





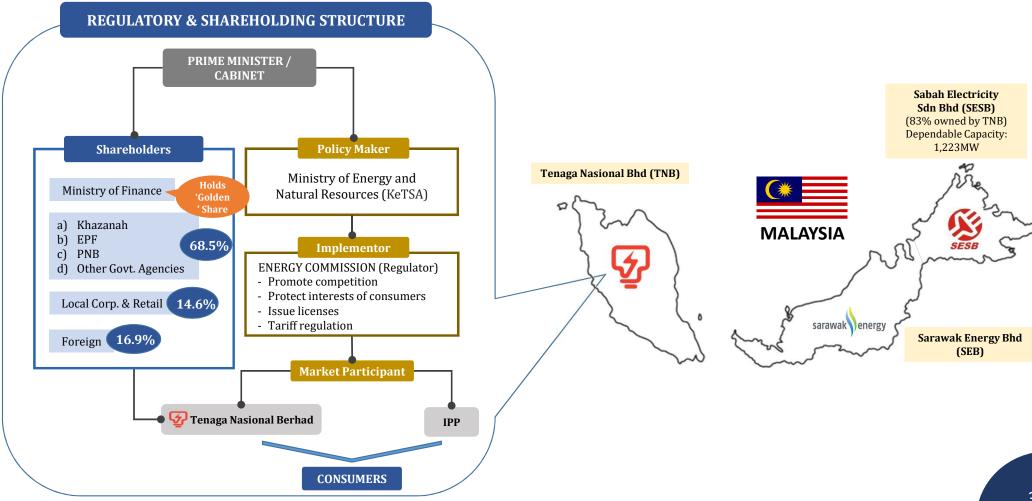


REGULATORY

BUSINESS STRATEGY & DIRECTION

CAPITAL MANAGEMENT

FINANCIAL & TECHNICAL HIGHLIGHT



Note: Data / Info as at 6th May 2020

	Generation			Grid/Transmission	Distribution Network & Retail	
	Non-Regulated Business			Regulated Business		
Core Business	Oil & Distillate Solar Hydro	0.00% 0.1% 4.2%	Installed Capacity: 25,409MW TNB: 14,561MW @ 57.3% IPP: 10,849MW @ 42.7% Generation Market Share: 60.5% Equivalent Availability Factor (EAF): 88.6% Note: TNB installed capacity & Market Share are based on gross capacity	Transmission Network Length: 23,964KM Transmission Substations: 456	Distribution Network Length: 683,008KM Distribution Substations: 83,467	
2)	Gas & LNG	15.6%			SAIDI: 48.1mins	
	Coal	40.6%		Transmission System Minutes: 0.01 mins	Customer Satisfaction Index (CSI): 8.1	

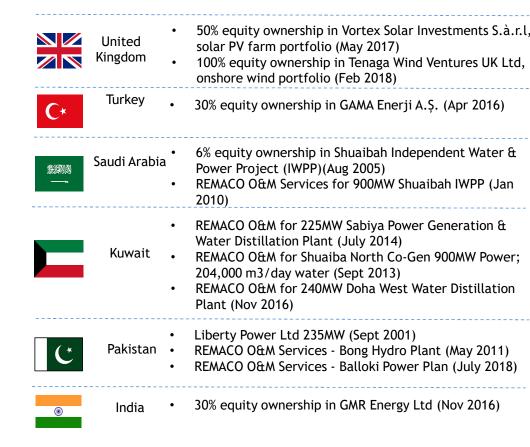
Source: TNB Data / Info as at March 2020

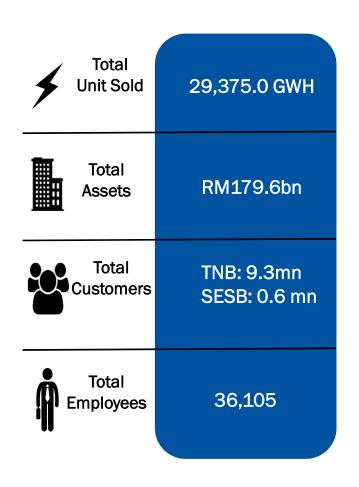


Growing Renewable Energy Business - TNB is currently present in more than 5 countries

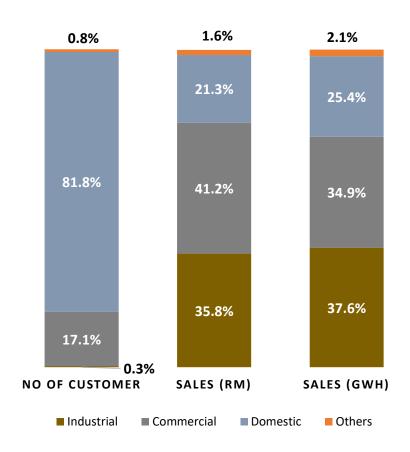


FOCUS ON GROWING RENEWABLE
ENERGY BUSINESS IN SPECIFIC MARKETS
BY LEVERAGING ON ITS INTERNATIONAL
AND DOMESTIC EXPERIENCE,
CAPABILITIES AND ASSETS





