassified subsequently to the profit or loss. Dividends from such investments are recognised in the profit or loss as other income. Impairment losses (and reversal of impairment losses) on equity instruments measured at FVOCI are also reported as other changes in fair value.

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Financial assets (continued)

(d) Impairment

From 1 January 2018, the Group and Company assess on a forward looking basis the expected credit losses associated with its debt instruments carried at AC and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

The Group and Company have four broad types of financial instruments that are subject to the ECL model:

- (i) Trade receivables
- (ii) Contract assets
- (iii) Non-trade receivables
 - intercompany loans/advances
 - rechargeable job orders ('RJO') debtors
 - sundry deposits for rental spaces
 - rental receivables
 - staff loans/advances
 - investment in unquoted debt security
- (iv) Financial guarantee contracts issued

While cash and cash equivalents are also subject to the impairment requirements of MFRS 9, the identified impairment loss was immaterial.

ECL represents a probability-weighted estimate of the difference between the present value of the cash flows according to the contract and present value of the cash flows the Group and Company expected to receive, over the remaining life of the financial instruments. For financial guarantee contracts, the ECL is the difference between the expected payments to be reimbursed to the holder of the guaranteed debt instrument less any amounts that the Company expects to receive from the holder, the debtor or any other party.

The measurement of ECL reflects:

- (i) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- (ii) the time value of money; and
- (iii) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

For trade receivables, the Group and Company apply the simplified approach, which requires expected lifetime losses to be recognised from initial recognition of the receivables, except for those which are in default or credit impaired are assessed individually.

For non-trade receivables, at each reporting date the Group and Company measure ECL through a loss allowance at an amount equal to 12 month ECL if credit risk on a financial instrument or a group of financial instruments has not increased significantly since initial recognition.

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Financial assets (continued)

(d) Impairment (continued)

The Group and Company use the three-stage approach for non-trade receivables which reflect their credit risks and how the loss allowances are determined for each of those stages. Summary of the assumptions underpinning the Group and Company's ECL model for non-trade receivables are as follows:

Types of non-trade receivables	Stage 1 Low credit risk (12 month ECL Model)	Stage 2 Significant increase in credit risk (Lifetime ECL Model)	Stage 3 Credit impaired (Lifetime ECL Model)
• Intercompany loans/advances	Positive operating cash flows/Net tangible assets (Total Assets - Total Liabilities)/ Subsidiaries with assets under construction having guaranteed long term revenue contract and agents	Negative operating cash flows and net tangible liabilities (Total Assets - Total Liabilities)/ Without defaulting on loan repayments	Dormant/History of default
• Rechargeable job orders ('RJO') debtors	Covered by indent/ downpayment/Letter of Undertaking ('LOU')	No indent/ downpayment/LOU	Accident cases
• Sundry deposits for rental spaces	Active contracts	Inactive contracts and amounts outstanding less or equal to 12 months	Inactive contracts and amounts outstanding more than 12 months
• Rental receivables	Active contracts and amounts outstanding less or equal to 3 months	Active contracts and amounts outstanding more than 3 months	Inactive contracts
• Staff loans/advances	Current employees	Ex-employees with no default in payment	Ex-employees with default in payment
• Investment in unquoted debt security	No history of default and no current default	History of default but no current default	History of default and currently defaulted

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Financial assets (continued)

(d) Impairment (continued)

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECL, the Group and Company consider reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment including forward-looking information, where available. Regardless of the analysis above, a significant increase in credit risk is presumed if the financial asset is past due in making a contractual payment.

The gross carrying amount of a financial asset is written off (either partially or fully) to the extent that there is no realistic prospect of recovery. This is generally the case when either the Group or Company determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subjected to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group or Company's procedures for recovery of amounts due.

Financial liabilities

MFRS 9 retains most of the MFRS 139 requirements for financial liabilities. From 1 January 2018, the Group and Company classify its financial liabilities in the following categories: at amortised cost ('AC') and at FVTPL.

Offsetting financial instruments

Financial assets and liabilities are offset and the net amount presented in the statement of financial position ('SOFPI') when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy.

Financial guarantee contracts

Financial guarantee contracts are contracts that require the Group or the Company to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due, in accordance with the terms of a debt instrument.

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of;

- (i) the amount determined in accordance with the expected credit loss model under MFRS 9; and
- (ii) the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of MFRS 15.

The fair value of financial guarantees is determined as the present value of the difference in net cash flows between the contractual payments under the debt instrument and the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables of associates are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.

45 FINANCIAL INSTRUMENTS (CONTINUED)**Accounting Policy (continued)**

Accounting policies applied until 31 December 2017

Financial assets

The Group and Company have applied MFRS 9 retrospectively, but have elected not to restate comparative information. As a result, the comparative information provided continues to be accounted for in accordance with the Group and Company's previous accounting policy.

(i) Classification

Until 31 December 2017, the Group and Company classified its financial assets in the following categories:

- financial assets at FVTPL;
- loans and receivables ('L&R'); and
- available-for-sale ('AFS') financial assets.

The classification depended on the purpose for which the investments were acquired. Management determined the classification of its investments at initial recognition.

- Financial assets at FVTPL

Financial assets at FVTPL are financial assets held-for-trading. A financial asset is classified in this category if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term. Derivatives are also categorised as held-for-trading unless they are designated as hedges.

- L&R

L&R are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. If collection of the amounts is expected in one year or less, they are classified as current assets. If not, they are classified as non-current assets.

- AFS financial assets

AFS financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless the investments mature or management intends to dispose it within 12 months of the end of the reporting period.

(ii) Reclassification

The Group and Company could choose to reclassify a non-derivative trading financial asset out of the held for trading category if the financial asset was no longer held for the purpose of selling it in the near term. Financial assets other than L&R were permitted to be reclassified out of the held for trading category only in rare circumstances arising from a single event that was unusual and highly unlikely to recur in the near term. In addition, the Group and Company could choose to reclassify financial assets that would meet the definition of L&R out of the held for trading or AFS categories if the Group and Company had the intention and ability to hold these financial assets for the foreseeable future or until maturity at the date of reclassification.

Reclassifications were made at fair value as of the reclassification date. Fair value became the new cost or AC as applicable, and no reversals of fair value gains or losses recorded before reclassification date were subsequently made. Effective interest rates for financial assets reclassified to L&R category were determined at the reclassification date. Further increases in estimates of cash flows adjusted effective interest rates prospectively.

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Accounting policies applied until 31 December 2017 (continued)

Financial assets (continued)

(iii) Subsequent measurement

- Gain and losses

AFS financial assets and financial assets at FVTPL are subsequently carried at fair value. L&R financial assets are subsequently carried at AC using the effective interest method.

Changes in the fair values of financial assets at FVTPL, including the effects of currency translation are recognised in the statement of profit or loss in the period in which the changes arise.

- Impairment of financial assets

The Group and Company assess at the end of the reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and an impairment loss is incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

- Assets carried at AC

Evidence of impairment may include indications that the debtors or a group of debtor is experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganisation, and where observable data indicates that there is a measurable decrease in the estimated future cash flows, such as changes in arrears or economic conditions that correlate with defaults.

The amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate method. The asset's carrying amount is reduced and the amount of the loss is recognised in the statement of profit or loss. If L&R have a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate determined under the contract. As a practical expedient, the Group and Company may measure impairment on the basis of an instrument's fair value using an observable market price.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be objectively related to an event occurring after the impairment was recognised (such as an improvement in the debtor's credit rating), the reversal of the previously recognised impairment loss is recognised in the statement of profit or loss.

When an asset is uncollectible, it is written off against the related accumulated impairment losses account. Such assets are written off after all the necessary procedures have been completed and the amount of the losses have been determined.

- Assets classified as AFS

For debt securities, the Group and Company use criteria and measurement of impairment loss applicable for 'assets carried at AC' above. If, in a subsequent period, the fair value of a debt instrument classified as AFS increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the statement of profit or loss, the impairment loss is reversed through the statement of profit or loss.

45 FINANCIAL INSTRUMENTS (CONTINUED)

Accounting Policy (continued)

Accounting policies applied until 31 December 2017 (continued)

Financial assets (continued)

(iii) Subsequent measurement (continued)

- Impairment of financial assets (continued)
 - Assets classified as AFS (continued)

In the case of equity securities classified as AFS, in addition to the criteria for 'assets carried at AC' above, a significant or prolonged decline in the fair value of the security below its cost is also considered as an indicator that the assets are impaired. If any such evidence exists for AFS financial assets, the cumulative losses that had been recognised directly in equity is removed from equity and recognised in the statement of profit or loss. The amount of cumulative losses that is reclassified to the statement of profit or loss is the difference between the acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised in the statement of profit or loss. Impairment losses recognised in the statement of profit or loss on equity instruments classified as AFS are not reversed through the statement of profit or loss.

(iv) Derecognition

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group and Company have transferred substantially all risks and rewards of ownership to related party.

Financial liabilities

The Group and Company classify its financial liabilities in two categories, at FVTPL or other financial liabilities. The Group and Company determine the classification of its financial liabilities at initial recognition.

Other financial liabilities are non-derivative financial liabilities, initially recognised at fair value plus transaction costs and subsequently carried at amortised cost using the effective interest method. Changes in the carrying value of these liabilities are recognised in the statement of profit or loss.

The Group and Company's other financial liabilities comprise trade and other payables and borrowings in the statement of financial position. Financial liabilities are classified as current liabilities; except for maturities more than 12 months after the reporting date, in which case they are classified as non-current liabilities.

Financial liabilities are derecognised when the liability is either discharged, cancelled, expired or has been restructured with substantially different terms.

Financial guarantee contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of the amount determined in accordance with MFRS 137 and the amount initially recognised less cumulative amortisation, where appropriate.

The fair value of financial guarantees is determined as the present value of the difference in net cash flows between the contractual payments under the debt instrument and the payments that would be required without guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

45 FINANCIAL INSTRUMENTS (CONTINUED)

- (a) Categories of financial instruments in compliance to MFRS 9 with comparative of MFRS 139 compliance.

The financial instruments are categorised as follows:

- (i) Financial assets and financial liabilities at amortised cost ('AC');
- (ii) Financial assets and financial liabilities at FVTPL;
- (iii) Financial assets at FVOCI;
- (iv) Loans and receivables ('L&R');
- (v) Available-for-sale financial assets ('AFS'); and
- (vi) Other financial liabilities measured at amortised cost ('OL').

31.12.2018	Carrying amount RM'million	AC RM'million	FVTPL RM'million	FVOCI RM'million
Group				
<u>Financial assets</u>				
Investments in unquoted debt securities	326.7	326.7	0	0
Long term receivables	102.7	102.7	0	0
Finance lease receivable	13.4	13.4	0	0
Financial assets at FVOCI	76.4	0	0	76.4
Receivables	4,620.9	4,620.9	0	0
Amounts due from joint ventures	10.8	10.8	0	0
Amounts due from associates	364.9	364.9	0	0
Financial assets at FVTPL	9,743.3	0	9,743.3	0
Deposits, bank and cash balances	8,670.8	8,670.8	0	0
Derivative financial instruments	1.4	0	1.4	0
	23,931.3	14,110.2	9,744.7	76.4
Company				
<u>Financial assets</u>				
Investment in unquoted debt security	8.7	8.7	0	0
Long term receivables	86.1	86.1	0	0
Financial assets at FVOCI	75.7	0	0	75.7
Receivables	2,822.1	2,822.1	0	0
Amounts due from subsidiaries	4,754.9	4,754.9	0	0
Amounts due from associates	7.5	7.5	0	0
Financial assets at FVTPL	5,224.6	0	5,224.6	0
Deposits, bank and cash balances	5,852.4	5,852.4	0	0
	18,832.0	13,531.7	5,224.6	75.7

45 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

31.12.2017 (Restated)	Carrying amount RM'million	L&R RM'million	FVTPL RM'million	AFS RM'million
Group				
<u>Financial assets</u>				
Investment in unquoted debt security	318.5	318.5	0	0
Long term receivables	249.5	249.5	0	0
Finance lease receivable	14.2	14.2	0	0
AFS financial assets	69.3	0	0	69.3
Receivables	6,016.2	6,016.2	0	0
Amounts due from joint ventures	1.1	1.1	0	0
Amounts due from associates	332.0	332.0	0	0
Financial assets at FVTPL	10,490.2	0	10,490.2	0
Deposits, bank and cash balances	5,415.0	5,415.0	0	0
	22,906.0	12,346.5	10,490.2	69.3
Company				
<u>Financial assets</u>				
Long term receivables	197.0	197.0	0	0
AFS financial assets	68.6	0	0	68.6
Receivables	3,233.3	3,233.3	0	0
Amounts due from subsidiaries	5,400.3	5,400.3	0	0
Amounts due from associates	9.2	9.2	0	0
Financial assets at FVTPL	3,850.5	0	3,850.5	0
Deposits, bank and cash balances	3,001.3	3,001.3	0	0
	15,760.2	11,841.1	3,850.5	68.6

45 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

31.12.2018	Carrying amount RM'million	AC RM'million	FVTPL RM'million
Group			
<u>Financial liabilities</u>			
Payables	9,166.2	9,166.2	0
Financial guarantee contract	270.3	0	270.3
Finance lease payables	4,874.1	4,874.1	0
Amounts due to associates	656.3	656.3	0
Amounts due to joint ventures	0.5	0.5	0
Borrowings	47,832.4	47,832.4	0
Derivative financial instruments	55.5	0	55.5
Other liabilities	602.0	602.0	0
	63,457.3	63,131.5	325.8
Company			
<u>Financial liabilities</u>			
Payables	5,635.9	5,635.9	0
Financial guarantee contracts	272.7	0	272.7
Finance lease payables	16,668.8	16,668.8	0
Amounts due to subsidiaries	1,459.4	1,459.4	0
Amounts due to associates	646.4	646.4	0
Borrowings	21,637.0	21,637.0	0
Other liabilities	536.9	536.9	0
	46,857.1	46,584.4	272.7

45 FINANCIAL INSTRUMENTS (CONTINUED)

(a) Categories of financial instruments (continued)

31.12.2017 (Restated)	Carrying amount RM'million	OL RM'million	FVTPL RM'million
Group			
<u>Financial liabilities</u>			
Payables	8,668.3	8,668.3	0
Finance lease payables	5,210.5	5,210.5	0
Amounts due to associates	691.2	691.2	0
Borrowings	41,443.7	41,443.7	0
Derivative financial instruments	47.3	0	47.3
Other liabilities	517.2	517.2	0
	56,578.2	56,530.9	47.3
Company			
<u>Financial liabilities</u>			
Payables	5,491.1	5,491.1	0
Finance lease payables	17,790.9	17,790.9	0
Amounts due to subsidiaries	1,086.3	1,086.3	0
Amounts due to associates	683.0	683.0	0
Borrowings	15,348.1	15,348.1	0
Derivative financial instruments	0.2	0	0.2
Other liabilities	473.5	473.5	0
	40,873.1	40,872.9	0.2

(b) Financial risk management

The Group and Company have exposure to the following risks from their use of financial instruments:

- Credit risk;
- Liquidity risk; and
- Market risk.

