

INVESTOR PRESENTATION



TABLE OF CONTENT

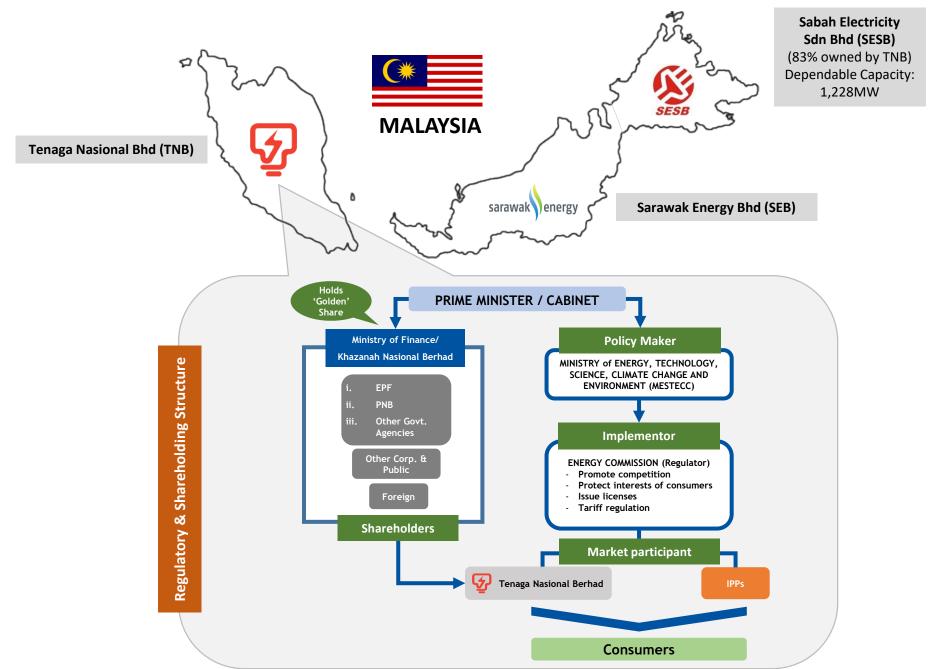
INTRODUCTION TO TENAGA

INCENTIVE BASED REGULATION (IBR)

BUSINESS STRATEGY & DIRECTION

CAPITAL MANAGEMENT

FINANCIAL & TECHNICAL HIGHLIGHTS



		Generat	tion	Grid/Transmission	Distribution Network & Customer Service	
	Νο	on-Regulated	d Business	Regulated Business		
business	Generation Mix:		Installed Capacity: 23,881MW TNB: 12,873MW @ 53.9%	Transmission Network Length: 23,082KM	Distribution Network Length: 660,038KM	
	Solar Thydro	0.4% 3.0%	IPP: 11,008MW @ 46.1% Generation Market Share: 51.7%	Transmission Substations:	Distribution Substations: 81,327	
	Gas & LNG	41.9%	Equivalent Availability Factor (EAF):	443	SAIDI: 12.8 mins	
	Coal	54.6%	Note: TNB installed capacity & Market Share a) Based on gross capacity b) Excludes Tembat (15MW)	Transmission System Minutes: 0.19 mins	Customer Satisfaction Index (CSI): 8.1	

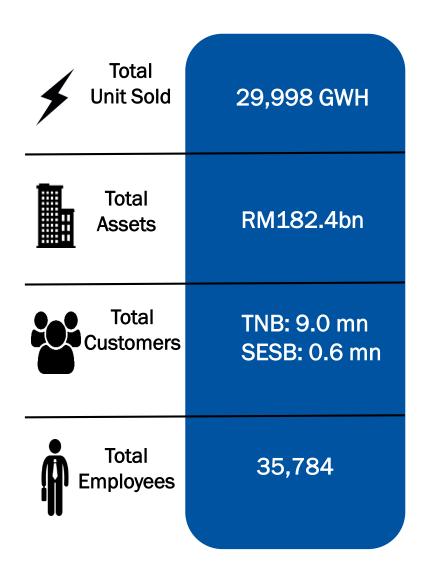
Source: TNB Data / Info as at 1QFY19 (March 2019)

Subsidiaries					
Non-Regulated Business					
Operation & Maintenance (O&M)	Renewables & Energy Efficiency Services	Education & Research			
 TNB Repair & Maintenance Sdn. Bhd. (REMACO) Manufacturing 	 TNB Renewables Sdn. Bhd. GSPARX Sdn. Bhd. TNB Energy Services Sdn. Bhd. 	 TNB Integrated Learning Solution Sdn. Bhd. (ILSAS) TNB Research 			
 Tenaga Switchgear Sdn. Bhd. Malaysia Transformer Manufacturing Sdn Bhd. Tenaga Cables Industries Sdn. Bhd. 	TNB Engineering Corporation Sdn. Bhd.	 University Tenaga Nasional (UNITEN) 			

Expanding Global Footprint To Achieve Aspiration – TNB is currently present in more than 5 countries



	United Kingdom	•	50% equity ownership in Vortex Solar Investments S.à.r.l 80% equity ownership in Operational Onshore Wind Portfolio in UK
C*	Turkey	•	30% equity ownership in GAMA Enerji A.Ş.
.费提制制 	Saudi Arabia	•	20% equity ownership in a Malaysian Shoaiba Consortium Sdn Bhd REMACO O&M Services for Shuaibah IWPP
	Kuwait	•	REMACO O&M for 225MW Sabiya Power Generation & Water Distillation Plant REMACO O&M for Shuaiba North Co-Gen 780MW Power; 204,000 m3/day water REMACO O&M for 210MW Doha West Power Generation & Water Distillation Plant
C	Pakistan	•	Liberty Power Ltd 235MW REMACO O&M Services - Bong Hydro Plant REMACO O&M Services - Balloki Power Plant
*	India	•	30% equity ownership in GMR Energy Ltd Convertible debenture in Bajoli Holi