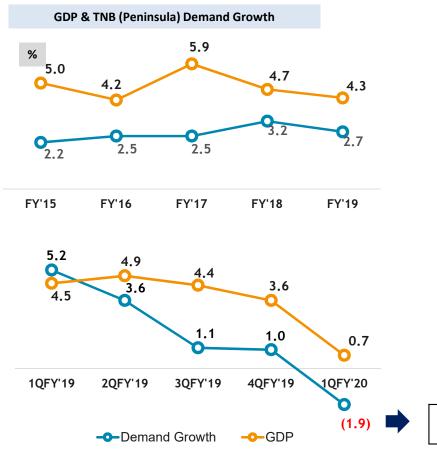
TNB Sectoral Sales Analysis*

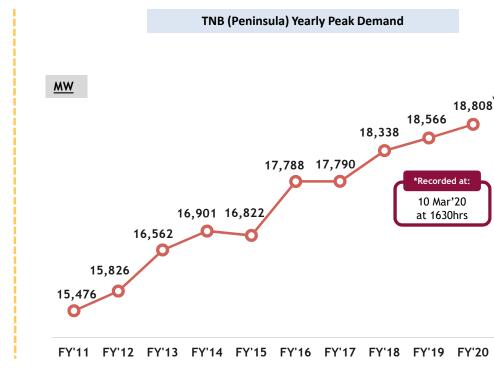


Note: Data / Info as at 1QFY20 (March 2020)

^{*} Peninsular Malaysia only (TNB exclude SESB and other subsidiaries)

Electricity Demand in line with GDP Growth



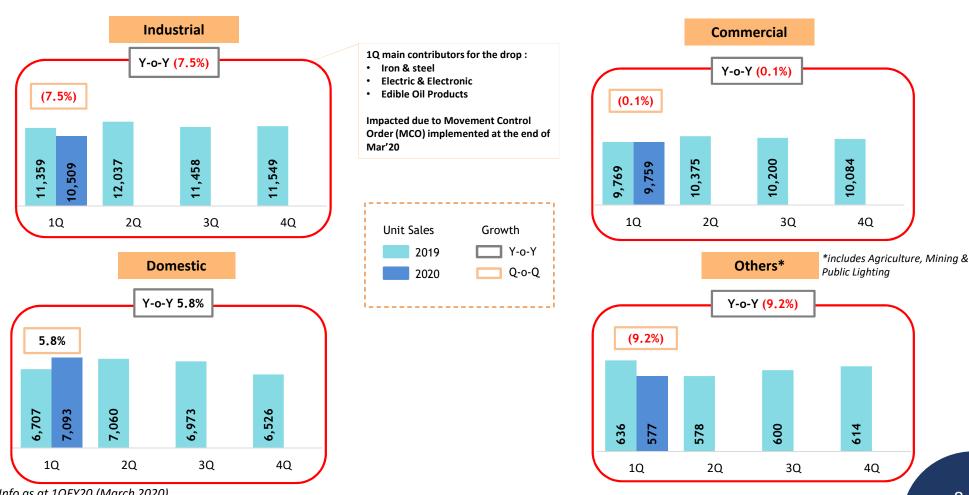


	1QFY'20	1QFY'19	Variance (%)
Total Unit Sales (GWh)	27,938.2	28,471.1	(1.9)

Note:

- Data / Info as at FY20 (March 2020)
- ii. Peninsular Malaysia only (TNB exclude SESB and other subsidiaries)

Slowing down in the Industrial Sector due to Global Economy Challenges



Note: Data / Info as at 1QFY20 (March 2020)

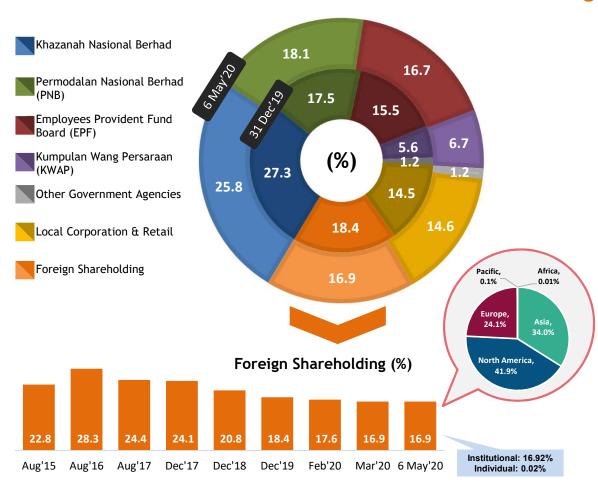
10,084

4Q

4Q

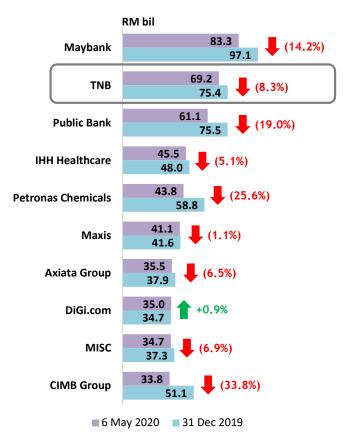
^{*} Peninsular Malaysia only (TNB exclude SESB and other subsidiaries)

TNB Shareholding



Source: Share Registrar, Bloomberg and IR Internal Analysis

Top 10 KLCI Stocks by Market Capitalization



Note:

- 1. Top 10 KLCI ranking by Market Capitalization as at 6th May 2020
- 2. TNB Latest Market Cap: RM68.2bil (2nd), as at 5th June 2020

Composition of BOD



CHAIRMAN
DATO' SERI DIRAJA MAHDZIR KHALID



EXECUTIVE DIRECTOR / CEO
DATUK SERI AMIR HAMZAH BIN AZIZAN

Independent Non-Executive Directors (Total = 7)