Credit risk

Credit risk is the risk of a financial loss to the Group and Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group and Company's exposures to credit risk arise principally from its receivables from customers, investments in unquoted debt securities, deposits, bank and cash balances and derivative financial instruments. In addition, the Company's exposure to credit risk arises principally from loans and advances to subsidiaries and financial guarantees given to banks in respect of banking facilities granted to certain subsidiaries and an associate.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

Net loss on impairment of financial instruments and contract assets are mainly from:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Net (losses)/gains on:				
Trade receivables				
- recognised in profit or loss	(402.9)	(106.5)	(392.6)	(95.2)
- reversed	212.8	0	176.0	0
Contract assets				
- recognised in profit or loss	(83.7)	(56.4)	(78.4)	(56.1)
- reversed	76.1	14.2	75.8	14.2
Intercompany loans/advances				
- recognised in profit or loss	0	0	(86.9)	(13.3)
- reversed	0	0	79.4	14.5
Other non-trade receivables				
- recognised in profit or loss	(79.2)	(15.0)	(35.9)	(1.7)
- reversed	66.7	5.8	66.4	2.0
Amounts due from associates				
- recognised in profit or loss	(7.1)	0	0	0
- reversed	0.3	0	0.3	0
Amounts due from joint ventures				
- recognised in profit or loss	0	(5.5)	0	0
Financial guarantee contracts				
- recognised in profit or loss	(270.3)	0	(270.8)	0
	(487.3)	(163.4)	(466.7)	(135.6)

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(i) Trade receivables and contract assets

Risk management objectives, policies and processes for managing the risk

The Group and Company have a credit policy in place and the exposures to credit risk are monitored on an ongoing basis. Normally, financial guarantees given by banks, shareholders or directors of customers are obtained, and credit evaluations are performed on customer requiring credit over a certain amount.

Exposure to credit risk, credit quality and collateral

The Group and Company's credit policy provide trade receivables with a 30 days (FPE 31.12.2017: 30 days) credit period. The Group and Company have no major significant concentration of credit risk due to their diverse customer base. An impairment has been made for estimated unrecoverable amounts, determined by reference to past default experience of individual debtor and collection portfolio.

The total trade receivables and contract assets and the impairment provided are as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Trade receivables	5,278.7	5,697.0	3,831.7	4,248.9
Less: Impairment losses	(1,640.1)	(1,495.0)	(1,471.8)	(1,385.9)
	3,638.6	4,202.0	2,359.9	2,863.0
Contract assets	3,445.5	3,115.7	3,283.4	2,981.8
Less: Impairment losses	(83.7)	(56.4)	(78.4)	(56.1)
	3,361.8	3,059.3	3,205.0	2,925.7

Given the varied nature of the Group and Company's customer base, the following analysis of trade receivables by type of customer is considered the most appropriate disclosure of credit concentration.

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Industrial	999.7	1,146.9	985.2	1,101.9
Commercial	1,595.5	1,818.9	1,527.9	1,724.8
Domestic	1,366.4	1,448.9	1,276.6	1,349.3
Specific agriculture	10.7	13.0	10.7	13.0
Mining	2.6	8.0	2.6	8.0
Public lighting	36.6	63.0	28.7	51.9
Others	1,267.2	1,198.3	0	0
Trade receivables	5,278.7	5,697.0	3,831.7	4,248.9
Contract asset	3,445.5	3,115.7	3,283.4	2,981.8

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(i) Trade receivables and contract assets (continued)

Impairment losses

The loss allowance for the trade receivables and the contract assets as at 31 December 2018 and 1 January 2018 (on adoption of MFRS 9) was as follows:

31.12.2018	Gross RM'million	Individual impairment RM'million	Expected loss rate %	Collective impairment RM'million	Net RM'million
Group					
Not past due	1,659.3	(35.9)	1.3	(20.4)	1,603.0
Past due 0 - 30 days	522.3	(0.9)	2.7	(14.0)	507.4
Past due 31 - 120 days	914.3	(86.2)	8.2	(67.9)	760.2
Past due 121 - 240 days	487.0	(64.3)	31.4	(132.6)	290.1
Past due 241 - 365 days	347.1	(54.4)	62.9	(184.0)	108.7
Past due more than 365 days	1,348.7	(292.6)	65.0	(686.9)	369.2
Trade receivables	5,278.7	(534.3)		(1,105.8)	3,638.6
Contract assets	3,445.5	(34.5)	1.4	(49.2)	3,361.8
Company					
Not past due	1,329.6	(34.8)	1.4	(17.5)	1,277.3
Past due 0 - 30 days	294.4	(0.9)	4.1	(12.0)	281.5
Past due 31 - 120 days	610.8	(86.2)	11.1	(58.3)	466.3
Past due 121 - 240 days	379.3	(61.9)	35.8	(113.8)	203.6
Past due 241 - 365 days	263.7	(51.9)	74.6	(158.0)	53.8
Past due more than 365 days	953.9	(287.0)	88.4	(589.5)	77.4
Trade receivables	3,831.7	(522.7)		(949.1)	2,359.9
Contract assets	3,283.4	(34.5)	1.4	(43.9)	3,205.0

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(i) Trade receivables and contract assets (continued)

Impairment losses (continued)

The loss allowance for the trade receivables and the contract assets as at 31 December 2018 and 1 January 2018 (on adoption of MFRS 9) was as follows: (continued)

1.1.2018 (Restated)	Gross RM'million	Individual impairment RM'million	Expected loss rate %	Collective impairment RM'million	Net RM'million
Group					
Not past due	1,889.7	(41.2)	1.1	(20.1)	1,828.4
Past due 0 - 30 days	592.2	(7.3)	2.6	(15.2)	569.7
Past due 31 - 120 days	1,306.4	(85.9)	7.7	(93.6)	1,126.9
Past due 121 - 240 days	461.5	(46.5)	40.6	(168.3)	246.7
Past due more than 240 days	1,447.2	(405.2)	74.9	(780.2)	261.8
Trade receivables	5,697.0	(586.1)		(1,077.4)	4,033.5
Contract assets	3,115.7	(39.7)	1.1	(36.4)	3,039.6
Company					
Not past due	1,473.4	(40.4)	1.2	(17.3)	1,415.7
Past due 0 - 30 days	372.7	(6.4)	3.5	(13.0)	353.3
Past due 31 - 120 days	827.2	(83.2)	10.8	(80.2)	663.8
Past due 121 - 240 days	408.0	(43.6)	39.6	(144.3)	220.1
Past due more than 240 days	1,167.6	(397.4)	86.8	(668.8)	101.4
Trade receivables	4,248.9	(571.0)		(923.6)	2,754.3
Contract assets	2,981.8	(39.7)	1.2	(36.1)	2,906.0

The Group and Company apply MFRS 9 simplified approach to measure expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

For certain large customers with high risk of default, the Group and Company assessed the risk of loss of each customer individually based on their financial information, past trend of payments and external credit ratings, where applicable.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(i) Trade receivables and contract assets (continued)

Impairment losses (continued)

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled customers are substantially have the same risk characteristics as the trade receivables for the same types of contracts. The Group and Company have therefore concluded that the expected loss rates for trade receivables are a reasonable approximation the loss rates of the contract assets.

The expected loss rates are based on the payment profiles of sales over a period of 2 to 6 years and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group and Company have identified growth rates of real Gross Domestic Product ('GDP') of Malaysia to be the most relevant factor, and accordingly, adjusts the historical loss rates based on the expected changes in this factor. As at 31 December 2018, for non-government customers, a combination of growth rates of real GDP and inflation rates were identified as the most relevant factors.

On that basis, the loss allowance was determined as follows for both trade receivables and contract assets are reflected in the tables above.

The closing loss allowances for trade receivables and contract assets as at 31 December 2018 reconcile to the opening loss allowances on 1 January 2018 and to the closing loss allowances as at 31 December 2018 as follows:

Trade receivables

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
As at the beginning of the financial year/period	(1,495.0)	(1,388.5)	(1,385.9)	(1,290.7)
Amount restated through opening retained profits	(168.5)	0	(108.7)	0
Opening loss allowances	(1,663.5)	(1,388.5)	(1,494.6)	(1,290.7)
Impairment loss recognised	(402.9)	(106.5)	(392.6)	(95.2)
Impairment loss reversed	212.8	0	176.0	0
Provision written-off	213.5	0	239.4	0
As at the end of the financial year/period (Note 30)	(1,640.1)	(1,495.0)	(1,471.8)	(1,385.9)

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(i) Trade receivables and contract assets (continued)

Impairment losses (continued)

The closing loss allowances for trade receivables and contract assets as at 31 December 2018 reconcile to the opening loss allowances on 1 January 2018 and to the closing loss allowances as at 31 December 2018 as follows: (continued)

Contract assets

	Group		Company	
	31.12.2018	31.12.2017 (Restated)	31.12.2018	31.12.2017 (Restated)
	RM'million	RM'million	RM'million	RM'million
As at the beginning of the financial year/period	(56.4)	(14.2)	(56.1)	(14.2)
Amount restated through opening retained profits	(19.7)	0	(19.7)	0
Opening loss allowances	(76.1)	(14.2)	(75.8)	(14.2)
Impairment loss recognised	(83.7)	(56.4)	(78.4)	(56.1)
Impairment loss reversed	76.1	14.2	75.8	14.2
As at the end of the financial year/period (Note 26(b))	(83.7)	(56.4)	(78.4)	(56.1)

Trade receivables are secured by deposits in the form of cash and bank guarantees. ECL is not provided on receivable balances fully secured by deposits. The deposits amount are reviewed on an individual basis periodically.

Of the above impairment losses, RM83.7 million (FPE 31.12.2017: RM56.4 million) for the Group and RM78.4 million (FPE 31.12.2017: RM56.1 million) for the Company are related to receivables arising from contracts with customers.

Individual receivables which were known to be uncollectible were written off by reducing the carrying amount directly.

Impairment losses on trade receivables and contract assets are presented as net impairment losses within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

- (ii) Investments in unquoted debt securities, deposits, bank and cash balances, derivative financial instruments and financial assets measured at FVTPL

Risk management objectives, policies and processes for managing the risk

Investments, deposits, bank and cash balances, derivative financial instruments and financial assets measured at FVTPL are allowed only in liquid securities and only with reputable financial institutions.

Investment in unquoted debt security is an investment in an associate's financial instruments. The credit risk of this associate is monitored on a quarterly basis.

For investment in unquoted debt security, there has been no history of default and there are no indicators that this financial instrument may default. The Group is of the view that the loss allowance is not material, and hence, it is not provided for.

Exposure to credit risk, credit quality and collateral

The maximum exposure to credit risk is represented by the carrying amounts in the statement of financial position.

In view of the sound credit rating of counterparties, the Group and Company do not expect any counterparty to fail to meet its obligations. The Group and Company do not have overdue investments that have not been impaired.

The investments, deposits, cash and bank balances and derivative financial instruments are unsecured.

Bank and cash balances are held with banks and financial institutions which have lower credit risks. In addition, some of the bank balances are insured by Government agencies. Consequently, the Group and Company are of the view that the loss allowance is not material and hence, it is not provided for.

Impairment losses

The impairment for investment in unquoted debt security during the financial year and previous financial period was insignificant.

(iii) Non-trade receivables

- Intercompany loans/advances

Risk management objectives, policies and processes for managing the risk

The Company provides unsecured loans and advances to subsidiaries. The Company monitors the results of the subsidiaries regularly.

Exposure to credit risk, credit quality and collateral

As at the end of the financial year, the maximum exposure to credit risk is represented by their carrying amounts in the statement of financial position.