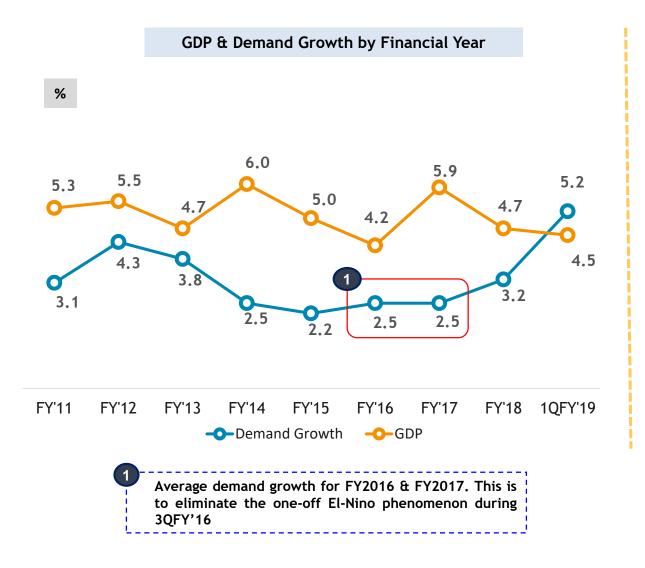


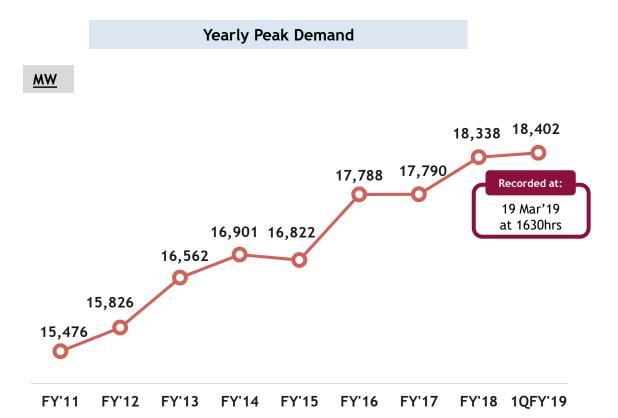
TNB Sectoral Sales Analysis*



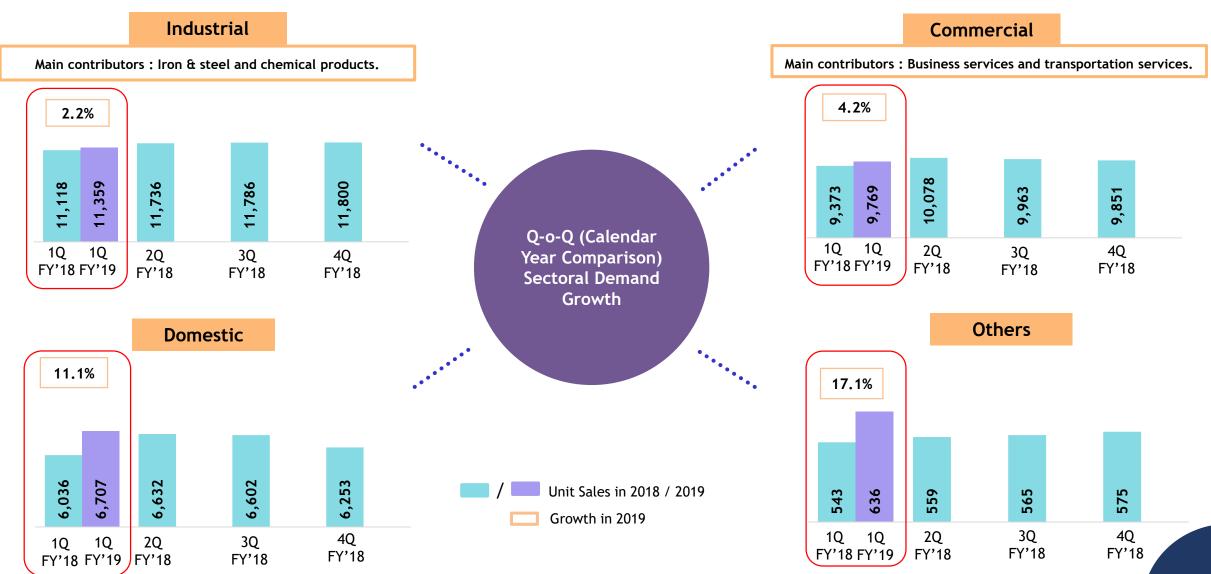
Note: Data / Info as at 1QFY19 (March 2019) * TNB exclude SESB

Higher Demand Growth Supported by New Peak Demand in 1QFY'19

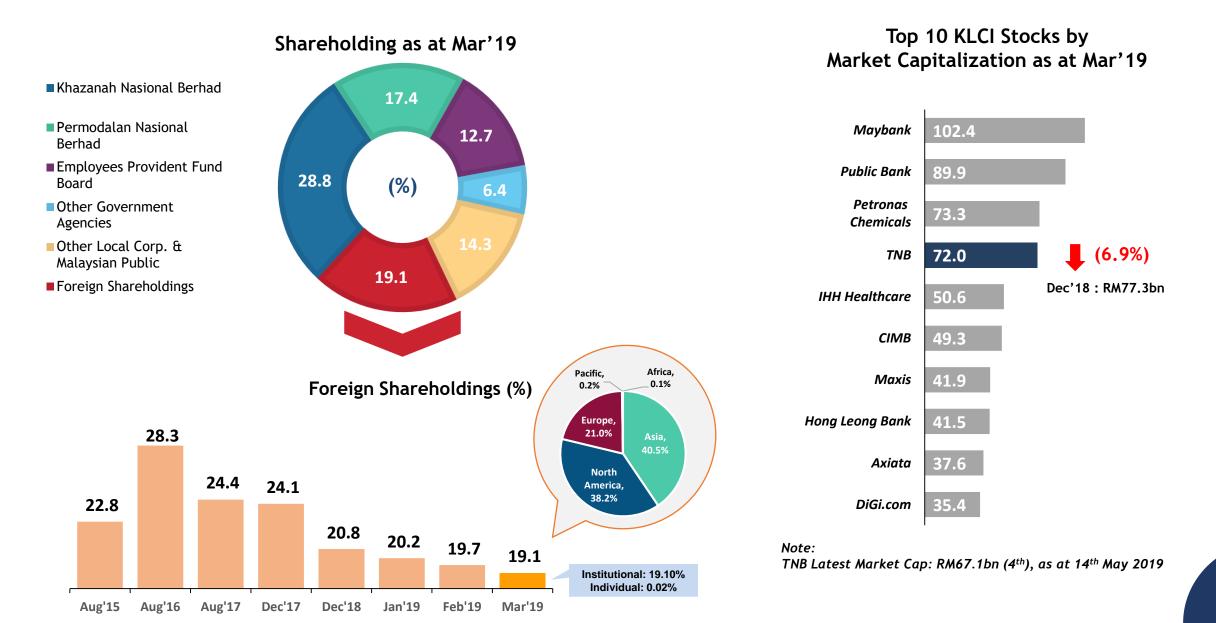




Positive Growth for All Sectors (GWh)