NORAINI BINTI CHE DAN

Expertise: Audit & Finance



GOPALA KRISHNAN A/L K.SUNDARAM

Expertise: Law



ONG AI LIN

Expertise: Audit & Finance



JUNIWATI BINTI RAHMAT HUSSIN

Expertise: Project Management, Corporate Planning and Human Resource



DATO' ROSLINA BINTI ZAINAL

Expertise: Business



DATO' CHEOK LAY LENG

Expertise: IT & Technology

Non-Independent Non-Executive Directors (Total =2)



AMRAN HAFIZ BIN AFFIFUDIN (Khazanah)



DATO' ASRI BIN HAMIDIN @ HAMIDON (MoF)



REGULATORY

BUSINESS STRATEGY & DIRECTION

CAPITAL MANAGEMENT

FINANCIAL & TECHNICAL HIGHLIGHT

A Mechanisms For Tariff Setting With Incentives To Improve Efficiency & Greater Transparency

Regulatory Environment:

1. Clear and Transparent Regulatory Framework

Clear and transparent regulatory framework governed by the Energy Commission provides investors with confidence in TNB's cash flow visibility

2. Consistent and Clear Returns

Regulatory WACC of 7.3% provides consistent and clear return to debt and equity holders

3. Shield against Uncontrollable Swings

Imbalance Cost Pass-Through mechanism shields Tenaga against uncontrollable swings in input costs, with a review every 6 months

4. Incentives for Operational Efficiencies

Incentive / Penalty mechanism provides clear incentives for TNB to achieve operational efficiencies

Tariff

System

Operations

Grid System

Operator

Transmission Tariff Transmission Tariff Distribution Network Distribution & Customer Service Tariff

Regulated

Non - Regulated

(competitive bidding environment)

Generation

SLAS

IPPs

Single Buyer

PPAs

Generation

Source: Energy Commission (EC)

Imbalance Cost Pass-Through (ICPT) Mechanisms Ensures TNB Remain Neutral

Base Tariff under IBR framework comprises of:

- a) Opex, Depreciation of Regulated Assets & Tax Expenses of Business Entities
 - transmission, grid system operation, Single Buyer operation, distribution network and customer services
- b) Power purchase cost charged by generators to the Single Buyer
- c) Return on regulated assets (rate base) of Business Entities
 - Reviewed every 3 years

Imbalance Cost Pass-Through (ICPT):

- a) ICPT is 6-monthly pass-through of variations in uncontrollable fuel costs and other generation specific costs (imbalance cost) incurred by utility for the preceding 6-month period
 - Reviewed every 6 months

sen/kWh ICPT Surcharge Base Tariff: RP1 - 38.53 sen/kWh RP2 - 39.45 sen/kWh ICPT Rebate Trial Period: 2014 Regulatory Period 1 (RP1): 2015 - 2017 Regulatory Period 2 (RP2): 2018 - 2020 Year 1 Year 2 Year 3 Regulatory Period

Principle for ICPT Calculation

Cost components comprise of

• The ICPT is calculated based on an estimated actual fuel cost and generation specific costs for a particular six (6) months period against the corresponding baseline costs in the Base Tariff.

Source: Energy Commission (EC)

Imbalance Cost Pass-Through (ICPT) Comprises Two Components

Imbalance Cost Pass-through (ICPT)

Fuel Cost Pass Through (FCPT)



Changes in Gas/LNG and Coal Costs

PPAs Power Purchase Agreements

SLAs Service Level Agreements

CSTA Coal Supply and Transportation Agreement

CPC Coal Purchase Contract

GFA Gas Framework Agreement

GSA Gas Supply Agreement

Generation Specific Cost Adjustment (GSCPT)



Changes in:

- Other fuel costs such as distillate and oil
- All costs incurred by SB under the power procurement agreements (PPAs, SLAs and etc.) and fuel procurement agreements (CSTA, CPC,
- Renewable energy FiT displaced cost

RP2

ICPT	Surcharge	Period
Jul – Dec'18	2.15sen/kWh	Jan – Jun'19
Jan – Jun'19	2.55sen/kWh	Jul – Dec'19
Jul – Dec'19	2.00sen/kWh	Jan – Jun'20
Jan – Jun'20	0.00sen/kWh	Jul – Dec'20

Source: Energy Commission, company presentations, company fillings

New Features in Electricity Tariff Review for RP2 (2018-2020)

More efficient and reliable electricity supply

- Efficient and reliable electricity supply at the lowest efficient cost;
- Enhancement in safety and reliability with smart grid capabilities.

Support Government's initiatives and aspirations

- Supporting
 Government's
 initiatives in green
 energy and
 sustainability for
 example AMI,
 Distribution
 Automation, Group
 Relamping of
 streetlight, etc.
- Continue the gas price subsidy rationalization by gradual removal of gas price subsidy;

New addition in Key Performance Indicators

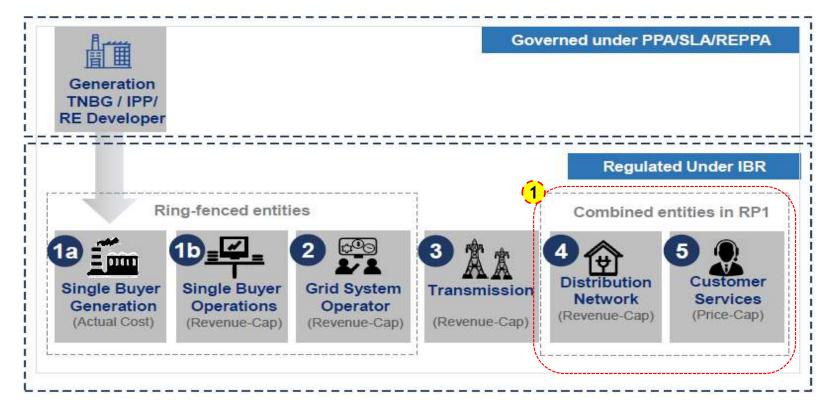
- New performance indicators on each business entity that are in line with Government's policies;
- Enhancement on KPI mechanisms and principles (symmetric and asymmetric).