Loans and advances are only provided to subsidiaries by the Company.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iii) Non-trade receivables (continued)

- Intercompany loans/advances (continued)

Exposure to credit risk, credit quality and collateral (continued)

The total amounts due from subsidiaries and impairment provided are as follows:

	Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Amounts due from subsidiaries	7,169.3	7,458.0
Less: Impairment losses	(2,414.4)	(2,057.7)
	4,754.9	5,400.3

Impairment losses

Generally, the Company considers loans and advances to subsidiaries have low credit risk. The Company assumes that there is a significant increase in credit risk when a subsidiary's financial position deteriorates significantly based on stages determined in the accounting policy part (d) of this note. As the Company is able to determine the timing of payments of the subsidiaries' loans and advances when they are payable, the Company considers the loans and advances to be in default when the subsidiaries are not able to pay when demanded. The Company considers a subsidiary's loan or advances to be impaired when:

- The subsidiary is unlikely to repay its loans and advances to the Company in full;
- The subsidiary is having a negative operating cash flows and is in a net tangible liabilities position; or
- The subsidiary is a dormant entity or has a history of default.

As at the end of the financial year, there was no indication that the loans and advances to the subsidiaries are not recoverable other than those which have already been impaired. The Company does not specifically monitor the ageing of advances to the subsidiaries.

The closing loss allowances for intercompany balances as at 31 December 2017 reconcile to the opening loss allowances on 1 January 2018 and to the closing loss allowances as at 31 December 2018 as follows:

	Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
As at the beginning of the financial year/period	(2,057.7)	(2,058.9)
Amount restated through opening retained profits	(458.8)	0
Opening loss allowances	(2,516.5)	(2,058.9)
Impairment loss recognised	(86.9)	(13.3)
Impairment loss reversed	79.4	14.5
Impairment written off	109.6	0
As at the end of the financial year/period (Note 22)	(2,414.4)	(2,057.7)

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iii) Non-trade receivables (continued)

- Intercompany loans/advances (continued)

Impairment losses (continued)

The loss allowances for intercompany loans/advances using the general 3-stage approach as at 31 December 2018 reconcile to the opening loss allowances for that provision as follows:

	Stage 1 RM'million	Stage 2 RM'million	Stage 3 RM'million	Total RM'million
At 31.12.2017 before restatement (calculated under MFRS 139)	(104.3)	(21.8)	(1,931.6)	(2,057.7)
Amounts restated through opening retained profits	(264.0)	(57.9)	(136.9)	(458.8)
Opening loss allowances as at 1.1.2018 (calculated under MFRS 9)	(368.3)	(79.7)	(2,068.5)	(2,516.5)
Current year movements	21.3	(16.3)	97.1	102.1
Closing loss allowances as at 31.12.2018	(347.0)	(96.0)	(1,971.4)	(2,414.4)

The impact on the carrying value of the intercompany loans/advances presented by the stages are as follows:

	Stage 1 RM'million	Stage 2 RM'million	Stage 3 RM'million	Total RM'million
Gross carrying amount	4,772.3	425.6	1,971.4	7,169.3
Loss allowances	(347.0)	(96.0)	(1,971.4)	(2,414.4)
Net carrying amount	4,425.3	329.6	0	4,754.9

- Other non-trade receivables

Risk management objectives, policies and processes for managing the risk

Credit risks on other non-trade receivables are mainly arising from rechargeable job orders ('RJO') debtors which are receivables from specific works requested by customers.

Credit risks also arises from sundry deposits for rental of office spaces from third parties and rental receivables. The Company manages the credit risk together with the specific leasing arrangements.

Staff advances and staff loans have low credit risks as these are mostly provided to existing staff. These are managed on a monthly basis.

Amounts due from associates are mostly due to transactions within the Group and have a low credit risks. These balances are managed on a monthly basis.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iii) Non-trade receivables (continued)

- Other non-trade receivables (continued)

Exposure to credit risk, credit quality and collateral

As at the end of the financial year, the maximum exposure to credit risk is represented by their carrying amounts in the statement of financial position.

The Company receives down payments, letters of undertaking ('LOU') or indents for RJO debtors where works are requested by customers.

The Company receives deposits from third parties for rental of office spaces. For staff loans and staff advances, any repayment is done through monthly payroll deductions.

In cases of RJO debtors arising from accidental damages to the Company's assets whereby the third party is identifiable, however, these amounts are fully impaired as there is very low prospect of recovery.

The total other non-trade receivables and amounts due from associates and impairments provided are as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Other non-trade receivables	1,270.6	2,310.2	662.7	785.4
Less: Loss allowances	(185.6)	(229.8)	(114.4)	(201.7)
	1,085.0	2,080.4	548.3	583.7
Amounts due from associates	372.1	332.0	7.6	9.2
Less: Loss allowances	(7.2)	0	(0.1)	0
	364.9	332.0	7.5	9.2

Impairment losses

Generally, the Group and Company considers other non-trade receivables as having low credit risk. The Company assumes that there is a significant increase in credit risk when there is a history of default in payments.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iii) Non-trade receivables (continued)

- Other non-trade receivables (continued)

Impairment losses (continued)

The closing loss allowances for other non-trade receivables as at 31 December 2017 reconcile to the opening loss allowances on 1 January 2018 and to the closing loss allowances as at 31 December 2018 as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
As at the beginning of the financial year/period	(229.8)	(220.6)	(201.7)	(202.0)
Amounts restated through opening retained profits	(34.8)	0	(34.1)	0
Opening loss allowances	(264.6)	(220.6)	(235.8)	(202.0)
Impairment loss recognised	(79.2)	(15.0)	(35.9)	(1.7)
Impairment loss reversed	66.7	5.8	66.4	2.0
Write off	11.0	0	10.4	0
Reclassification	80.5	0	80.5	0
As at the end of the financial year/period (Note 30)	(185.6)	(229.8)	(114.4)	(201.7)

The loss allowances for other non-trade receivables using the general 3-stage approach as at 31 December 2018 reconcile to the opening loss allowances for that provision as follows:

	Stage 1 RM'million	Stage 2 RM'million	Stage 3 RM'million	Total RM'million
Group				
At 31.12.2017 before restatement (calculated under MFRS 139)	0	0	(229.8)	(229.8)
Amounts restated through opening retained profits	(26.3)	(1.3)	(7.2)	(34.8)
Opening loss allowances as at 1.1.2018 (calculated under MFRS 9)	(26.3)	(1.3)	(237.0)	(264.6)
Current year movements	2.8	0.3	75.9	79.0
Closing loss allowances as at 31.12.2018	(23.5)	(1.0)	(161.1)	(185.6)

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iii) Non-trade receivables (continued)

- Other non-trade receivables (continued)

Impairment losses (continued)

The loss allowances for other non-trade receivables using the general 3-stage approach as at 31 December 2018 reconcile to the opening loss allowances for that provision as follows: (continued)

	Stage 1 RM'million	Stage 2 RM'million	Stage 3 RM'million	Total RM'million
Company				
At 31.12.2017 before restatement (calculated under MFRS 139)	0	0	(201.7)	(201.7)
Amounts restated through opening retained profits	(25.8)	(1.3)	(7.0)	(34.1)
Opening loss allowances as at 1.1.2018 (calculated under MFRS 9)	(25.8)	(1.3)	(208.7)	(235.8)
Current year movements	4.3	0.5	116.6	121.4
Closing loss allowances as at 31.12.2018	(21.5)	(0.8)	(92.1)	(114.4)

The impact on the carrying value of other non-trade receivables presented by the stages are as follows:

	Stage 1 RM'million	Stage 2 RM'million	Stage 3 RM'million	Total RM'million
Group				
Gross carrying amount	996.2	70.5	203.9	1,270.6
Loss allowances	(23.5)	(1.0)	(161.1)	(185.6)
Net carrying amount	972.7	69.5	42.8	1,085.0
Company				
Gross carrying amount	534.7	29.9	98.1	662.7
Loss allowances	(21.5)	(0.8)	(92.1)	(114.4)
Net carrying amount	513.2	29.1	6.0	548.3

(iv) Financial guarantees

Risk management objectives, policies and processes for managing the risk

The Company provides financial guarantees to banks in respect of banking facilities granted to certain subsidiaries and an associate. The Company monitors the ability of the subsidiaries and the associate to service their loans on an individual basis.

Exposure to credit risk, credit quality and collateral

The maximum exposure to the Company amounts to RM3,330.0 million (FPE 31.12.2017: RM1,968.5 million) representing banking facilities utilised by the subsidiaries and an associate as at the end of the financial year/period.

The financial guarantees are provided as credit enhancements to the subsidiaries' and associate's secured loans.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Credit risk (continued)

(iv) Financial guarantees (continued)

Exposure to credit risk, credit quality and collateral (continued)

The total financial guarantees and loss allowances provided are as follows:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Financial guarantees	410.4	0	3,330.0	1,968.5
Less: Loss allowances	(270.3)	0	(272.7)	0
	140.1	0	3,057.3	1,968.5

Impairment losses

The Company assumes that there is a significant increase in credit risk when a subsidiary or associate has indication of defaulting on its banking facilities. The Company considers a financial guarantee to be credit impaired when the subsidiary or associate is unlikely to repay its credit obligation to the bank in full.

The Company determines the probability of default of the guaranteed loans individually using internal information available.

Loss allowance has been recognised in the profit or loss during the financial year mainly arising from the financial guarantee provided by the Group in 2016 to support the loan facility offered to İç Anadolu Doğalgaz Elektrik Üretim ve Ticaret A.Ş. ('İCAN'), a subsidiary of Gama Enerji. The expected credit losses is determined based on an internal assessment of Gama Enerji's debt servicing ability taking into account of the current adverse macro-economic conditions in Turkey.

The movement in the loss allowances of financial guarantees during the financial year/period was:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
As at the beginning of the financial year/period	0	0	0	0
Amount restated through opening retained profits	0	0	(1.9)	0
Opening loss allowances	0	0	(1.9)	0
Impairment loss recognised	(270.3)	0	(270.8)	0
As at the end of the financial year/period (Note 32)	(270.3)	0	(272.7)	0

Liquidity risk

Liquidity risk is the risk that the Group and Company will not be able to meet its financial obligations as they fall due. The Group and Company's exposures to liquidity risk arise principally from its various payables, loans and borrowings.

The Group and Company maintain a level of cash and cash equivalents and bank facilities deemed adequate by the Group and Company to ensure, as far as possible, that they will have sufficient liquidity to meet their liabilities when they fall due.

As at 31 December 2018, the Company has sufficient financial capacity and available facility to meet its obligations as and when they fall due within 12 months from the financial statement date.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profiles of the Group and Company's financial liabilities as at the end of the financial year/period based on the undiscounted contractual payments:

31.12.2018	Carrying amount RM'million	Contractual cash flows RM'million	Below 1 year RM'million	1 - 2 years RM'million	3 - 5 years RM'million	More than 5 years RM'million
Group						
<i>Non-derivative financial liabilities</i>						
Payables	9,166.2	9,166.2	9,166.2	0	0	0
Finance lease payables	4,874.1	7,507.6	698.8	698.4	2,078.7	4,031.7
Amounts due to associates	656.3	656.3	656.3	0	0	0
Borrowings	47,832.4	71,377.3	5,671.6	4,679.4	12,134.7	48,891.6
Financial guarantee contracts	270.3	410.4	410.4	0	0	0
Other financial liabilities at amortised cost	602.0	618.6	304.2	306.6	2.6	5.2
	63,401.3	89,736.4	16,907.5	5,684.4	14,216.0	52,928.5
<i>Derivative financial liabilities</i>						
Interest rate swap	11.5	622.4	622.4	0	0	0
Forward exchange contracts (gross settled):						
- Outflows	44.0	907.0	907.0	0	0	0
- Inflows	(1.2)	(42.7)	(42.7)	0	0	0
Put option	(0.2)	(14.2)	(14.2)	0	0	0
	63,455.4	91,208.9	18,380.0	5,684.4	14,216.0	52,928.5
Company						
<i>Non-derivative financial liabilities</i>						
Payables	5,635.9	5,635.9	5,635.9	0	0	0
Finance lease payables	16,668.8	26,494.6	2,142.1	1,932.5	5,270.8	17,149.2
Amounts due to subsidiaries	1,459.4	1,459.4	1,459.4	0	0	0
Amounts due to associates	646.4	646.4	646.4	0	0	0
Borrowings	21,637.0	30,486.8	3,028.9	1,707.9	4,651.1	21,098.9
Financial guarantee contracts	272.7	3,330.0	3,330.0	0	0	0
Other financial liabilities at amortised cost	536.9	553.5	272.2	274.3	2.3	4.6
	46,857.1	68,606.6	16,514.9	3,914.7	9,924.2	38,252.7

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Liquidity risk (continued)

The table below summarises the maturity profiles of the Group and Company's financial liabilities as at the end of the financial year/period based on the undiscounted contractual payments: (continued)

31.12.2017	Carrying amount RM'million	Contractual cash flows RM'million	Below 1 year RM'million	1 - 2 years RM'million	3 - 5 years RM'million	More than 5 years RM'million
Group						
<i>Non-derivative financial liabilities</i>						
Payables	8,668.3	8,668.3	8,668.3	0	0	0
Finance lease payables	5,210.5	8,205.5	697.9	701.3	2,093.1	4,713.2
Amounts due to associates	691.2	691.2	691.2	0	0	0
Borrowings	41,443.7	48,136.6	2,753.5	6,075.5	9,481.0	29,826.6
Other liabilities	517.2	531.0	263.8	264.3	0.7	2.2
	56,530.9	66,232.6	13,074.7	7,041.1	11,574.8	34,542.0
<i>Derivative financial liabilities</i>						
Forward exchange contracts (gross settled):						
- Outflows	47.3	975.1	975.1	0	0	0
	56,578.2	67,207.7	14,049.8	7,041.1	11,574.8	34,542.0
Company						
<i>Non-derivative financial liabilities</i>						
Payables	5,491.1	5,491.1	5,491.1	0	0	0
Finance lease payables	17,790.9	28,742.0	2,247.5	2,142.1	5,703.5	18,648.9
Amounts due to subsidiaries	1,086.3	1,086.3	1,086.3	0	0	0
Amounts due to associates	683.0	683.0	683.0	0	0	0
Borrowings	15,348.1	21,854.0	765.7	2,661.5	5,243.5	13,183.3
Other liabilities	473.5	487.3	242.1	242.6	0.6	2.0
	40,872.9	58,343.7	10,515.7	5,046.2	10,947.6	31,834.2
<i>Derivative financial liabilities</i>						
Forward exchange contracts (gross settled):						
- Outflows	0.2	19.8	19.8	0	0	0
	40,873.1	58,363.5	10,535.5	5,046.2	10,947.6	31,834.2

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and other prices will affect the Group and Company's financial positions or cash flows.