TNB Shareholding



Composition of BOD



CHAIRMAN TAN SRI LEO MOGGIE



EXECUTIVE DIRECTOR / CEO AMIR HAMZAH BIN AZIZAN

> Non-Independent Non-Executive Directors (Total =3)



DATO' ROSLINA BINTI ZAINAL (Khazanah)



AMRAN HAFIZ BIN AFFIFUDIN (Khazanah)



DATUK AHMAD BADRI BIN MOHD ZAHIR

(MoF)





10

GEE SIEW YOONG

Independent Non-Executive Directors (Total = 5)

Expertise: Audit & Finance



ONG AI LIN

Expertise: Audit & Finance



NORAINI BINTI CHE DAN

Expertise: Audit & Finance

GOPALA KRISHNAN A/L K.SUNDARAM

Expertise: Law



JUNIWATI BINTI RAHMAT HUSSIN

Expertise: Project Management, Corporate Planning and Human Resource

TABLE OF CONTENT

INTRODUCTION TO TENAGA

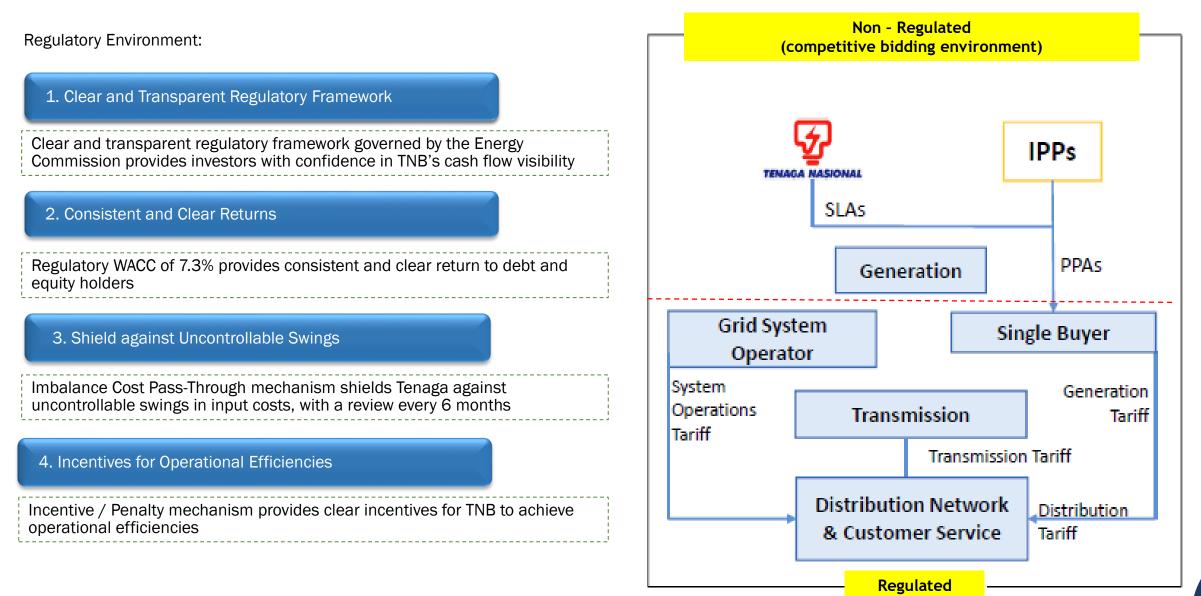
INCENTIVE BASED REGULATION (IBR)