Separation of Distribution Networks and Customer Services

- Separation of these business entities will enhance the system reliability and consumer experience;
- This will increase the productivity and consumer satisfaction.

Source: Energy Commission (EC)

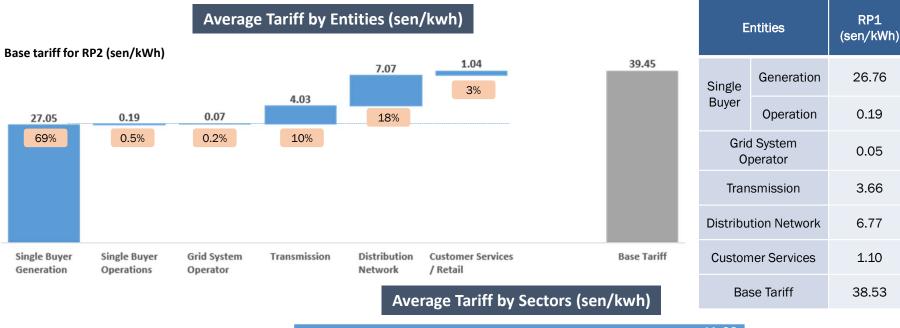
IBR Entities



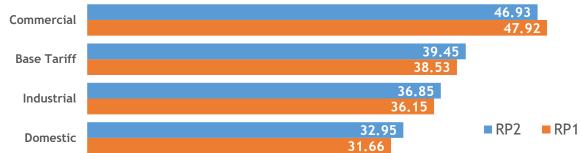
In RP1, these 2 entity are grouped as Price -Cap entity

Source: Energy Commission (EC)

New Base Tariff Under IBR Mechanism RP2



Source: Energy Commission (EC)



Variance

(RP2 v. RP1)

(sen/kWh)

+0.29

+0.02

+0.37

+0.3

-0.06

+0.92

RP2 Parameters

WACC

7.3% RP1: 7.5%

Avg. Regulated **Asset Based (RAB)**

RM54.8bn

(Avg. RAB in 2020) RP1: RM43.6bn (Closing RAB)

TARIFF

39.45 sen/kwh

RP1: 38.53 sen/kwh

CAPEX

OPEX

(Approved OPEX)



RM18.8bn* (Approved CAPEX)

RP1: RM15.7bn (Closing CAPEX)

Source: Energy Commission (EC)

RM18.2bn

RP1: RM16.9bn (Closing OPEX)

* Special **Projects** approved

network development for energy security & 367,000 **ED** streetlights

Fibre Optic

reliability

1.5 million

smart meters in homes

Fuel Parameters

Coal

USD75/MT



(RM14.47/mmbtu @ RM4.212/USD) RP1: USD87.5/MT @ RM3.100/USD

LNG

RM35/mmbtu

RP1: RM41.68/mmbtu

Regulated

Gas

@1,000mmscfd

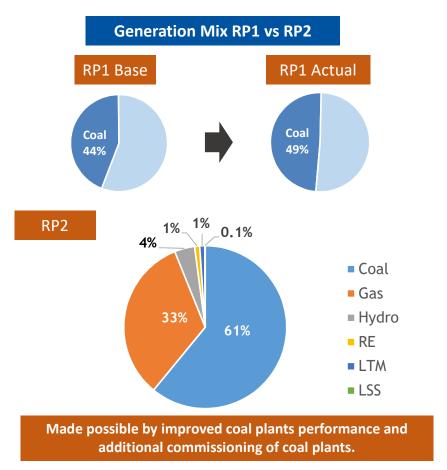


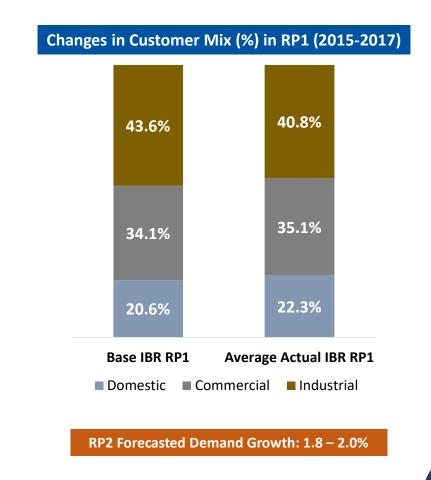
RM24.20/mmbtu (Jan'18 - Jun'18) RM25.70/mmbtu (Jul'18 - Dec'18) RM27.20/mmbtu (Jan'19 - Dec'20)