(i) Foreign currency risk

The Group and Company are exposed to foreign currency risk on sales, purchases and borrowings that are denominated in currencies other than the respective functional currencies of the Group and Company. The currencies giving rise to this risk are primarily USD, JPY, GBP, PKR and EUR.

Risk management objectives, policies and processes for managing the risk

The Group and Company are required to hedge a minimum of 50.0% of TNB's known foreign currency exposure up to 12 months period. The Group and Company use forward exchange contracts and maintains foreign currencies float to hedge its foreign currency risk.

Exposure to foreign currency risk

The currency exposure of financial assets and financial liabilities of the Group and Company that are not denominated in the functional currency of the respective companies is set out below:

31.12.2018	USD RM'million	JPY RM'million	GBP RM'million	EUR RM'million	Others RM'million
Group					
<u>Financial assets</u>					
Financial assets at FVOCI	0	0	0	0	0.4
Deposits, bank and cash balances	4,061.0	1.2	134.9	0.5	0.8
	4,061.0	1.2	134.9	0.5	1.2
<u>Financial liabilities</u>					
Payables	25.1	2.5	0	2.7	0.5
Borrowings	9,210.1	2,526.2	609.1	0	66.1
	9,235.2	2,528.7	609.1	2.7	66.6
Company					
<u>Financial assets</u>					
Amounts due from subsidiaries	303.9	0	0	0	0
Deposits, bank and cash balances	4,027.8	0	134.9	0	0
	4,331.7	0	134.9	0	0
<u>Financial liability</u>					
Borrowings	9,210.1	2,526.2	0	0	0

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Market risk (continued)

(i) Foreign currency risk (continued)

Exposure to foreign currency risk (continued)

The currency exposure of financial assets and financial liabilities of the Group and Company that are not denominated in the functional currency of the respective companies is set out below: (continued)

31.12.2017	USD RM'million	JPY RM'million	PKR RM'million	EUR RM'million	Others RM'million
Group					
<u>Financial assets</u>					
AFS financial assets	0	0	0	0	0.7
Deposits, bank and cash balances	2,676.3	1.2	0	1.0	0
	2,676.3	1.2	0	1.0	0.7
<u>Financial liabilities</u>					
Payables	47.7	22.2	0	3.8	10.9
Borrowings	5,958.5	2,542.0	68.4	0	2.9
	6,006.2	2,564.2	68.4	3.8	13.8
Company					
<u>Financial assets</u>					
Amounts due from subsidiaries	112.1	0	0	0	0
Deposits, bank and cash balances	2,644.9	0	0	0	0
	2,757.0	0	0	0	0
<u>Financial liability</u>					
Borrowings	5,958.5	2,538.5	0	0	0

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Market risk (continued)

(i) Foreign currency risk (continued)

Currency risk sensitivity analysis

A 10.0% strengthening of the foreign currencies against RM at the end of the financial year/period would have decreased post-tax profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remained constant and ignores any impact of forecasted sales and purchases.

	Profit or loss/equity	
	Financial year ended 31.12.2018 RM'million	Financial period ended 31.12.2017 RM'million
Group		
USD	(566.9)	(275.1)
JPY	(354.9)	(55.3)
Company		
USD	(534.4)	(275.1)
JPY	(354.7)	(55.4)

A 10.0% weakening of the foreign currencies against RM at the end of the financial year/period would have had equal but opposite effect on the above currencies to the amounts shown above, on the basis that all other variables remained constant.

Foreign currency risk for the Group and Company which have a functional currency other than USD and JPY are not material and hence, sensitivity analysis is not presented.

(ii) Interest rate risk

The Group and Company's investments in fixed rate debt securities and its fixed rate borrowings are not exposed to a significant risk of change in their fair values due to changes in interest rates. The Group and Company's variable rate borrowings are exposed to a risk of change in cash flows due to changes in interest rates. Investment in equity securities and short term receivables and payables are not significantly exposed to interest rate risk.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Market risk (continued)

(ii) Interest rate risk (continued)

Exposure to interest rate risk

The interest rate profile of the Group and Company's significant interest-bearing financial instruments, based on carrying amounts as at the end of the financial year/period was:

	Group		Company	
	31.12.2018 RM'million	31.12.2017 RM'million	31.12.2018 RM'million	31.12.2017 RM'million
Fixed rate instruments:				
Financial assets	5,719.5	4,403.0	4,936.8	3,565.0
Financial liabilities	51,165.8	45,381.3	37,054.4	31,916.3
Floating rate instrument:				
Financial liabilities	1,540.7	1,272.9	1,251.4	1,222.7

The financial assets are not sensitive to interest rate changes.

A 5.0% change in the interest rates of the financial liabilities with floating interest rates at the end of the financial year/period would have affected the Group and Company's profit or loss and equity by RM0.4 million (FPE 31.12.2017: RM0.5 million). This analysis assumes that all other variables, in particular foreign currency rates remained constant.

(iii) Other price risk

Other price risk arises from the Group and Company's investments in equity securities, debt securities and unit trust funds.

Risk management objectives, policies and processes for managing the risk

The Group and Company are exposed to price risk because the investments held are classified on the statement of financial position as FVOCI and FVTPL. The Group and Company mainly invest in unit trust funds, primarily in short term deposits as underlying instruments with minimal price risk.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Fair value of financial instruments

The carrying amounts of deposits, bank and cash balances, short term receivables and payables, short term borrowings and short term derivative financial instruments approximate their fair values and are equivalent to nominal values due to the relatively short term nature of these financial instruments.

The table below analyses financial instruments carried at fair value and those not carried at fair value for which fair value is disclosed, together with their fair values and carrying amounts shown in the statement of financial position.

The classifications in the fair value hierarchy of the Group and Company's assets and liabilities measured at fair value are summarised in the table below:

31.12.2018	Fair value of financial instruments carried at fair value				Fair value of financial instruments not carried at fair value				Total fair value RM'million	Carrying amount RM'million
	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million		
Group										
<u>Financial assets</u>										
Investment in unquoted debt security	0	0	0	0	0	326.7	0	326.7	326.7	326.7
Long term receivables	0	0	0	0	0	139.2	0	139.2	139.2	102.7
Derivative financial instruments	0	0.2	0	0.2	0	0	0	0	0.2	0.2
Financial assets at FVOCI	0	76.4	0	76.4	0	0	0	0	76.4	76.4
Financial assets at FVTPL	9,743.3	0	0	9,743.3	0	0	0	0	9,743.3	9,743.3
	9,743.3	76.6	0	9,819.9	0	465.9	0	465.9	10,285.8	10,249.3
<u>Financial liabilities</u>										
Borrowings	0	0	0	0	1,972.1	47,298.2	0	49,270.3	49,270.3	47,832.4
Other financial liabilities at amortised cost	0	0	0	0	0	606.1	0	606.1	606.1	602.0
Derivative financial instruments	0	11.5	0	11.5	0	0	0	0	11.5	11.5
	0	11.5	0	11.5	1,972.1	47,904.3	0	49,876.4	49,887.9	48,445.9

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Fair value of financial instruments (continued)

The classifications in the fair value hierarchy of the Group and Company's assets and liabilities measured at fair value are summarised in the table below: (continued)

31.12.2018	Fair value of financial instruments carried at fair value				Fair value of financial instruments not carried at fair value				Total fair value RM'million	Carrying amount RM'million
	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million		
Company										
<u>Financial assets</u>										
Investment in unquoted debt securities	0	0	0	0	0	8.7	0	8.7	8.7	8.7
Long term receivables	0	0	0	0	0	104.7	0	104.7	104.7	86.1
Financial assets at FVOCI	0	75.7	0	75.7	0	0	0	0	75.7	75.7
Amounts due from subsidiaries	0	0	0	0	0	1,142.1	0	1,142.1	1,142.1	1,052.0
Financial assets at FVTPL	5,224.6	0	0	5,224.6	0	0	0	0	5,224.6	5,224.6
	5,224.6	75.7	0	5,300.3	0	1,255.5	0	1,255.5	6,555.8	6,447.1
<u>Financial liabilities</u>										
Borrowings	0	0	0	0	1,972.1	20,183.0	0	22,155.1	22,155.1	21,637.0
Other liabilities	0	0	0	0	0	541.1	0	541.1	541.1	536.9
	0	0	0	0	1,972.1	20,724.1	0	22,696.2	22,696.2	22,173.9

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Fair value of financial instruments (continued)

The classifications in the fair value hierarchy of the Group and Company's assets and liabilities measured at fair value are summarised in the table below: (continued)

the table below (continued)

31.12.2017	Fair value of financial instruments carried at fair value				Fair value of financial instruments not carried at fair value				Total fair value RM'million	Carrying amount RM'million
	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million		
Group										
Financial assets										
Investment in unquoted debt security	0	0	0	0	0	318.5	0	318.5	318.5	318.5
Long term receivables	0	0	0	0	0	214.3	0	214.3	214.3	249.5
AFS financial assets	0	69.3	0	69.3	0	0	0	0	69.3	69.3
Financial assets at FVTPL	10,490.2	0	0	10,490.2	0	0	0	0	10,490.2	10,490.2
	10,490.2	69.3	0	10,559.5	0	532.8	0	532.8	11,092.3	11,127.5
Financial liabilities										
Borrowings	0	0	0	0	2,023.1	40,711.2	0	42,734.3	42,734.3	41,443.7
Other liabilities	0	0	0	0	0	520.6	0	520.6	520.6	517.2
Derivative financial instruments	0	47.3	0	47.3	0	0	0	0	47.3	47.3
	0	47.3	0	47.3	2,023.1	41,231.8	0	43,254.9	43,302.2	42,008.2

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Fair value of financial instruments (continued)

The classifications in the fair value hierarchy of the Group and Company's assets and liabilities measured at fair value are summarised in the table below: (continued)

the table below (continued)

31.12.2017	Fair value of financial instruments carried at fair value				Fair value of financial instruments not carried at fair value				Total fair value RM'million	Carrying amount RM'million
	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million	Level 1 RM'million	Level 2 RM'million	Level 3 RM'million	Total RM'million		
Company										
Financial assets										
Long term receivables	0	0	0	0	0	183.9	0	183.9	183.9	197.0
AFS financial assets	0	68.6	0	68.6	0	0	0	0	68.6	68.6
Amounts due from subsidiaries	0	0	0	0	0	584.4	0	584.4	584.4	1,213.4
Financial assets at FVTPL	3,850.5	0	0	3,850.5	0	0	0	0	3,850.5	3,850.5
	3,850.5	68.6	0	3,919.1	0	768.3	0	768.3	4,687.4	5,329.5
Financial liabilities										
Borrowings	0	0	0	0	2,023.1	14,112.9	0	16,136.0	16,136.0	15,348.1
Other liabilities	0	0	0	0	0	476.7	0	476.7	476.7	473.5
	0	0	0	0	2,023.1	14,589.6	0	16,612.7	16,612.7	15,821.6

45 FINANCIAL INSTRUMENTS (CONTINUED)

(b) Financial risk management (continued)

Fair value of financial instruments (continued)

(i) Policy on transfer between levels

The fair value of an asset to be transferred between levels is determined as of the date of the event or change in circumstances that caused the transfer.

There were no transfer between levels during the financial year.

(ii) Level 1 fair value

Level 1 fair value is derived from quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

(iii) Level 2 fair value

Level 2 fair value is estimated using inputs other than quoted prices included within Level 1 that are observable for the financial assets or liabilities, either directly or indirectly.

Derivative financial instruments

The fair value is estimated by the difference between the contractual forward price and the current forward price for the residual maturity of the contract.

Non-derivative financial instruments

Fair value, which is determined for disclosure purpose, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the end of the reporting period.

(iv) Level 3 fair value

Level 3 fair values for the financial assets and liabilities are estimated using unobservable inputs.

(v) Interest rates used to determine fair value

The interest rates used to discount estimated cash flows, when applicable, ranging between 0.1% to 10.0% (FPE 31.12.2017: 0.1% to 8.9%).

Although the Group and Company believe that their estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value.

The favourable and unfavourable effects of using reasonably possible alternative assumptions have been calculated by recalibrating the model values using expected cash flows and risk-adjusted discount rates based on the probability weighted average of the Group and Company's ranges of possible outcomes.