BUSINESS STRATEGY & DIRECTION

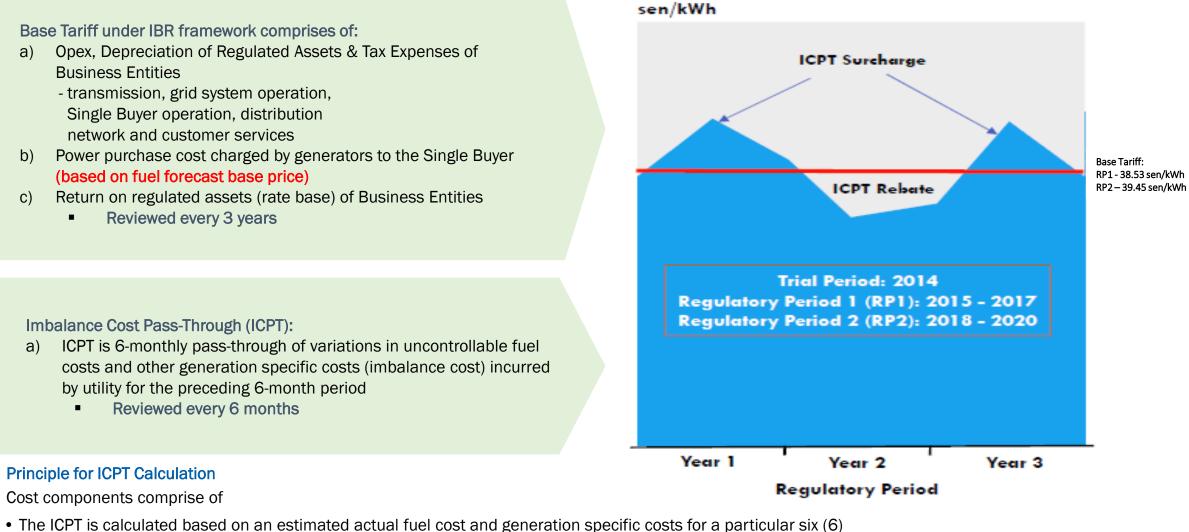
CAPITAL MANAGEMENT

FINANCIAL & TECHNICAL HIGHLIGHTS

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

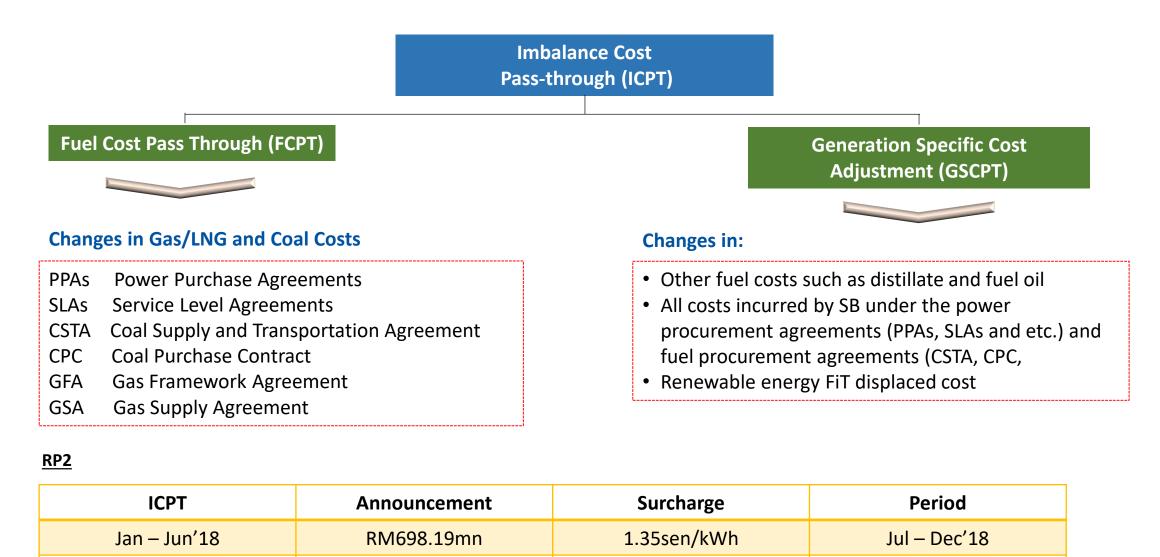


Imbalance Cost Pass-Through (ICPT) Mechanisms Ensures TNB Remain Neutral



months period against the corresponding baseline costs in the Base Tariff.

Imbalance Cost Pass-Through (ICPT) Comprises Two Components



2.15sen/kWh

Jan – Jun'19

RM948.00mn

Jul – Dec'18

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;

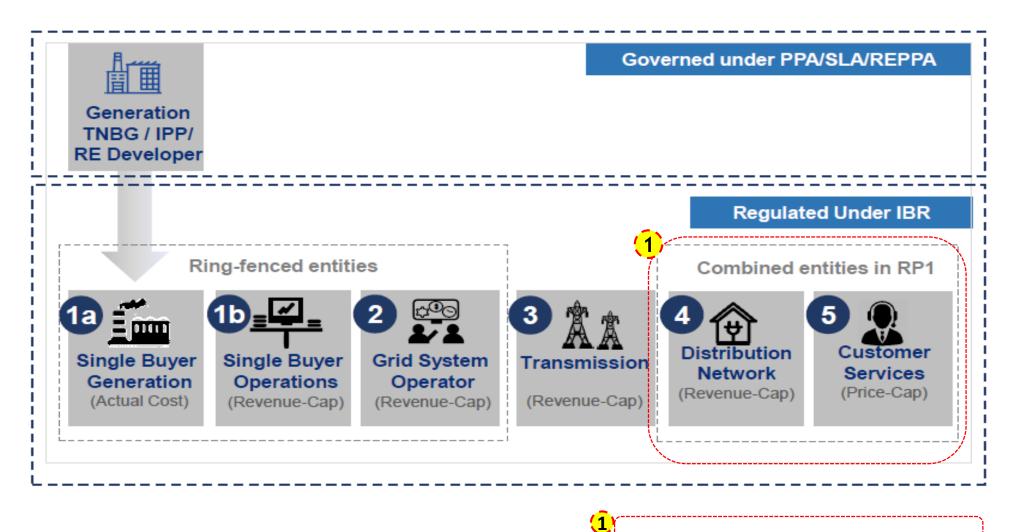
New addition in Key Performance Indicators

- 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

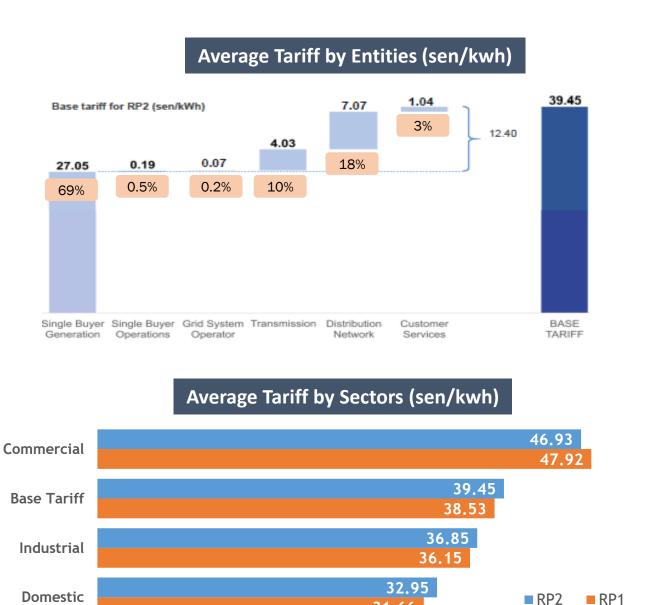
- Separation of these business entities will enhance the system reliability and consumer experience;
- This will increase the productivity and consumer satisfaction.