RP1: RM15.20/mmbtu - RM22.70/mmbtu

RP2 Forecasted Gas Utilization: 840 mmscfd

Generation and Customer Mix

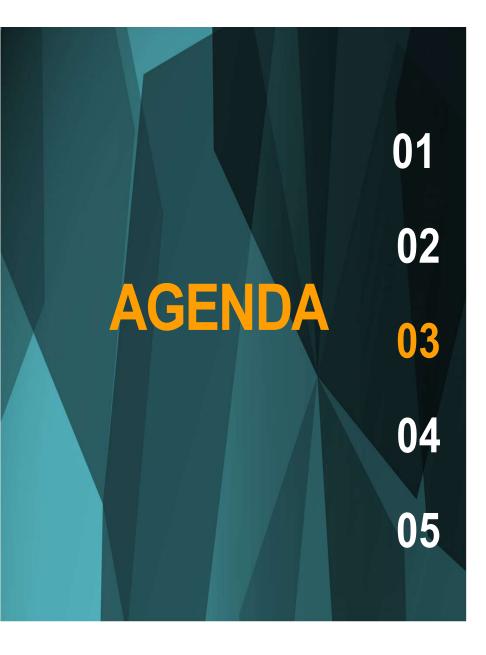




Note:

LTM – Laos, Thailand & Malaysia Interconnection; **LSS** – Large Scale Solar

Source: Energy Commission (EC)



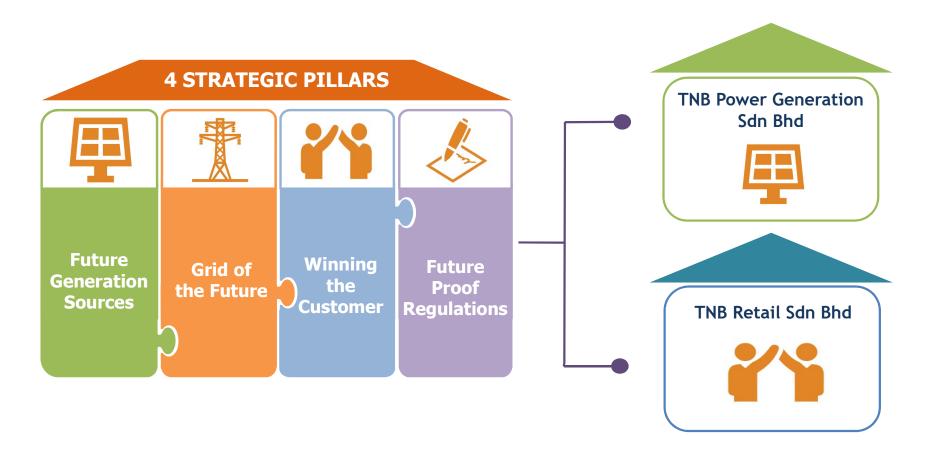
REGULATORY

BUSINESS STRATEGY & DIRECTION

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FINANCIAL & TECHNICAL HIGHLIGHT

Reimagining TNB is TNB's strategic aspiration – a key enabler is the corporate structure



International Acquisition - Four International Acquisitions to Support Aspiration



30%

Equity interest of GAMA Enerji A.S.

Assets include a 853MW natural gasfired plant, 117.5MW wind plants and 131.3 hydro plants

Vortex Solar UK

50%

Equity interest of Vortex Solar Investments S.a.r.l.

Assets include 24 operational solar PV Farm across England and Wales with net installed capacity of about 365MW



30%

Equity interest of GMR Energy Limited.

Assets include 1,014MW coal, gas and solar plants.

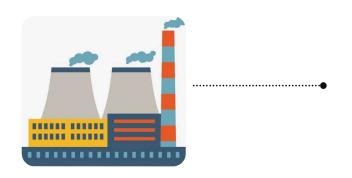
Tenaga Wind Ventures

100%

Equity interest of GVO Wind Limited & Blumerang Capital Limited

Assets include 53 operational onshore medium wind turbines with a total combined capacity of 26.1MW

Generation Projects



Southern Power Generation

1,440 MW

COD:

30th Nov 2020

Physical Progress: 99%

(Planned: 99%)



TNB Bukit Selambau

30 MW

COD: 31st Dec 2020

Physical Progress: 93%

(Planned: 97%)

Note:

Gas

i. PPA Tenure - 21 years

ii. Data as at March 2020









Renewable Energy (RE) & Green Policy

11th Malaysia Plan 2016 - 2020

FY2018

Government Green
Development Plan

Reduction up to 45% in
GHGs emission intensity of
GDP compared to 2005

FY2016

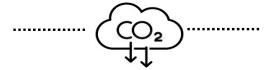
TNB

Sustainability Efforts

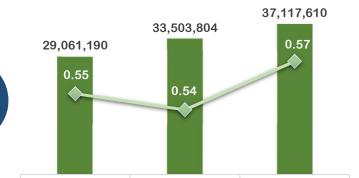
RE installed capacity of 8,885MW by 2020

* The increase in the total installed capacity of RE is based on the adoption of the ASEAN definition of RE by Malaysia in 2016 which takes into account all types of hydro energy in the calculation without limiting their capacities. Country RE Target by 2025

20% of Total Installed Capacity



level by 2030



FY2017

Total Emissions (tCO2e) — Emission Intensity (tCO2e/MWh)



TNB RE Capacity (include major hydro)

Total: **2,937MW**

As at March 2020:

- International 291MW
- Domestic 2,646MW (include major hydro > 100MW)