45 FINANCIAL INSTRUMENTS (CONTINUED)

(c) Offsetting of financial assets and financial liabilities

The following financial assets and financial liabilities are subject to offsetting arrangements based on Group policies and procedures:

	Group			Company		
	Gross amounts recognised RM'million	Gross amounts set-off in the SOFP RM'million	Net amounts presented in the SOFP RM'million	Gross amounts recognised RM'million	Gross amounts set-off in the SOFP RM'million	Net amounts presented in the SOFP RM'million
<u>Financial assets</u>						
31.12.2018						
Amounts due from associates	364.9	0	364.9	7.5	0	7.5
Amounts due from subsidiaries	0	0	0	7,816.0	(3,061.1)	4,754.9
31.12.2017						
Amounts due from associates	337.4	(5.4)	332.0	14.6	(5.4)	9.2
Amounts due from subsidiaries	0	0	0	6,312.7	(912.4)	5,400.3
<u>Financial liabilities</u>						
31.12.2018						
Amounts due to associates	(656.3)	0	(656.3)	(646.4)	0	(646.4)
Amounts due to subsidiaries	0	0	0	(2,116.2)	656.8	(1,459.4)
31.12.2017						
Amounts due to associates	(691.2)	0	(691.2)	(683.0)	0	(683.0)
Amounts due to subsidiaries	0	0	0	(4,130.5)	3,044.2	(1,086.3)

46 CAPITAL RISK MANAGEMENT

The Group and Company's main objective of capital management is to safeguard the Group and Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders. The Group and Company will also strive to maintain an optimal capital structure to reduce the cost of capital.

For the purpose of sustaining or changing the capital structure, the Group and Company may adjust the amount of dividends paid to shareholders, issue new shares or return capital to shareholders.

In order to be consistent with industry norms, the Group and Company monitor its capital structure on the basis of the gearing ratio. This ratio is calculated as total borrowings divided by capital employed. Total borrowings include non-current borrowings, current borrowings and hire purchase as shown in the consolidated statement of financial position. Capital employed is the summation of total equity and total borrowings.

The gearing ratios are as follows:

	Group			Company	
	31.12.2018 RM'million	31.12.2017 (Restated) RM'million	1.9.2017 (Restated) RM'million	31.12.2018 RM'million	31.12.2017 (Restated) RM'million
Total borrowings	47,838.5	41,453.5	38,857.5	21,637.0	15,348.1
Total equity	59,051.9	57,989.0	57,579.4	51,730.1	51,742.8
Total capital employed	106,890.4	99,442.5	96,436.9	73,367.1	67,090.9
Gearing ratios	0.45	0.42	0.40	0.29	0.23

The Group and Company have met all externally imposed capital requirements.

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES

During the year, the Group and Company adopted MFRS 15 and MFRS 9 on their financial statements. The Group and Company generally applied the requirements of these standards retrospectively with practical expedients and transitional exemptions as allowed by the standards.

(a) Impact on the financial statements

As a result of the adoption of the new MFRS, prior year financial statements had to be restated. Nevertheless, as permitted by MFRS 9, comparative information was not restated. The reclassifications and the adjustments arising from the new impairment rules are therefore not reflected in the stated balance sheet as at 31 December 2017, but are recognised in the opening balance on 1 January 2018.

The following restatements have been made in the financial statements:

- (i) Consumer deposits are reclassified from non-current liabilities to current liabilities as the amounts shall be refunded within 30 days upon request for termination of electricity supply by the consumer. The interest payable to customers on consumer deposits in accordance with the regulations has been reflected within finance cost in the operating activities.
- (ii) Advances to subsidiaries previously treated as quasi-investment and certain intercompany loan stocks previously classified as long term receivables, have been reclassified to amounts due from subsidiaries within non-current assets.
- (iii) The repayment of finance lease obligation previously reported under cash flows from operating activities is reclassified to cash flows from financing activities in the statement of cash flows. The corresponding finance lease interest has been reflected within finance cost in the operating activities.
- (iv) Reclassification of certain line items in consolidated statement of profit or loss as a result of consequential changes made to MFRS 101.

The following tables show the adjustments recognised for each individual line item. Line items that were not affected by the changes have not been included. As a result, the sub-totals and totals disclosed cannot be recalculated from the numbers provided.

Reconciliation of consolidated statement of profit or loss

	For the financial period ended 31 December 2017			
	As previously reported RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated RM'million
Group				
Revenue	15,827.1	(134.9)	0	15,692.2
Operating expenses	(13,191.1)	(0.9)	164.6	(13,027.4)
Net loss on impairment of financial instruments	0	0	(163.4)	(163.4)
Finance income	133.5	0	(38.6)	94.9
Finance cost	(576.0)	0	44.6	(531.4)
Fair value changes of financial instruments	0	0	(7.2)	(7.2)
Taxation and zakat	(235.4)	0.4	0	(235.0)
Profit for the financial period:				
- Owners of the Company	2,755.7	(133.4)	0	2,622.3
- Non-controlling interests	(11.8)	(2.0)	0	(13.8)
	2,743.9	(135.4)	0	2,608.5
Earnings per share:	Sen			Sen
- Basic	48.68			46.32
- Diluted	48.56			46.21

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of profit or loss (continued)

	For the financial period ended 31 December 2017			
	As previously reported RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated RM'million
Company				
Revenue	14,820.6	(102.4)	0	14,718.2
Operating expenses	(12,411.9)	0	136.8	(12,275.1)
Net loss on impairment of financial instruments	0	0	(135.6)	(135.6)
Finance income	101.0	0	(29.1)	71.9
Finance cost	(564.2)	0	0.2	(564.0)
Fair value changes of financial instruments	0	0	27.7	27.7
Profit for the financial period	2,554.7	(102.4)	0	2,452.3

Reconciliation of consolidated statement of comprehensive income

	For the financial period ended 31 December 2017		
	As previously reported RM'million	Effect of adoption of MFRS 15 RM'million	As restated RM'million
Group			
Total comprehensive income	2,508.1	(135.4)	2,372.7
Total comprehensive income for the financial period is attributable to:			
- Owners of the Company	2,519.9	(133.4)	2,386.5
- Non-controlling interests	(11.8)	(2.0)	(13.8)
	2,508.1	(135.4)	2,372.7
Company			
Total comprehensive income	2,452.3	(102.4)	2,349.9

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of financial position

	Balance as at 1 January 2018					
	As previously reported 31.12.2017 RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated 31.12.2017 RM'million	Effect of adoption of MFRS 9 RM'million	As restated RM'million
Group						
<u>Non-current assets</u>						
Contract cost assets	0	0.1	0	0.1	0	0.1
<u>Current assets</u>						
Receivables, deposits and prepayments	10,362.1	(3,086.6)	0	7,275.5	(203.3)	7,072.2
Contract assets	0	3,059.3	0	3,059.3	(19.7)	3,039.6
Amounts due from associates	332.0	0	0	332.0	(0.4)	331.6
<u>Current liabilities</u>						
Payables	(9,065.2)	28.8	0	(9,036.4)	(1.9)	(9,038.3)
Contract liabilities (Deferred income)	(1,487.2)	1,199.7	0	(287.5)	0	(287.5)
Consumer deposits	0	0	(5,209.2)	(5,209.2)	0	(5,209.2)
<u>Non-current liabilities</u>						
Contract liabilities (Deferred income)	(1,107.6)	(1,342.4)	0	(2,450.0)	0	(2,450.0)
Deferred tax liabilities	(7,646.0)	0.3	0	(7,645.7)	32.5	(7,613.2)
Consumer deposits	(5,209.2)	0	5,209.2	0	0	0
<u>Equity</u>						
Retained profits	(52,378.0)	138.8	0	(52,239.2)	189.4	(52,049.8)
Non-controlling interests	(925.2)	2.0	0	(923.2)	3.4	(919.8)

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of financial position (continued)

	Balance as at 1 September 2017			
	As previously reported 31.8.2017 RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated 1.9.2017 RM'million
Group (continued)				
<u>Current assets</u>				
Receivables, deposits and prepayments	8,962.2	(3,227.6)	0	5,734.6
Contract assets	0	3,222.3	0	3,222.3
<u>Current liabilities</u>				
Payables	(10,245.0)	16.2	0	(10,228.8)
Contract liabilities (Deferred income)	(1,460.9)	1,184.2	0	(276.7)
Consumer deposits	0	0	(5,073.4)	(5,073.4)
<u>Non-current liabilities</u>				
Contract liabilities (Deferred income)	(993.9)	(1,200.4)	0	(2,194.3)
Deferred tax liabilities	(7,728.3)	(0.1)	0	(7,728.4)
Consumer deposits	(5,073.4)	0	5,073.4	0
<u>Equity</u>				
Retained profits	(52,115.3)	5.4	0	(52,109.9)

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of financial position (continued)

	Balance as at 1 January 2018					
	As previously reported 31.12.2017 RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated 31.12.2017 RM'million	Effect of adoption of MFRS 9 RM'million	As restated RM'million
Company						
<u>Non-current assets</u>						
Subsidiaries	9,991.5	0	(192.3)	9,799.2	0	9,799.2
Amounts due from subsidiaries	527.6	0	685.8	1,213.4	(106.6)	1,106.8
Long term receivables	690.5	0	(493.5)	197.0	0	197.0
<u>Current assets</u>						
Receivables, deposits and prepayments	6,260.9	(2,925.7)	0	3,335.2	(142.8)	3,192.4
Contract assets	0	2,925.7	0	2,925.7	(19.7)	2,906.0
Amounts due from subsidiaries	4,186.9	0	0	4,186.9	(284.4)	3,902.5
Amounts due from associates	9.2	0	0	9.2	(0.4)	8.8
<u>Current liabilities</u>						
Payables	(5,819.8)	0	0	(5,819.8)	(1.9)	(5,821.7)
Contract liabilities (Deferred income)	(1,377.7)	1,154.2	0	(223.5)	0	(223.5)
Consumer deposits	0	0	(4,910.9)	(4,910.9)	0	(4,910.9)
<u>Non-current liabilities</u>						
Contract liabilities (Deferred income)	(826.0)	(1,256.6)	0	(2,082.6)	0	(2,082.6)
Deferred tax liabilities	(6,289.9)	0	0	(6,289.9)	32.2	(6,257.7)
Consumer deposits	(4,910.9)	0	4,910.9	0	0	0
<u>Equity</u>						
Retained profits	(45,947.3)	102.4	0	(45,844.9)	523.6	(45,321.3)

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of financial position (continued)

	Balance as at 1 September 2017			
	As previously reported 31.8.2017 RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated 1.9.2017 RM'million
Company (continued)				
<u>Non-current assets</u>				
Subsidiaries	10,081.5	0	(1,261.3)	8,820.2
Amounts due from subsidiaries	455.0	0	1,754.8	2,209.8
Long term receivables	694.1	0	(493.5)	200.6
<u>Current assets</u>				
Receivables, deposits and prepayments	6,119.1	(3,051.8)	0	3,067.3
Contract assets	0	3,051.8	0	3,051.8
<u>Current liabilities</u>				
Contract liabilities (Deferred income)	(1,384.9)	1,144.6	0	(240.3)
Consumer deposits	0	0	(4,778.2)	(4,778.2)
<u>Non-current liabilities</u>				
Contract liabilities (Deferred income)	(691.5)	(1,144.6)	0	(1,836.1)
Consumer deposits	(4,778.2)	0	4,778.2	0

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(a) Impact on the financial statements (continued)

Reconciliation of consolidated statement of cash flows

	For the financial period ended 31 December 2017			
	As previously reported RM'million	Effect of adoption of MFRS 15 RM'million	Reclassification RM'million	As restated RM'million
Group				
Profit for the financial period	2,743.9	(135.4)	0	2,608.5
Taxation and zakat	235.4	(0.4)	0	235.0
Interest on:				
Finance leases	0	0	123.4	123.4
Consumer deposits	0	0	44.0	44.0
Release of:				
Customers' contribution	(142.5)	26.9	0	(115.6)
Deferred income	(116.8)	34.5	0	(82.3)
Receivables	(2,006.3)	(135.8)	0	(2,142.1)
Contract assets	0	163.0	0	163.0
Payables	(995.7)	(17.9)	108.6	(905.0)
Cash generated from operations	1,940.8	(65.1)	276.0	2,151.7
Contract liabilities received	399.3	65.1	0	464.4
Consumer deposits received	135.8	0	(44.0)	91.8
Net cash flows generated from operating activities	1,985.2	0	232.0	2,217.2
Repayment of finance lease obligations	0	0	(232.0)	(232.0)
Net cash flows generated from financing activities	266.1	0	(232.0)	34.1
Company				
Profit for the financial period	2,554.7	(102.4)	0	2,452.3
Interest on:				
Finance leases	0	0	365.4	365.4
Consumer deposits	0	0	41.6	41.6
Release of:				
Customers' contribution	(120.9)	24.8	0	(96.1)
Deferred income	(77.6)	77.6	0	0
Receivables	(455.4)	(126.1)	0	(581.5)
Contract assets	0	126.1	0	126.1
Payables	(1,268.4)	0	273.2	(995.2)
Cash generated from operations	1,420.1	0	680.2	2,100.3
Consumer deposits received	132.7	0	(41.6)	91.1
Net cash flows generated from operating activities	1,505.8	0	638.6	2,144.4
Repayment of finance lease obligations	0	0	(638.6)	(638.6)
Net cash flows used in financing activities	(2,843.6)	0	(638.6)	(3,482.2)

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(b) Adoption of MFRS 15 'Revenue from Contracts with Customers' ('MFRS 15')

The Group and Company have adopted MFRS 15 from 1 January 2018 which resulted in changes in accounting policies and adjustments to the amounts recognised in the current and prior financial year/period's financial statements. In accordance with the transition provisions in MFRS 15, the Group and Company have adopted the new rules retrospectively and have restated comparatives for the 2017 financial period.