IBR Entities



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

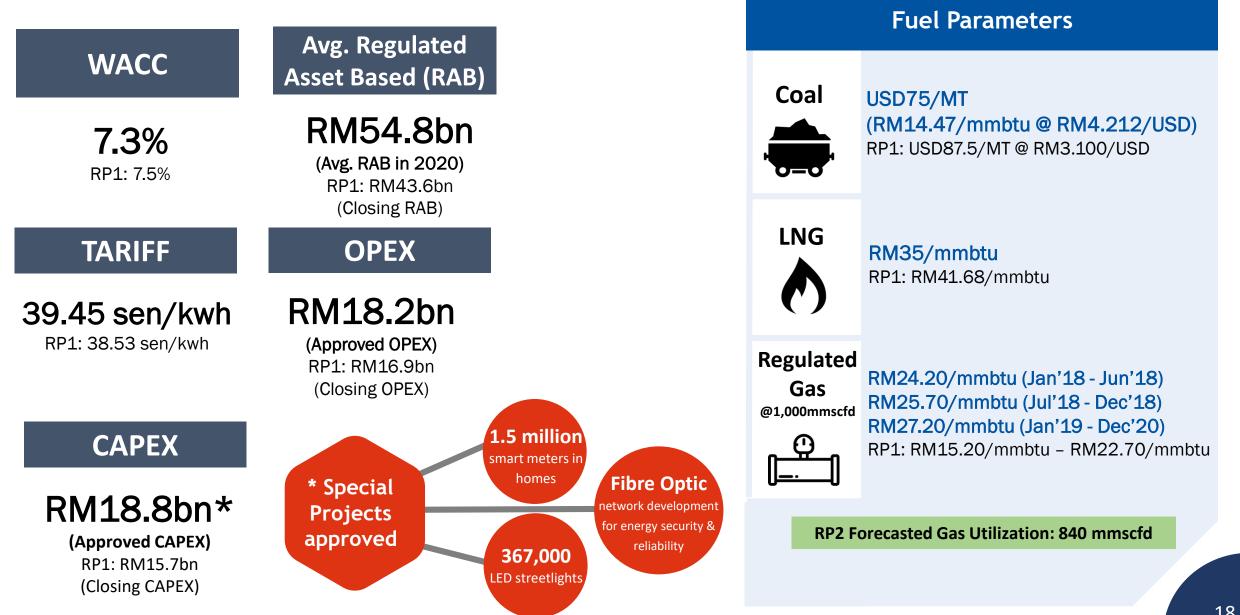
New Base Tariff Under IBR Mechanism RP2



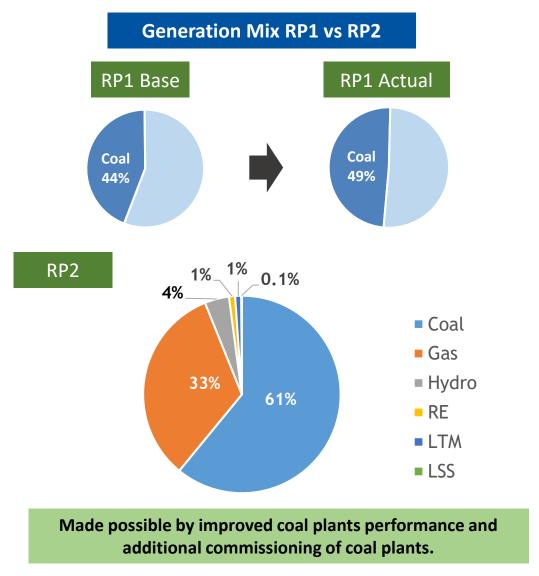
31.66

Entities		RP1 (sen/kWh)	Variance (sen/kWh)
Single	Generation	26.76	+0.29
Buyer	Operation	0.19	-
Grid Syst	Grid System Operator		+0.02
Tran	Transmission		+0.37
Distribution		7.87	+0.24
Base Tariff		38.53	+0.92

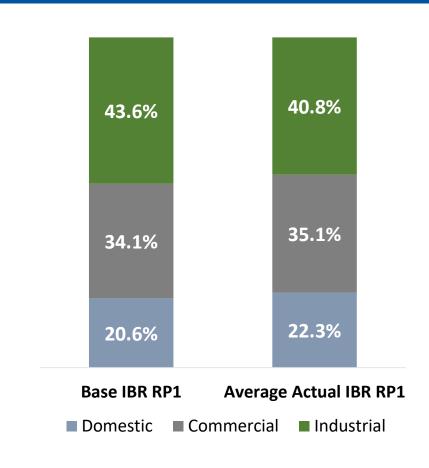
RP2 Parameters



Generation and Customer Mix



Changes in Customer Mix (%) in RP1 (2015-2017)



RP2 Forecasted Demand Growth: 1.8 – 2.0%

The Government has reactivated MyPower to drive MESI Reform 2.0

Objectives of MESI Reform 2.0

To increase industry efficiency through:

- Greater utilisation of market-based competition
- Reduce government intervention & increase transparency
- Cost reflective & time based tariff with targeted subsidies
- Increase cross-border trade



To future-proof industry, structure, regulations and key processes to ensure the introduction of market-based competition, adoption of new technologies, promotion of RE and EE initiatives will add value to consumers & improve energy security.

To empower consumers



by facilitating the growth of prosumers, at the same time incentivising consumers to change their consumption patterns as and when required.



TABLE OF CONTENT

01 $\mathbf{02}$ 03 $\mathbf{04}$ 05

INTRODUCTION TO TENAGA

INCENTIVE BASED REGULATION (IBR)