TNB RE Target of 1,700MW by 2025

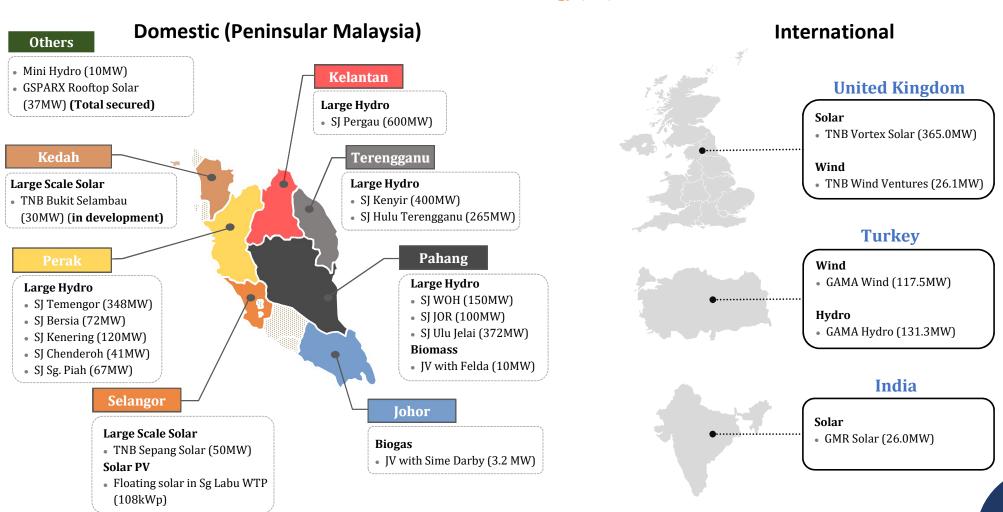
TNB RE Capacity (exclude major hydro)

Total: 776MW

As at March 2020:

- International 665.9MW
- Domestic 110MW (exclude major hydro > 100MW)

TNB's Renewable Energy (RE) Assets



TNB's Environment Initiatives

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



5,750,636.42 tCO2e of GHG Emissions were mitigated in FY2018 through the used of hydro, renewable energy and efficient technology power plant. (Data as at FY2018)



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.



50MW Large Scale Solar (LSS), cut emissions by approx. 64,000 tCO2e/year, additional 30MW LSS to further reduce emissions after COD in Dec 2020



To develop Green House Gas Emission Management System (GEMS), an online system to record and analyse raw emission data from TNB assets





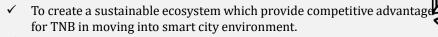
Promoting green energy by introducing tradable RE Certificate (MGATS) and optional green tariff (myGreen+)



Development on microalgae initiative to reduce carbon dioxide (CO2)

TNB's Green Development

□ UNITEN's Smart UniverCity



✓ The project focuses on customer experience, renewable energy, energy efficiency and artificial intelligence.





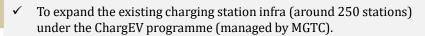
✓ The CoE will become a training centre for solar energy development and technology, catering for TNB employees and external participants from public and private sectors

☐ Introduction of Electric Buses for UNITEN



✓ The project aims to develop a feasible business model for the operation of electric buses within the campus, such as vehicle leasing between the Fleet Management and UNITEN.

☐ Expansion of Electric Vehicle Charging Network





☐ Maverick - Showcase of Net Zero Energy Home

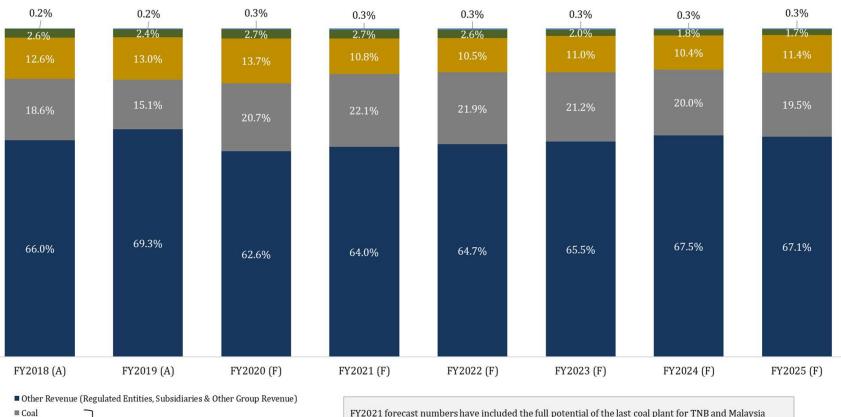


✓ Showcasing Net Zero Energy Home Living in residential areas in Cyberjaya, the project provides a physical experience for customers to visualise how to self generate their own electricity.

☐ Smart Street Light Showcase Project at UNITEN Putrajaya Campus

✓ A street lighting system integrated with communication facilities that allow it to perform various functions such as brightness control, surveillance and digital street signs.

Breakdown of TNB's Generation Revenue



Gas

■ Hydro

Solar & Wind

Revenue from TNB Generation Plants by fuel type

(Domestic & International)

The Group will continuously strive to ensure that the revenue from the coal generation plants does not not exceed 25%

FY2021 forecast numbers have included the full potential of the last coal plant for TNB and Malaysia (Jimah East Power). FY2022 onwards, coal contribution to the Group's Revenue will potentially diminish as new and more effcient gas plants are commissioned in Malaysia.