The Group and Company used the following practical expedients as permitted under the Standard:

- effects of significant financing component are disregarded if at contract inception the period between customer payment and the transfer of goods or services is expected to be one year or less
- incremental costs of obtaining a contract are expensed if the amortisation period of the asset is one year or less
- revenue is recognised at the invoice amount if billing corresponds directly with performance to date
- completed contracts at the beginning of the earliest period presented are not restated
- completed contracts with the variable consideration will use the transaction price at the date the contract was completed
- completed contracts for customers' contributions received from customers and customers are connected to the network between 1 September 2017 to 31 December 2017
- contracts modified before the beginning of the earliest period presented will reflect the aggregate effect of all of the modifications that occurred
- for all reporting periods presented before the date of initial application, the amount of the transaction price allocated to the remaining performance obligations and an explanation of when the entity expects to recognise that amount as revenue need not be disclosed

The impact on the Group and Company's retained profits as at 31 December 2017 and 1 September 2017 are as follows:

	Group		Company
	31.12.2017 RM'million	1.9.2017 RM'million	31.12.2017 RM'million
Retained profits	52,378.0	52,115.3	45,947.3
Change in timing of revenue recognition	(27.2)	(5.3)	0
Amortisation of customers' contribution	(113.9)	0	(102.4)
Decrease/(Increase) in deferred tax liabilities	0.3	(0.1)	0
Decrease in NCI	2.0	0	0
Adjustments to retained profits from adoption of MFRS 15	(138.8)	(5.4)	(102.4)
Opening retained profits – MFRS 15	52,239.2	52,109.9	45,844.9

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(b) Adoption of MFRS 15 'Revenue from Contracts with Customers' ('MFRS 15') (continued)

The impact of the adoption has resulted in changes to the following:

(i) Accounting for customers' contribution

Prior to MFRS 15, revenue from customers' contribution are recognised upon the connection of electricity supply. With effect from 1 September 2017, in compliance with MFRS 15, the contributions received from customers are recognised over time, through the amortisation over the estimated useful life of the constructed assets [Note 5(d)]. To reflect this change, the adjustments of RM113.9 million and RM102.4 million for the Group and Company respectively were made to the retained profits as at 31 December 2017 for the Group and Company.

Customers' contributions received from customers and these customers are connected to the network within the reporting period from 1 September 2017 to 31 December 2017 are considered as completed contracts and will not be restated. Furthermore, revenue from customers' contributions recognised prior to 1 September 2017 are also considered completed contracts and will not be restated.

(ii) Accounting for other revenue streams from subsidiaries

Revenue from other streams based on performance obligations satisfied has changed the timing of revenue recognition for some subsidiaries. To reflect this change of accounting policy, the adjustment of RM5.3 million was made to the opening retained profits as at 1 September 2017 and a further adjustment of RM27.2 million was made to the retained profits as at 31 December 2017.

(iii) Presentation of assets and liabilities related to contracts with customers

- Contract assets recognised in relation to unbilled revenue were previously presented as part of receivables, deposits and prepayments (RM3,039.6 million as at 31 December 2017 and RM3,222.3 million as at 1 September 2017 for the Group; RM2,906.0 million as at 31 December 2017 and RM3,051.8 million as at 1 September 2017 for the Company).
- Contract liabilities in relation to customers' contribution were previously presented as part of deferred income (RM2,708.7 million as at 31 December 2017 and RM2,454.8 million as at 1 September 2017 for the Group; RM2,306.1 million as at 31 December 2017 and RM2,076.4 million as at 1 September 2017 for the Company).

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(c) Adoption of MFRS 9 'Financial Instruments' ('MFRS 9')

MFRS 9 replaces the provisions of MFRS 139 that relate to the recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments and impairment of financial assets.

The adoption of MFRS 9 from 1 January 2018 resulted in changes in accounting policies and adjustments to the amounts recognised in the financial statements. The new accounting policies are set out in Note 45 above. In accordance with the transitional provisions in MFRS 9, comparative figures have not been restated.

The total impact on the Group and Company's retained profits are as follows:

	Group RM'million	Company RM'million
Closing retained profits 31 December 2017 after restatement for MFRS 15	52,239.2	45,844.9
Increase in provision for receivables, deposits and prepayments	(203.3)	(142.8)
Increase in loss allowances for contract assets	(19.7)	(19.7)
Increase in provision for amounts due from subsidiaries	0	(391.0)
Increase in provision for amounts due from associates	(0.4)	(0.4)
Loss allowances on financial guarantee contract	(1.9)	(1.9)
Decrease in deferred tax liabilities	32.5	32.2
Decrease in NCI	3.4	0
Adjustments to retained profits from adoption of MFRS 9 on 1 January 2018	(189.4)	(523.6)
Opening retained profits 1 January 2018 – MFRS 9	52,049.8	45,321.3

(i) Classification and measurement

On 1 January 2018 (the date of initial application of MFRS 9), the Group and Company's management had assessed which business models apply to the financial assets held by the Group and Company and had classified its financial instruments into the appropriate MFRS 9 categories. The main effects resulting from this reclassification are as follows:

- **Reclassification from AFS to FVOCI**
Investment in unquoted shares are investments that the Group and Company intend to hold for long term strategic purposes. As permitted by MFRS 9, the Group and Company have designated these investments as measured at FVOCI at the date of initial application.
- **Reclassification from L&R to FVTPL**
Convertible students loans offered under Yayasan Tenaga Nasional ('YTN') were classified as L&R previously. These financial assets do not meet the business model criteria of collecting contractual cash flows due to the convertible feature of the scholarships. Hence, these student loans are reclassified as FVTPL on 1 January 2018.

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(c) Adoption of MFRS 9 'Financial Instruments' ('MFRS 9') (continued)

(ii) Reclassification of financial instruments on adoption of MFRS 9

On the date of initial application, 1 January 2018, the financial instruments of the Group and Company were as follows, with any reclassification noted:

	Group		Company	
	Measurement category		Measurement category	
	Original MFRS 139	New MFRS 9	Original MFRS 139	New MFRS 9
<u>Financial assets</u>				
Investment in unquoted debt security	L&R	AC	L&R	AC
Long term receivables	L&R	AC	L&R	AC
Finance lease receivables	L&R	AC	L&R	AC
AFS financial assets	AFS	FVOCI	AFS	FVOCI
Trade and other receivables	L&R	AC	L&R	AC
Amounts due from subsidiaries	-	-	L&R	AC
Amounts due from joint ventures	L&R	AC	L&R	AC
Amounts due from associates	L&R	AC	L&R	AC
Financial assets at FVTPL	FVTPL	FVTPL	FVTPL	FVTPL
Deposits, cash and bank balances	L&R	AC	L&R	AC
Derivative financial instruments	FVTPL	FVTPL	FVTPL	FVTPL
<u>Financial liabilities</u>				
Trade and other payables	AC	AC	AC	AC
Finance lease payables	AC	AC	AC	AC
Amounts due to subsidiaries	-	-	AC	AC
Amounts due to associates	AC	AC	AC	AC
Borrowings	AC	AC	AC	AC
Derivative financial instruments	FVTPL	FVTPL	FVTPL	FVTPL
Other liabilities	AC	AC	AC	AC

The changes in the measurement category above did not have any impact on the carrying amount of the financial assets and liabilities.

47 RESTATEMENT AND EFFECTS OF CHANGES IN ACCOUNTING POLICIES (CONTINUED)

(c) Adoption of MFRS 9 'Financial Instruments' ('MFRS 9') (continued)

(iii) Impairment of financial assets and financial guarantee contracts

The Group and Company have four types of financial instruments that are subject to MFRS 9's new ECL model:

- trade receivables;
- contract assets;
- related company balances;
- non-trade receivables carried at amortised cost; and
- financial guarantee contracts.

The Group and Company also have financial guarantee contracts that are subject to MFRS 9's new ECL model.

The Group and Company were required to revise its impairment methodology under MFRS 9 for each of these classes of assets. The impact of the change in impairment methodology on the Group and Company's retained profits and equity is disclosed in the table in Note 45 above.

While cash and cash equivalents are also subject to the impairment requirements of MFRS 9, the identified impairment loss was immaterial.

The Group and Company apply the MFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected credit loss allowance for all receivables and financial guarantee contracts. This resulted in an increase in the loss allowance on 1 January 2018 by RM225.3 million for the Group and RM555.8 million for the Company. Note 45 provide details about the calculation of the allowance.

The loss allowance increased by RM223.0 million and RM162.5 million for the Group and Company for trade receivables and contract assets on 1 January 2018. Loss allowance on contract assets is referring to impairment on unbilled revenue.

Applying the ECL model for non-trade receivables (amounts due from subsidiaries and associates) carried at amortised cost resulted in the recognition of a loss allowance of RM0.4 million and RM391.4 million on 1 January 2018 for the Group and Company. Note 45 provides the details on non-trade receivables.

Financial guarantee contracts (i.e. contracts that require the Company to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument) are also subject to impairment requirements under the ECL model.

Applying the ECL model for financial guarantee contracts resulted in the recognition of a loss allowance of RM1.9 million on 1 January 2018 for the Group and Company. Note 45 provides the details on financial guarantee contracts.

48 SIGNIFICANT ACQUISITION DURING THE FINANCIAL YEAR

Acquisitions during the financial year

(a) Subsidiaries acquired by the Group during the financial year ended 31 December 2018 are as follows:

	Note	Purchase consideration RM'million	Group's effective interest acquired	Effective acquisition date
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Name of subsidiaries

GVO and BCL	(i)	498.6	100.0%	1 March 2018
Allo Technology Sdn. Bhd. ('Allo') formerly known as Setia Haruman Technology Sdn. Bhd. ('SHTech')	(ii)	28.0	100.0%	8 March 2018

- (i) Tenaga Wind Ventures UK Ltd ('TWV'), a wholly owned subsidiary of TNB International Sdn. Bhd. ('TNBI') completed its acquisition of two United Kingdom ('UK') renewable energy companies; GVO and BCL for a purchase consideration of GBP77.4 million in cash and future consideration of GBP13.4 million, through two Share Purchase Agreements ('SPAs') with George von Opel and Tanzanite B.V. & Cataline Breaban ('the Sellers') respectively. Refer to Note 15 for the principal activities of these companies.

The Group's profit after tax for the financial year ended 31 December 2018 would have been estimated at RM3,745.1 million if GVO and BCL had been consolidated at the beginning of the financial year ended 31 December 2018. From the acquisition date up to 31 December 2018, GVO and BCL contributed a loss after tax of RM48.0 million.

- (ii) The Company has completed the 100.0% equity acquisition of Allo representing 1,000,002 ordinary shares, a wholly owned subsidiary of Setia Haruman Sdn. Bhd. ('SHSB'), for a cash consideration of RM28.0 million. Allo is principally involved in information technology related services as disclosed in Note 15.

The Group's profit after tax for the financial year ended 31 December 2018 would have been estimated at RM3,745.4 million if Allo had been consolidated at the beginning of the financial year ended 31 December 2018. From the acquisition date up to 31 December 2018, Allo contributed a profit after tax of RM3.0 million.

48 SIGNIFICANT ACQUISITION DURING THE FINANCIAL YEAR (CONTINUED)

Acquisitions during the financial year (continued)

- (b) Details of the assets, liabilities and net cash outflow as at the date of the acquisition of these subsidiaries by the Group during the financial year ended 31 December 2018 are as follows:

	GVO and BCL		Allo	
	Book value RM'million	Fair value RM'million	Book value RM'million	Fair value RM'million
<u>Recognised amounts of identifiable assets acquired and liabilities assumed</u>				
PPE (Note 14)	564.6	1,019.2	7.8	20.0
Receivables, deposits and prepayments	27.7	27.7	16.4	16.4
Deposits, bank and cash balances	47.6	47.6	7.9	7.9
Payables	(498.1)	(495.9)	(12.6)	(15.6)
Deferred tax liabilities	(13.6)	(129.7)	(0.7)	(0.7)
Total identifiable net assets	128.2	468.9	18.8	28.0
Goodwill on consolidation (Note 18)		29.7		0
Total		498.6		28.0
Cash consideration paid		428.6		28.0
Deferred consideration		68.0		0
Foreign currency translation reserve		2.0		0
Total purchase consideration		498.6		28.0
Cash consideration paid		428.6		28.0
Cash and cash equivalents assumed		(47.6)		(7.9)
Net cash outflow on acquisition		381.0		20.1

Acquisitions during the preceding financial period

There were no acquisition during the preceding financial period ended 31 December 2017.

49 EVENTS AFTER REPORTING PERIOD

On 10 January 2019, the Company announced that through its wholly-owned subsidiary, TNB Bukit Selambau Solar Sdn. Bhd. ('TBSS'), it has secured a RM144.0 million financing for its second Large Scale Solar ('LSS') project in Malaysia in Bukit Selambau, Kuala Muda, Kedah. TBSS together with MUFG Bank (Malaysia) Berhad (formerly known as Bank of Tokyo-Mitsubishi UFJ (Malaysia) Berhad) has recently achieved financial close for financing the project. The bank will be providing funding and working capital requirements for the LSS project.

TNB and TBSS inked a 21 year Power Purchase Agreement ('PPA') for the project in early March 2018. The project is scheduled to be completed in the fourth quarter of 2020. This LSS has a generation capacity of 30 megawatt ('MW') with DC install capacity of 45 megawatt peak ('MWp').

STATEMENT BY DIRECTORS

PURSUANT TO SECTION 251(2) OF THE COMPANIES ACT 2016

We, Tan Sri Leo Moggie and Datuk Seri Ir. Azman bin Mohd, the Directors of Tenaga Nasional Berhad, do hereby state that, in the opinion of the Directors, the financial statements set out on pages 153 to 307 are drawn up so as to give a true and fair view of the financial position of the Group and of the Company as at 31 December 2018 and financial performance of the Group and of the Company for the financial year ended 31 December 2018 in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the requirements of the Companies Act 2016 in Malaysia.