BUSINESS STRATEGY & DIRECTION

CAPITAL MANAGEMENT

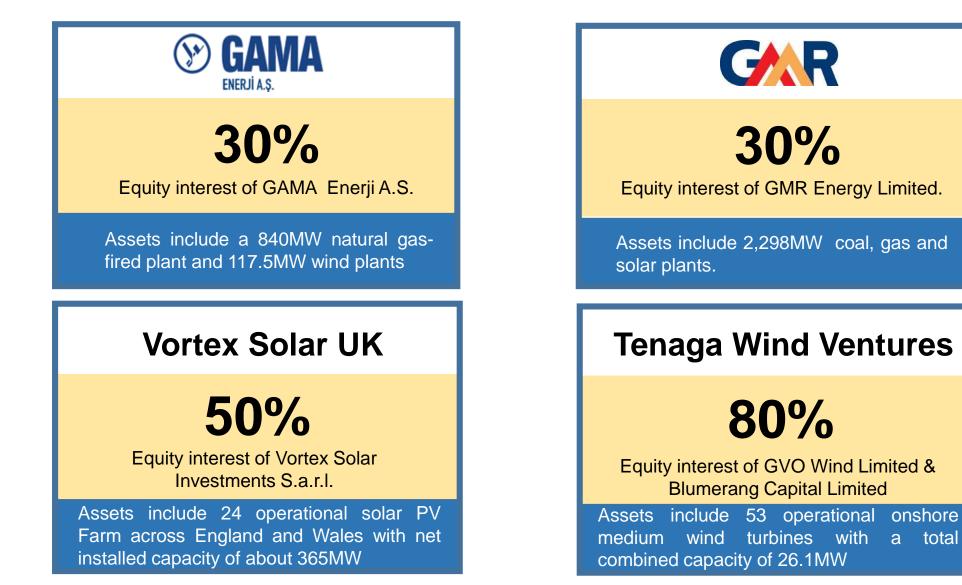
FINANCIAL & TECHNICAL HIGHLIGHTS

Reimagining TNB To Future Proof Our Business Towards A Sustainable Future

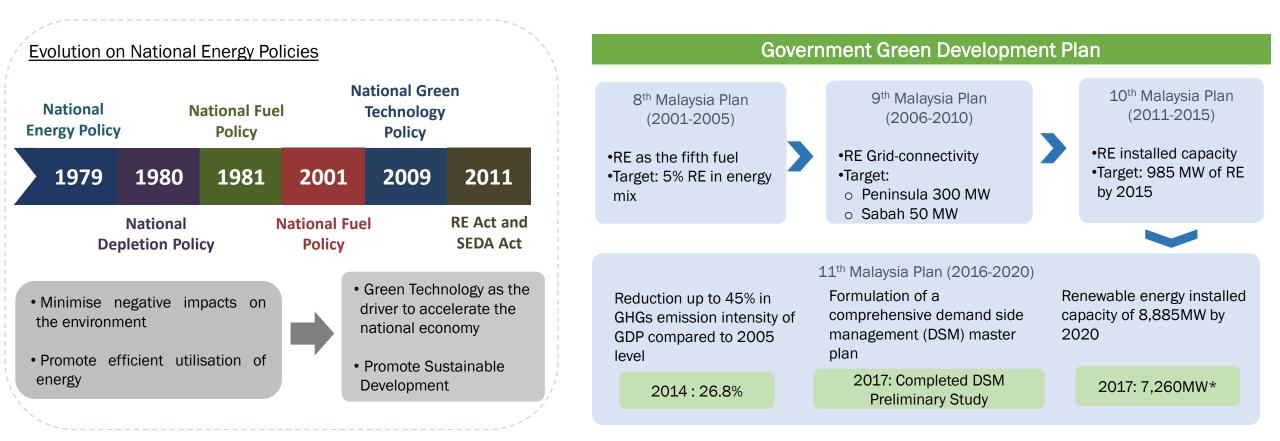


Towards Achieving Top 10 Global Utility by 2025

International Acquisition - Four International Acquisitions to Support Aspiration