TNB's Social Initiatives



Economic & Social



212 households benefitted from Projek Baiti Jannati and Program Mesra Rakyat by refurbishing or building new homes through a total contribution of RM9.96 million



TNB's contribution of **RM6 million** including sponsorships to the Malaysian Hockey
Confederation



Approximately RM3.49 million has been allocated to Better Brighter Shelter programme, provide accommodation via dormitories whose members are undergoing treatment in the hospitals



Education



700 students awarded YTN scholarship with a total amount of **RM66.1** million



RM21.2 million for 3,564 students from low-income families in the fields of Science, Technology, Engineering and Mathematics through Dermasiswa My Brighter Future (MyBF) Programme



TNB has contributed a total of **RM2.19 million** to 18 schools under the Pintar Schools Adoption Programme



Career Development



More than **RM183** million contributed in training & development



RM10 million spent to cultivate 705 youth potentials through PROTÉGÉ



38,000 hours for Leadership Training & Total **1,085,160** training hours

TNB's Governance Initiatives

TNB is committed to operating in an ethical, transparent and responsible manner given the critical role we play in national development and the number of stakeholders who are impacted by our business

TNB Board Committees

- Board Audit Committee
- Board Risk Committee
- Board Finance And Investment Committee
- Board Long Term Incentive Plan Committee
- Board Tender Committee
- Board Integrity Committee
- Board Nomination And Remuneration Committee

Governance Pillars



Leadership & Effectiveness



Internal Audit Function



Relations with Stakeholders



Statement on Risk Management & Internal Controls



Ethics, Integrity & Trust



REGULATORY

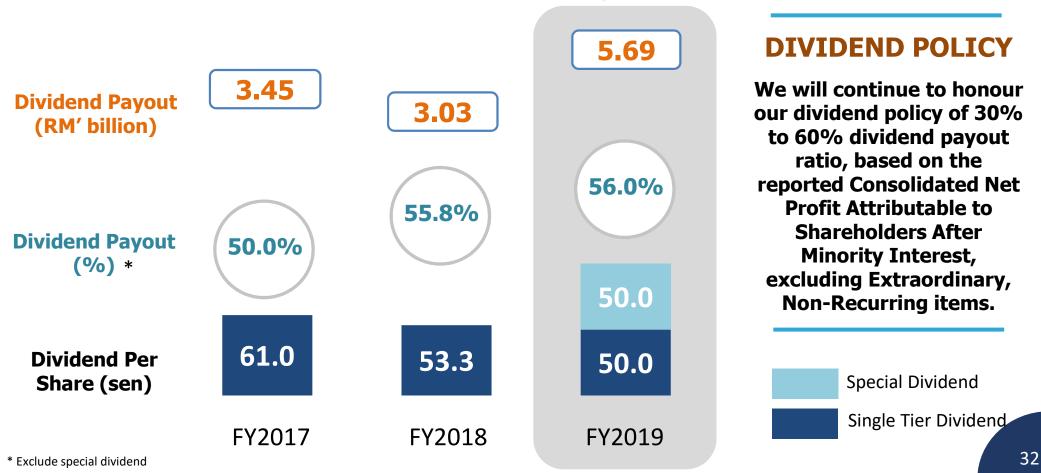
BUSINESS STRATEGY & DIRECTION

CAPITAL MANAGEMENT

FINANCIAL & TECHNICAL HIGHLIGHT

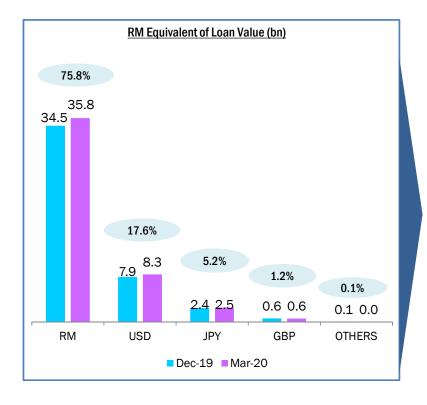
CAPITAL MANAGEMENT

With These Achievements, We Are Pleased To Distribute Dividend Payout Of RM5.6bn Comprising Of A 50.0sen Special Dividend On Top Of 50.0sen Single Tier Dividend To Our Loyal Shareholders, By Balancing The Company's Growth With Proactive Capital Management



CAPITAL MANAGEMENT

New drawdown of RM1bil increases Gearing Level



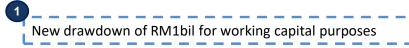
Note:

1. Debt consists of Principal + Accrued Interest

Statistics	31 st Mar'20	31 st Dec'19
1 Total Debt (RM' Bil)	47.3	45.4
Net Debt (RM' Bil)*	31.3	31.2
Gearing (%)	45.8	43.4
Net Gearing (%)	30.3	29.8
Fixed : Floating	98:2	98:2
Final Exposure	98:2	98:2
Effective Average Cost of Borrowing (based on exposure) **	5.01	5.06

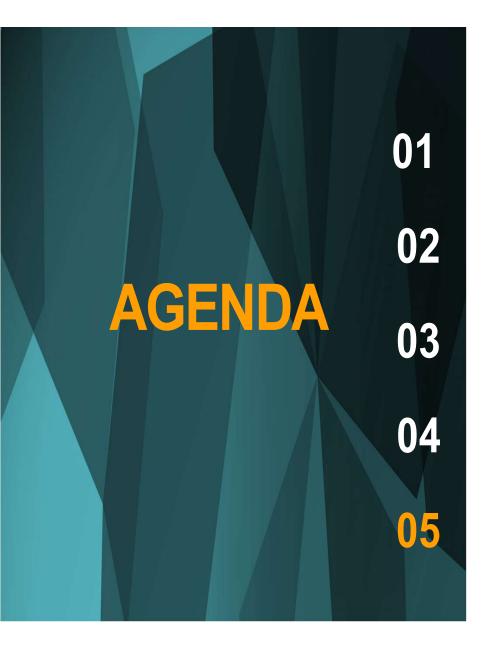
^{*} Net Debt excludes deposits, bank and cash balances & investment in UTF

^{**} Inclusive of interest rate swap



Reduced due to lower interest rate of the new drawdown.