Signed on behalf of the Board of Directors, in accordance with their resolution dated 19 March 2019.



TAN SRI LEO MOGGIE
CHAIRMAN



DATUK SERI IR. AZMAN BIN MOHD
PRESIDENT/CHIEF EXECUTIVE OFFICER

STATUTORY DECLARATION

PURSUANT TO SECTION 251(1) OF THE COMPANIES ACT 2016

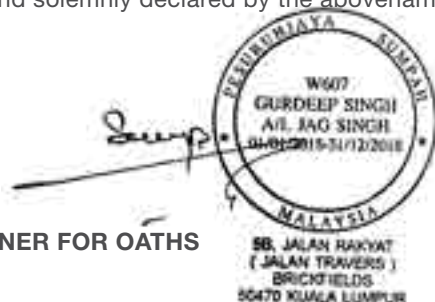
I, Nazmi bin Othman, the Officer primarily responsible for the financial management of Tenaga Nasional Berhad, do solemnly and sincerely declare that the financial statements set out on pages 153 to 307 are, in my opinion, correct and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declarations Act, 1960.



NAZMI BIN OTHMAN

Subscribed and solemnly declared by the abovenamed Nazmi bin Othman at Kuala Lumpur, Malaysia on 19 March 2019, before me.

COMMISSIONER FOR OATHS



INDEPENDENT AUDITORS' REPORT

TO THE MEMBERS OF TENAGA NASIONAL BERHAD

(Incorporated in Malaysia)

(Company No. 200866-W)

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Our opinion

In our opinion, the financial statements of Tenaga Nasional Berhad ('the Company') and its subsidiaries ('the Group') give a true and fair view of the financial position of the Group and of the Company as at 31 December 2018, and of their financial performance and their cash flows for the financial year then ended in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the requirements of the Companies Act 2016 in Malaysia.

What we have audited

We have audited the financial statements of the Group and of the Company, which comprise the statements of financial position as at 31 December 2018 of the Group and of the Company, and the statements of profit or loss, statements of comprehensive income, statements of changes in equity and statements of cash flows of the Group and of the Company for the financial year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages 153 to 307.

Basis for opinion

We conducted our audit in accordance with approved standards on auditing in Malaysia and International Standards on Auditing. Our responsibilities under those standards are further described in the "Auditors' responsibilities for the audit of the financial statements" section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and other ethical responsibilities

We are independent of the Group and of the Company in accordance with the By-Laws (on Professional Ethics, Conduct and Practice) of the Malaysian Institute of Accountants ('By-Laws') and the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ('IESBA Code'), and we have fulfilled our other ethical responsibilities in accordance with the By-Laws and the IESBA Code.

Our audit approach

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements of the Group and the Company. In particular, we considered where the Directors made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters, consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the Group and of the Company, the accounting processes and controls, and the industry in which the Group and the Company operate.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the Group and of the Company for the current financial year. These matters were addressed in the context of our audit of the financial statements of the Group and of the Company as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters	How our audit addressed the key audit matters
<p>Revenue recognition for sales of electricity</p> <p><i>Refer to Note 4 – Critical Accounting Estimates and Judgements and Note 5 – Revenue</i></p> <p>Sales of electricity of RM49,487.4 million and RM46,883.9 million is the most significant component of the Group's and Company's revenue respectively for the financial year ended 31 December 2018.</p> <p>Revenue from sales of electricity is based on the end customers' consumption and the related tariff rates, which are governed by the Incentive Based Regulations imposed by the Suruhanjaya Tenaga.</p> <p>We focused on the revenue recognition for sales of electricity as it involves the use of complex billing and accounting systems to process large volumes of data with different tariffs based on respective customer categories and consumption.</p>	<p>We performed the following audit procedures:</p> <ul style="list-style-type: none"> Tested the overall information technology general controls of the billing and accounting systems recording the revenue transactions. Tested the application controls within the billing systems over the: <ul style="list-style-type: none"> maintenance of tariff rates in the billing systems; accuracy of calculation of amounts billed to customers; and recording of revenue transactions. Tested the billings and revenue adjustments on a sampling basis to assess whether the revenue recognised and revenue adjustments are valid and recorded accurately. <p>Based on the above procedures performed, we did not find any material exceptions.</p>
<p>Reinvestment allowance ('RIA') claims</p> <p><i>Refer to Note 4 – Critical Accounting Estimates and Judgements and Note 42 – Contingent Liabilities</i></p> <p>On 23 November 2015, Inland Revenue Board ('IRB') had disallowed the Company's RIA claims of RM2,068.2 million for Year Assessment 2013 and 2014 and had issued notices of additional assessments ('Notices') to the Company. The Company had filed an appeal to the Special Commissioners of the Income Tax ('SCIT') on the Notices.</p> <p>As at 31 December 2018, the Group and Company recorded a tax recoverable of RM1,765.1 million from IRB arising from the resubmission of tax computations in the financial year ended 31 August 2014, pursuant to the explicit approval given by IRB on 21 January 2013 on the eligibility of TNB in claiming RIA, and based on a legal view obtained from external legal counsel.</p> <p>In addition, the Group and Company have not recorded the potential tax liability arising from the tax impact if the RIA claimed is disallowed and the Company loses its appeal.</p> <p>We focused on this area due to the inherent uncertainties involved in the outcome of judgement on the RIA claims by the SCIT and by the Kuala Lumpur High Court, including if there is a subsequent appeal by either party.</p>	<p>We evaluated the Directors' assessment on the basis of recoverability of the tax recoverable of RM1,765.1 million and the potential tax liability by assessing the independent legal confirmation obtained from management's external legal counsel.</p> <p>Examined the correspondence between the Company and the tax authority and assessed the matters in dispute based on advice received from our own tax experts to review the basis of application of the relevant tax laws.</p> <p>Based on the procedures performed above, we did not find any material exceptions to the Directors' judgement in the treatment of the tax recoverable balance and the potential tax liability.</p>

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Key audit matters (continued)

Key audit matters	How our audit addressed the key audit matters
<p>Assessment on carrying value of post-employment benefits</p> <p><i>Refer to Note 4 – Critical Accounting Estimates and Judgements and Note 33 – Employee Benefits</i></p> <p>As at 31 December 2018, the Group and Company recorded post-employment benefits of RM11,908.2 million and RM11,279.8 million respectively.</p> <p>Management assessed the present value of post-employment benefit plans by relying on the actuarial valuation reports from an actuary. The actuarial valuation reports estimated the present value of post-employment benefit plans based on key assumptions that comprised expected rate of salary increases, medical cost inflation and discount rates.</p> <p>We focused on this area because of the significant estimates made by management in determining the present value of post-employment benefit plans.</p>	<p>We performed the following audit procedures:</p> <ul style="list-style-type: none"> Obtained an understanding of the terms and conditions of the post-employment benefit plans. Tested the present value of post-employment benefit plans based on the actuarial valuation reports by performing the following: <ul style="list-style-type: none"> Discussed with actuary the valuation method used and checked that the valuation method is acceptable in accordance with MFRS 119 'Employee Benefits'; Discussed with actuary on the key assumptions used in the actuarial valuation and checked the reasonableness by comparing to historical data; Checked the reasonableness of the discount rates with the assistance of our valuation experts by comparing to market yields of high quality government securities at reporting date; Checked the membership data used in the actuarial models through inspection of payroll personnel files and other supporting documents; and Compared the fair value of plan assets based on the actuary report against the trustee's report. <p>Based on the procedures performed above, we did not find any material exceptions to the Director's estimates of the post-employment benefits carrying value.</p>

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Key audit matters (continued)

Key audit matters	How our audit addressed the key audit matters
<p>Impairment assessments of non-current assets other than goodwill</p> <p>Refer to Note 4 – Critical Accounting Estimates and Judgements, Note 15 – Subsidiaries and Note 17 – Associates</p> <p>Management performed impairment assessments of certain non-current assets of the Group and Company, other than goodwill, which had impairment indicators. As a result, the following impairment losses were recognised during the financial year ended 31 December 2018:</p> <ul style="list-style-type: none"> Impairment totalling RM802.7 million at TNB Group in respect of the Group's investments in Gama Enerji Anonim Şirketi ('Gama Enerji') and GMR Energy Limited ('GEL'), associates in Turkey and India respectively. Impairment totalling RM1,621.4 million at TNB Company in respect of the Company's investments in Aruna Servicios Integrales S.L.U. ('ASI') and Power and Energy International (Mauritius) Ltd. ('PEIM'), wholly owned subsidiaries of TNB Company. <p>We focused on this area as the recoverable amounts of the non-current assets are determined based on discounted cash flows projections, which require judgement on the part of management on the future financial performance and the key assumptions used, in particular, plant load factor, plant availability factor and terminal growth rate.</p>	<p>We have assessed management's impairment assessments. Our procedures in relation to management's impairment assessment includes the following:</p> <ul style="list-style-type: none"> We assessed the reliability of management's forecast through the review of past trends of actual financial performances against previous forecasted results; We assessed the key assumptions used by management in the discounted future cash flows projections, in particular, plant load factor, plant availability factor and terminal growth rate, by comparing with historical results and market outlook; We performed sensitivity analysis on discount rates, plant load factors and terminal growth rate used to evaluate the impact on the impairment assessment; and We assessed the adequacy and reasonableness of the disclosures in the financial statements. <p>Based on the procedures performed, we noted no significant exceptions.</p>

Information other than the financial statements and auditors' report thereon

The Directors of the Company are responsible for the other information. The other information comprises Directors' Report, Statement on Risk Management and Internal Control, Board Risk Committee Report and the Chairman's Statement, which we obtained prior to the date of this auditors' report, and the remaining Annual Report 31 December 2018 of Tenaga Nasional Berhad, which is expected to be made available to us after that date. Other information does not include the financial statements of the Group and of the Company and our auditors' report thereon.

Our opinion on the financial statements of the Group and of the Company does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements of the Group and of the Company, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements of the Group and of the Company or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Responsibilities of the Directors for the financial statements

The Directors of the Company are responsible for the preparation of the financial statements of the Group and of the Company that give a true and fair view in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the requirements of the Companies Act 2016 in Malaysia. The Directors are also responsible for such internal control as the Directors determine is necessary to enable the preparation of financial statements of the Group and of the Company that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements of the Group and of the Company, the Directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements of the Group and of the Company as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with approved standards on auditing in Malaysia and International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with approved standards on auditing in Malaysia and International Standards on Auditing, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- (a) Identify and assess the risks of material misstatement of the financial statements of the Group and of the Company, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- (b) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's and the Company's internal control.
- (c) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
- (d) Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's or the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements of the Group and of the Company or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group or the Company to cease to continue as a going concern.
- (e) Evaluate the overall presentation, structure and content of the financial statements of the Group and of the Company, including the disclosures, and whether the financial statements of the Group and of the Company represent the underlying transactions and events in a manner that achieve fair presentation.
- (f) Obtain sufficient appropriate audit evidence regarding the financial statements of the entities or business activities within the Group to express an opinion on the financial statements of the Group. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS (CONTINUED)

Auditors' responsibilities for the audit of the financial statements (continued)

We communicate with the Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Directors, we determine those matters that were of most significance in the audit of the financial statements of the Group and of the Company for the current financial year and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

In accordance with the requirements of the Companies Act 2016 in Malaysia, we report that the subsidiaries of which we have not acted as auditors, are disclosed in Note 15 to the financial statements.

OTHER MATTERS

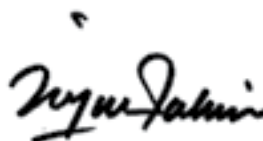
This report is made solely to the members of the Company, as a body, in accordance with Section 266 of the Companies Act 2016 in Malaysia and for no other purpose. We do not assume responsibility to any other person for the content of this report.