Renewable Generation - Government Green Policy & Initiatives





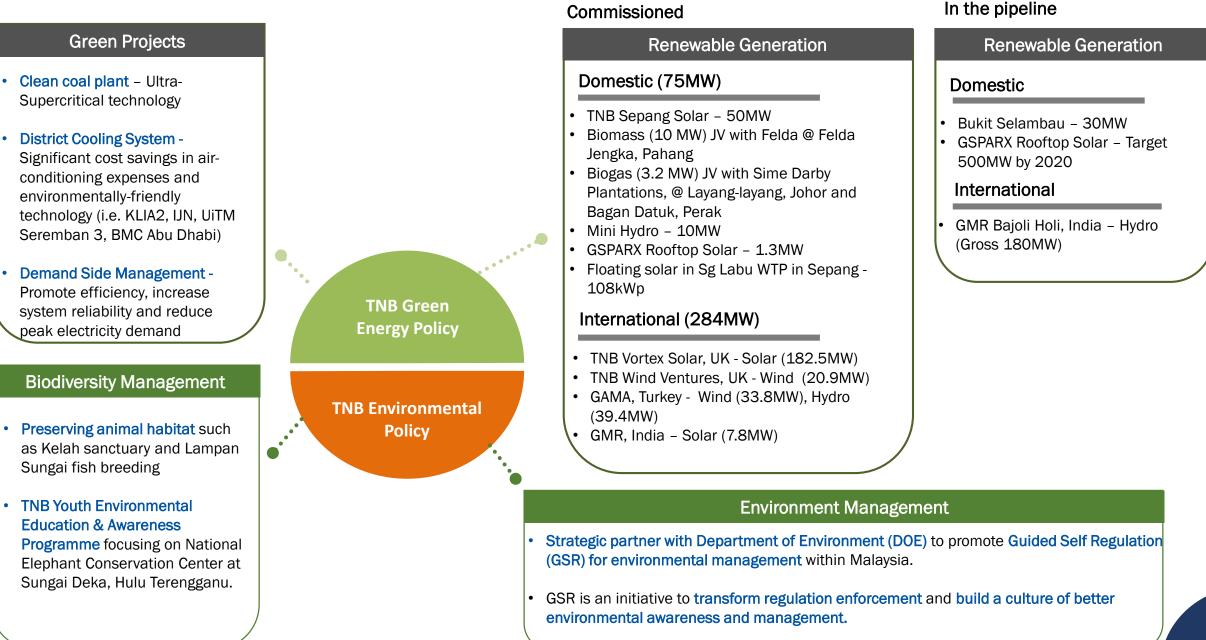
NEW RE TARGET SET BY MESTECC

20% of Total Installed Capacity

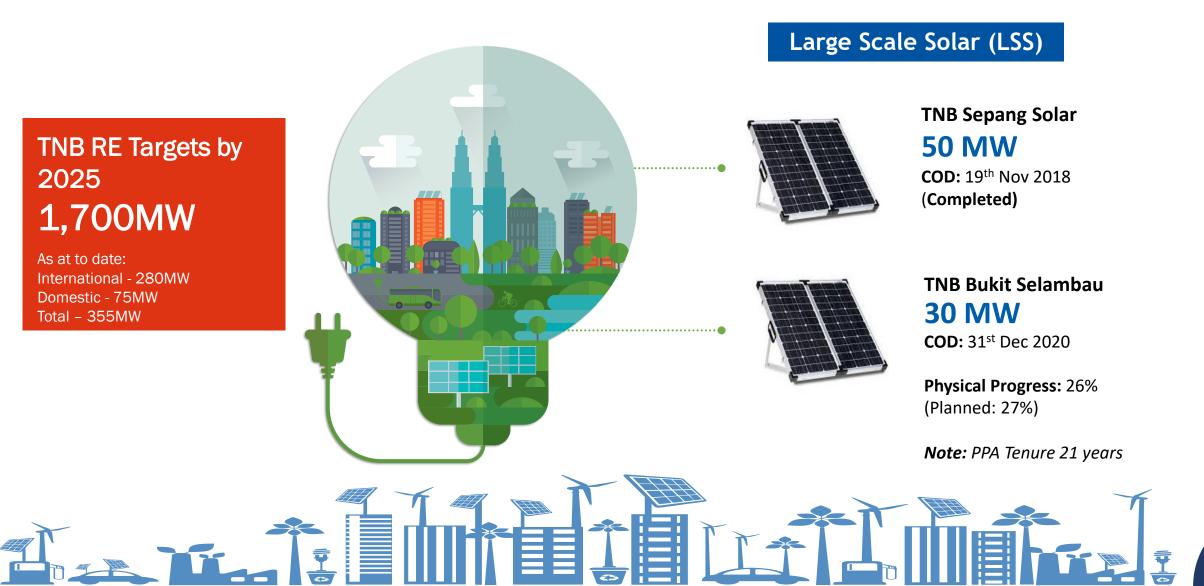
by 2025

MESTECC = Minister of Energy, Science, Technology, Environment and Climate Change

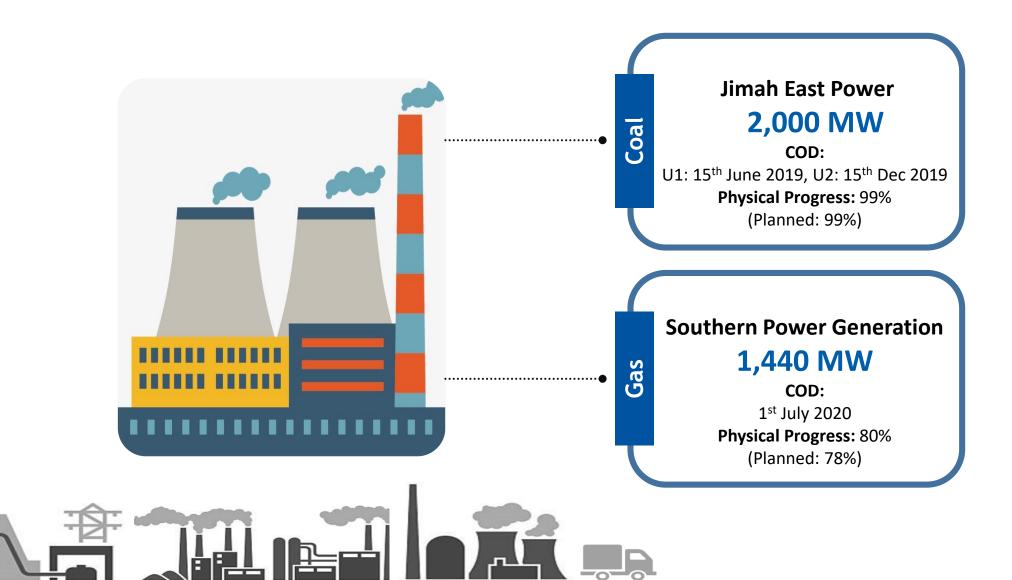
* The increase in the total installed capacity of RE is based on the adoption of the ASEAN definition of RE by Malaysia in 2016 which takes into account all types of hydro energy in the calculation without limiting their capacities.



Building Renewable Energy Portfolio for Greener Future



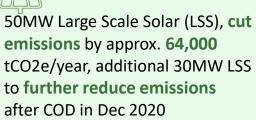
Conventional Generation Projects



Environmental, Social & Governance (ESG)



Strives To Conserve The Environment As Our Commitment Towards Continuous Environmental Improvement





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.

Reduction in GHG emissions intensity from **0.55** to **0.54** tCO2e/MWh



Increase in total GHG emissions mitigation from 2,359,770 to 5,030,079 tCO2e through the used of hydro, renewable energy and efficient technology power plant

Our Pledge Towards A Better And Brighter Future For The Communities

(D

Governance



for 1,000 students in the fields of Science, Technology, Engineering and Mathematics (STEM)

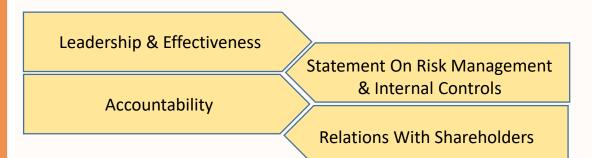


816 students (596 local & 220 abroad universities) awarded Yayasan Tenaga Nasional (YTN) scholarship



UNITEN produced **3,145** graduates with 93.7% employability rate within 6 months

Cultivate Ethical Conduct To Reinforce Sound Business Decisions & Forward-Looking Culture





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

Source: TNB Annual Integrated Report 2018

TABLE OF CONTENT

INTRODUCTION TO TENAGA

INCENTIVE BASED REGULATION (IBR)

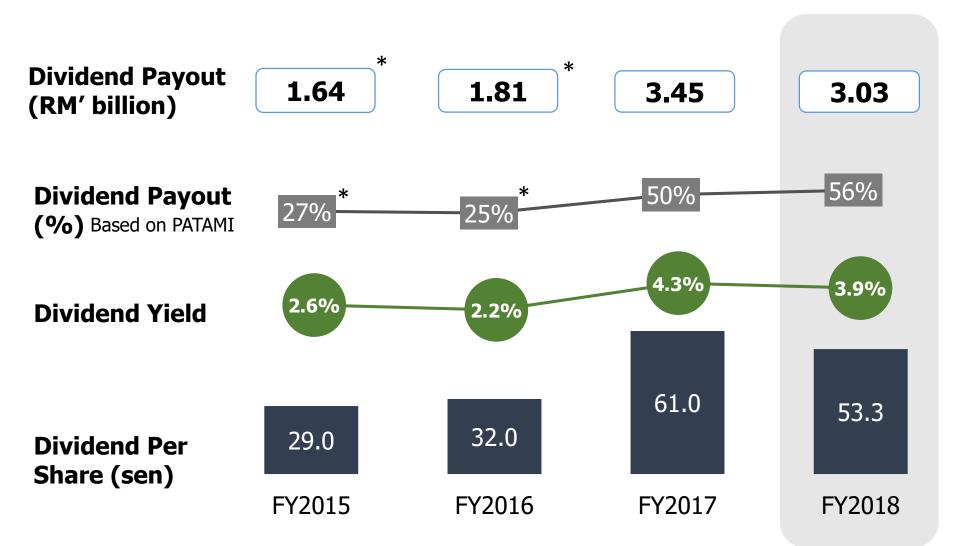
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CAPITAL MANAGEMENT