Closing FOREX	31st Mar'20	31 st Dec'19
USD/RM	4.29	4.09
100YEN/RM	3.96	3.77
GBP/RM	5.30	5.37
USD/YEN	108.24	105.40



REGULATORY

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FINANCIAL & TECHNICAL HIGHLIGHT

FINANCIAL & TECHNICAL HIGHLIGHTS

FY2020 Outlook



ELECTRICITY DEMAND

- Demand contraction of 1.9% recorded in 10FY'20.
- Due to the Covid-19 pandemic and implementation of MCO, demand for May'20 fell by 10.6% as compared to May'19.
- Moving forward, we expect the overall electricity consumption to drop between 7-15% Y-o-Y this year, mainly due to slowdown of activities in the commercial sector.
- However, earnings of our regulated revenue cap entities are guaranteed at demand growth of 1.8% - 2.0% as stipulated by the IBR guidelines in RP2.



INTERNATIONAL

- The COVID-19 pandemic is impacting the progress of our initiatives to reduce the current exposure, including the restructuring & turnaround exercise, and sale of investment in particular for GAMA & GMR. However, UK assets are insulated by the long-term subsidy scheme.
- TNB had acquired the remaining 20% stake of TWV in March 2020. We will use our UK Investments & Assets as a platform to grow our Renewable Energy portfolio due to its huge growth potential as the world shifts towards sustainable energy sources.



CAPEX

RM9.5 - 10.0bil

- Regulated Recurring : RM5.0 5.5bil
- Others: RM4.0 5.0bil



DIVIDEND POLICY

We will continue to honour our dividend policy of 30% to 60% dividend payout ratio, based on the reported Consolidated Net Profit Attributable to Shareholders After Minority Interest, excluding Extraordinary, Non-Recurring items.

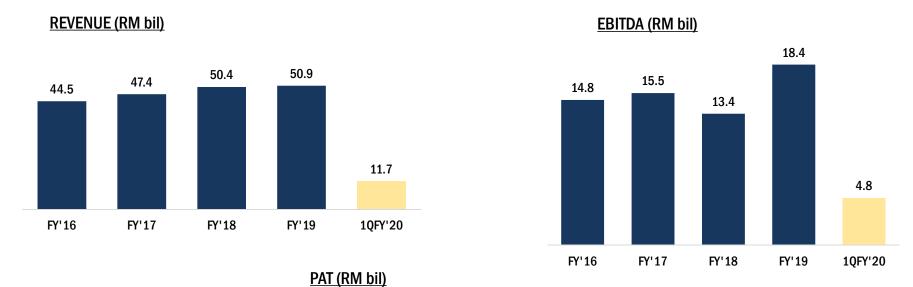


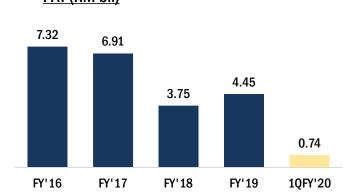
CASH FLOW

- Our cash flow is still resilient supported by the recent capital drawdown. Furthermore, we commanded good rates in the exercise due to our robust and strong balance sheet.
- For 1QFY'20, the allowance for doubtful debt is RM99.1 mil.
- We expect continued challenges on our collection based on the prolonged impact of COVID-19 pandemic & prediction by the Department of Statistics Malaysia (DOSM) that the country is heading into an economic recession in the next four to six months. This is indicated by the drop of our sales collection by 29.9% for May'20 as compared to May'19. However, the trend in early days of June seems to be improving and we will continue to monitor the collection on a regular basis.

FINANCIAL & TECHNICAL HIGHLIGHTS

Reasonable FY'19 Results amid Challenges in Generation Business

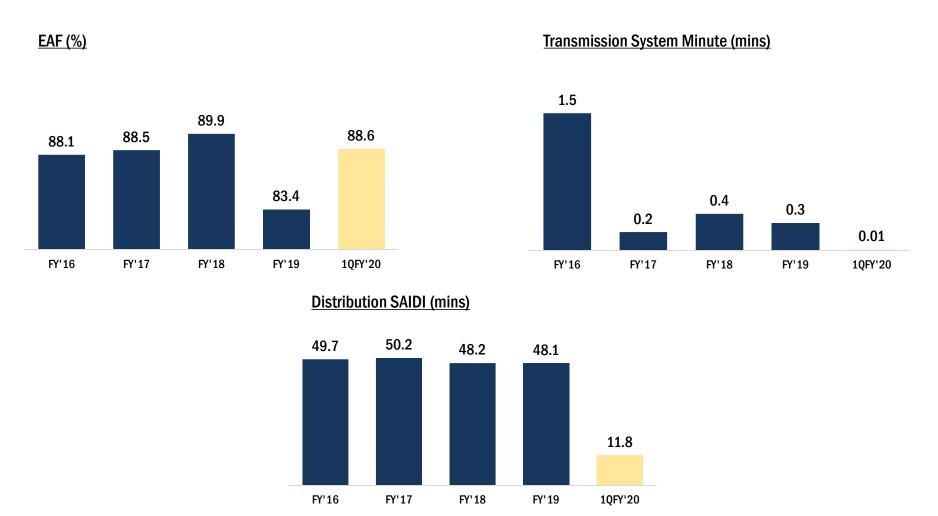




Note: FY2019 is after MFRS16 implementation

FINANCIAL & TECHNICAL HIGHLIGHTS

Improved Technical Performance for Grid Business



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THANK YOU

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