PRICEWATERHOUSECOOPERS PLT

LLP0014401-LCA & AF 1146

Chartered Accountants



AZIZAN BIN ZAKARIA

02930/05/2020 J

Chartered Accountant

Kuala Lumpur
19 March 2019



ADDITIONAL INFORMATION

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Proxy Form

STATISTICS OF SHAREHOLDINGS

AS AT 18 MARCH 2019

SHARE CAPITAL

Issued Shares : 5,686,888,771 ordinary shares
One (1) Special Rights Redeemable Preference Share

Voting Right : One (1) vote per ordinary share

ANALYSIS BY SIZE OF SHAREHOLDINGS

Size of Shareholdings	No. of Shareholders		Total No. of Shareholders		No. of Issued Shares		Total No. of Issued Shares	
	Malaysian	Foreigner	No.	%	Malaysian	Foreigner	No.	%
1 - 99	1,784	29	1,813	4.14	60,944	1,029	61,973	0.00
100 - 1,000	19,343	148	19,491	44.49	8,368,929	83,640	8,452,569	0.15
1,001 - 10,000	19,090	294	19,384	44.25	52,518,261	1,235,361	53,753,622	0.95
10,001 - 100,000	1,630	371	2,001	4.57	41,603,637	15,566,223	57,169,860	1.00
100,001 - less than 5% of issued shares	468	649	1,117	2.55	1,648,154,125	1,075,189,679	2,723,343,804	47.89
5% and above of issued shares	3	0	3	0.00	2,844,106,943	0	2,844,106,943	50.01
Total	42,318	1,491	43,809	100.00	4,594,812,839	1,092,075,932	5,686,888,771	100.00

ANALYSIS OF EQUITY STRUCTURE

No.	Category of Shareholders	No. of Shareholders		No. of Issued Shares		% of Issued Shares	
		Malaysian	Foreigner	Malaysian	Foreigner	Malaysian	Foreigner
1.	Individuals	37,464	281	81,358,522	1,120,974	1.43	0.02
2.	Body Corporate						
	a. Banks/Finance Companies	135	1	1,494,431,863	46	26.28	0.00
	b. Investment Trusts/Foundation/Charities	9	0	180,612	0	0.00	0.00
	c. Other Type of Companies	359	14	1,660,854,196	9,210,062	29.21	0.16
3.	Government Agencies/Institutions	16	0	12,356,662	0	0.22	0.00
4.	Nominees	4,335	1,195	1,345,630,984	1,081,744,850	23.66	19.02
5.	Others	0	0	0	0	0.00	0.00
Total		42,318	1,491	4,594,812,839	1,092,075,932	80.80	19.20

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Statistics of Shareholdings

DIRECTORS' SHAREHOLDINGS

No.	Name of Directors	No. of Shares	
		Direct Interest	%
1.	Tan Sri Leo Moggie	0	0.00
2.	Datuk Seri Ir. Azman bin Mohd	330,700	0.01
3.	Datuk Ahmad Badri bin Mohd Zahir (<i>Appointed w.e.f. 1 November 2018</i>)	0	0.00
4.	Amran Hafiz bin Affifudin	0	0.00
5.	Noraini binti Che Dan (<i>Redesignated w.e.f. 28 February 2019</i>)	0	0.00
6.	Gee Siew Yoong	0	0.00
7.	Juniwati Rahmat Hussin	0	0.00
8.	Gopala Krishnan K.Sundaram (<i>Appointed w.e.f. 4 July 2018</i>)	0	0.00
9.	Ong Ai Lin (<i>Appointed w.e.f. 1 August 2018</i>)	0	0.00
10.	Dato' Roslina binti Zainal (<i>Appointed w.e.f. 15 March 2019</i>)	18,400	0.00

SUBSTANTIAL SHAREHOLDERS ACCORDING TO THE REGISTER OF SUBSTANTIAL SHAREHOLDERS

No.	Name of Substantial Shareholders	No. of Shares	%
1.	Khazanah Nasional Berhad	1,635,655,861	28.76
2.	Employees Provident Fund Board*	788,778,782	13.87
3.	Amanah Saham Bumiputera**	517,606,500	9.10
4.	Kumpulan Wang Persaraan (Diperbadankan)***	308,066,925	5.42
Total		3,250,108,068	57.15

Notes:-

* Registered with Citigroup Nominees (Tempatan) Sdn. Bhd.

** Registered with AmanahRaya Trustees Berhad

*** Kumpulan Wang Persaraan (Diperbadankan)

- Registered with Citigroup Nominees (Tempatan) Sdn. Bhd. (40,562,000)

TOP 30 SECURITIES ACCOUNT HOLDERS

No.	Name of Shareholders	No. of Shares	%
1.	Khazanah Nasional Berhad	1,635,655,861	28.76
2.	Citigroup Nominees (Tempatan) Sdn. Bhd. Employees Provident Fund Board	690,844,582	12.15
3.	AmanahRaya Trustees Berhad Amanah Saham Bumiputera	517,606,500	9.10
4.	Kumpulan Wang Persaraan (Diperbadankan)	267,504,925	4.70
5.	Permodalan Nasional Berhad	153,796,300	2.70
6.	AmanahRaya Trustees Berhad Amanah Saham Malaysia 2 - Wawasan	97,714,800	1.72

Statistics of Shareholdings

No.	Name of Shareholders	No. of Shares	%
7.	AmanahRaya Trustees Berhad Amanah Saham Malaysia	79,861,600	1.40
8.	Cartaban Nominees (Asing) Sdn. Bhd. Exempt AN For State Street Bank & Trust Company (West CLT OD67)	79,003,662	1.39
9.	HSBC Nominees (Asing) Sdn. Bhd. JPMCB NA For Vanguard Emerging Markets Stock Index Fund	62,393,811	1.10
10.	HSBC Nominees (Asing) Sdn. Bhd. JPMCB NA For Vanguard Total International Stock Index Fund	61,226,011	1.08
11.	Cartaban Nominees (Tempatan) Sdn. Bhd. PAMB For Prulink Equity Fund	58,931,450	1.04
12.	Malaysia Nominees (Tempatan) Sendirian Berhad Great Eastern Life Assurance (Malaysia) Berhad (Par 1)	58,234,125	1.02
13.	Citigroup Nominees (Tempatan) Sdn. Bhd. Exempt AN For AIA Bhd.	47,520,025	0.84
14.	AmanahRaya Trustees Berhad Amanah Saham Bumiputera 2	41,895,700	0.74
15.	Cartaban Nominees (Asing) Sdn. Bhd. GIC Private Limited For Government of Singapore (C)	34,659,775	0.61
16.	AmanahRaya Trustees Berhad Amanah Saham Bumiputera 3 - Didik	34,362,992	0.60
17.	Citigroup Nominees (Tempatan) Sdn. Bhd. Employees Provident Fund Board (NOMURA)	34,229,600	0.60
18.	Maybank Nominees (Tempatan) Sdn. Bhd. Maybank Trustees Berhad For Public Ittikal Fund (N14011970240)	33,000,000	0.58
19.	AmanahRaya Trustees Berhad Amanah Saham Malaysia 3	32,634,300	0.57
20.	AmanahRaya Trustees Berhad Public Islamic Dividend Fund	30,222,975	0.53
21.	Lembaga Tabung Haji	30,080,000	0.53
22.	Maybank Nominees (Tempatan) Sdn. Bhd. MTrustee Berhad For CIMB Islamic DALI Equity Growth Fund (UT-CIMB-DALI) (419455)	24,098,300	0.42
23.	Malaysia Nominees (Tempatan) Sendirian Berhad Great Eastern Life Assurance (Malaysia) Berhad (Par 3)	22,863,550	0.40
24.	HSBC Nominees (Asing) Sdn. Bhd. JPMBL SA For Nordea 1, Sicav	22,751,360	0.40
25.	HSBC Nominees (Asing) Sdn. Bhd. Pictet And CIE (Europe) For Pictet Global Selection Fund - Global Utilities Equity Fund	18,526,600	0.33
26.	AmanahRaya Trustees Berhad Public Islamic Equity Fund	17,626,037	0.31
27.	HSBC Nominees (Asing) Sdn. Bhd. JPMCB NA For MSCI Equity Index Fund B - Malaysia	17,543,418	0.31
28.	DB (Malaysia) Nominee (Asing) Sdn. Bhd. BNYM SA/NV For People's Bank of China (SICL ASIA EM)	17,523,100	0.31
29.	AmanahRaya Trustees Berhad Public Ittikal Sequel Fund	17,504,400	0.31
30.	Citigroup Nominees (Tempatan) Sdn. Bhd. Employees Provident Fund Board (CIMB PRIN)	17,424,100	0.31
Total		4,257,239,859	74.86

PROXY FORM

29TH ANNUAL GENERAL MEETING

(Before completing the form, please refer to the notes overleaf)



Number of Ordinary Share(s) held	CDS Account No.															
				-				-								

I/We, _____
(FULL NAME OF SHAREHOLDER AS PER NRIC/CERTIFICATE OF INCORPORATION IN CAPITAL LETTERS)

NRIC No./Passport No./Company No. _____ of _____
(FULL ADDRESS)

(FULL ADDRESS)

Telephone No. _____

being a Member of Tenaga Nasional Berhad, hereby appoint:

	FULL NAME OF PROXY AS PER NRIC IN CAPITAL LETTERS	NO. OF SHARES	PERCENTAGE (%)	
Proxy 1	NRIC No./Passport No.:			or failing him/her
Proxy 2	NRIC No./Passport No.:			or failing him/her
TOTAL			100%	

the *Chairman of the Meeting, as my/our proxy, to attend and vote for me/us and on my/our behalf at the **29TH ANNUAL GENERAL MEETING (29TH AGM)** of **TENAGA NASIONAL BERHAD ("TNB" or "the Company")** to be held at mySpace1@Ballroom, Level 3, The Malaysia International Trade & Exhibition Centre (MITEC), Kompleks MITEC, No. 8, Jalan Dutamas 2, 50480 Kuala Lumpur, Malaysia on **TUESDAY, 14 MAY 2019 at 10.00 a.m.** and/or at any adjournment thereof.

My/Our proxy is to vote as indicated below:

NO.	RESOLUTIONS		FOR	AGAINST
ORDINARY BUSINESS				
	Re-election of the following Directors who retire in accordance with Clause 64(1) of the Company's Constitution:			
1.	Tan Sri Leo Moggie	ORDINARY RESOLUTION 1		
2.	Juniwati Rahmat Hussin	ORDINARY RESOLUTION 2		
	Re-election of the following Directors who retire in accordance with Clause 63(2) of the Company's Constitution:			
3.	Gopala Krishnan K.Sundaram	ORDINARY RESOLUTION 3		
4.	Ong Ai Lin	ORDINARY RESOLUTION 4		
5.	Datuk Ahmad Badri bin Mohd Zahir	ORDINARY RESOLUTION 5		
6.	Dato' Roslina binti Zainal	ORDINARY RESOLUTION 6		
7.	Amir Hamzah bin Azizan	ORDINARY RESOLUTION 7		
8.	Approval for payment of Non-Executive Directors' fees for the Financial Year ended 31 December 2018	ORDINARY RESOLUTION 8		
9.	Approval for payment of the following Non-Executive Directors' fees from 1 January 2019 until the next Annual General Meeting (AGM) of the Company: (i) Director's fee of RM30,000.00 per month for the Non-Executive Chairman (ii) Director's fee of RM20,000.00 per month for each Non-Executive Directors	ORDINARY RESOLUTION 9		
10.	Approval for payment of benefits to the Non-Executive Directors (excluding Non-Executive Directors' fees) from the 29 th AGM until the next AGM of the Company	ORDINARY RESOLUTION 10		
11.	Re-appointment of Messrs PricewaterhouseCoopers PLT as Auditors of the Company and to authorise the Directors to fix their remuneration	ORDINARY RESOLUTION 11		

Please indicate with an "X" in the box provided for each Resolution as how you wish your votes to be cast. If no voting instruction is given, the proxy(ies) is/are hereby authorised to vote, or abstain from voting at his/her/their discretion.

*If you do not wish to appoint the Chairman of the Meeting as your proxy/one (1) of your proxies, please strike out the words "the Chairman of the Meeting" and insert the name(s) of the proxy(ies) you wish to appoint in the blank spaces provided.

Dated this _____ day of _____, 2019

Signature(s) or Common Seal of Member(s)

NOTES:

1. A member of a Company shall be entitled to appoint another person as his/her proxy to exercise all or any of his/her rights to attend, participate, speak and vote at a meeting of members of the Company, in accordance with Section 334(1) of the Companies Act 2016.
2. Only members whose names appear in the Record of Depositors as at 7 May 2019 shall be entitled to attend the AGM or appoint proxy(ies) to attend and/or vote on their behalf. There shall be no restriction as to the qualification of a proxy.
3. Where a member is an authorised nominee as defined in accordance with the provisions of the Securities Industry (Central Depositories) Act 1991, it may appoint up to two (2) proxies in respect of each Securities Account it holds with ordinary shares in the Company standing to the credit of the said Securities Account.
4. A member entitled to attend and vote at the Meeting is entitled to appoint not more than two (2) proxies to attend and vote on his/her behalf. Where a member appoints two (2) proxies, the appointments shall be invalid unless the proportion of the shareholdings to be represented by each proxy is specified.
5. The instrument appointing a proxy/Proxy Form shall be in writing under the hand of the appointer or of his attorney duly appointed under a power of attorney. Where the instrument appointing a proxy/Proxy Form is executed by a corporation, it shall be executed either under its common seal or under the hand of any officer or attorney duly appointed under a power of attorney.
6. A corporation which is a member may by resolution of its Directors or other governing body authorise such person as it thinks fit to act as its representative at the Meeting in accordance with Clause 51 of the Company's Constitution.
7. Duly completed Proxy Form must be deposited to the Boardroom Share Registrars Sdn. Bhd., Level 6, Symphony House, Pusat Dagangan Dana 1, Jalan PJU 1A/46, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia not less than twenty-four (24) hours before the time appointed for the taking of the poll or **no later than 13 May 2019 at 12.00 p.m.**
8. Pursuant to Paragraph 8.29A of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad, voting at the 29th AGM of the Company will be conducted by poll. Poll Administrator and Independent Scrutineers will be appointed respectively to conduct the polling/e-voting process and to verify the results of the poll.
9. Registration of members/proxies attending the Meeting will start from 7.00 a.m. on the day of the Meeting and shall remain open until such time as may be determined by the Chairman of the Meeting. At the closure thereof, no person will be allowed to register for the Meeting nor enter the Meeting venue. Members/proxies are required to produce identification documents for registration.

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AFFIX
STAMP

BOARDROOM SHARE REGISTRARS SDN. BHD.
(formerly known as Symphony Share Registrars Sdn. Bhd.)
Level 6, Symphony House
Pusat Dagangan Dana 1
Jalan PJU 1A/46
47301 Petaling Jaya
Selangor Darul Ehsan
Malaysia

2. Fold Here To Seal



TENAGA NASIONAL BERHAD (200866-W)

No. 129, Jalan Bangsar, 59200 Kuala Lumpur

Tel: +603 2180 4582 Fax: +603 2180 4589 Email: cosec@tnb.com.my

www.tnb.com.my