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CAPITAL MANAGEMENT

Highest Dividend Payout at 56% of Adjusted PATAMI



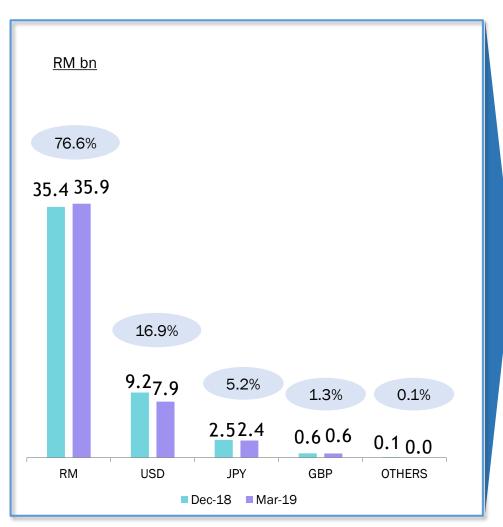
* Dividend paid based on the previous dividend policy of 40% - 60% of Company's Annual Free Cashflow from Operations less Normalised Capex and Interest Servicing

DIVIDEND POLICY

30% - 60% dividend payout ratio of Group PATAMI, excluding Extraordinary, Non-Recurring items

CAPITAL MANAGEMENT

Gearing Level Registered at 44.3%



Note:	
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1. Debt consists of Principal + Accrued Interest + Accounting Treatment (FRS139)

2. Company Debt: RM20.26bn as at Mar'19

3. Company Gearing: 28.2% as at Mar'19

Statistics	31 st Mar'19	31 st Dec'18
Total Debt (RM' Bil)	46.9	47.8
Net Debt (RM' Bil) *	29.8	29.6
Gearing (%)	44.3	44.8
Net Gearing (%)	28.2	27.7
Fixed : Floating	98:2	95:5
Final Exposure	98:2	95:5
Weighted Average Cost of Borrowing 2	5.03	4.98
Final Exposure **	5.04	4.99

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

** Inclusive of interest rate swap

2

	Closing FOREX	31 st Mar'19	31 st Dec'18	
	USD/RM	4.08	4.14	
	100YEN/RM	3.69	3.75	
	GBP/RM	5.32	5.27	
	USD/YEN	110.60	110.28	
Lower mainly due to repayment of Mizuho Loan (USD300mn) amounting of RM1.2bn				

Increased due to repayment of Mizuho Loan with lower interest rate

TABLE OF CONTENT

INTRODUCTION TO TENAGA

INCENTIVE BASED REGULATION (IBR)

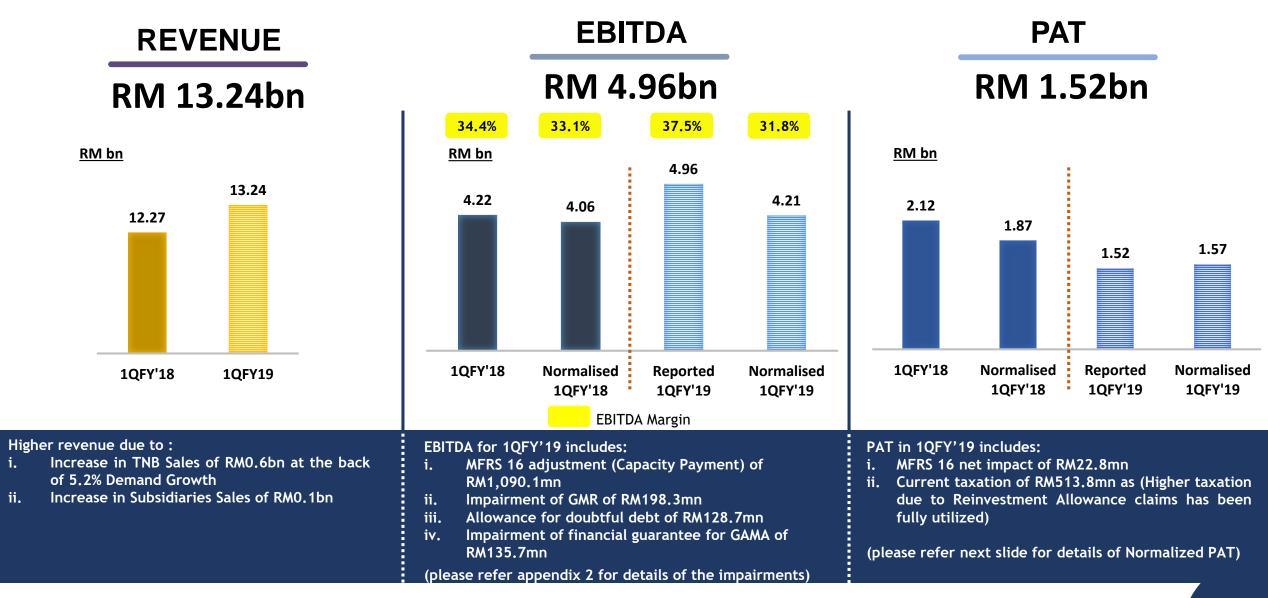
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FINANCIAL & TECHNICAL HIGHLIGHTS

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Financial Performance Overview for 1QFY'19



FINANCIAL & TECHNICAL HIGHLIGHTS

Consistent Technical Performances

Equivalent Plant Availability Factor (EAF)	System Minutes	SAIDI
91.9%* 1QFY'18: 92.8%* *The figure is for all TNB plants	0.19 mins 1QFY'18 : 0.04 mins	12.8 mins* 1QFY'18 : 11.7 mins* *The figure is for TNB SAIDI
7		

DISCLAIMER

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THANK YOU

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