



# Presentation to Analyst

28<sup>th</sup> February 2019

Unaudited Consolidated Result for the  
**4<sup>th</sup> Quarter FY2018**  
Ended 31<sup>st</sup> December 2018

# Contents



1

**KEY HIGHLIGHTS**

2

**FINANCIAL DETAILS**

3

**INDUSTRY OUTLOOK**

4

**APPENDIX**

# Overview of FY'18



## KEY HIGHLIGHTS

## FINANCIAL DETAILS

## INDUSTRY OUTLOOK

## APPENDIX

|                                 | RP1  | RP2  |
|---------------------------------|--|--|
| TNB's Regulated Return          | 7.5%   | 7.3%   |
| Annual Regulatory Adjustment    | <u>Allowed to keep</u> revenue due to higher average selling price compared to Base Tariff from favorable change in customers mix  | <u>Required to return</u> revenue due to higher average selling price compared to Base Tariff and/or higher than allowed annual revenue for revenue-cap entities |
| Profit After Tax                | FY2017<br>RM6.15bn   | FY2018-2020<br>Lower than RP1  |
| One-offs Adjustments for FY2018 | <ul style="list-style-type: none"> <li>• Impairments for international investment of RM1.07bn</li> <li>• Other adjustments of RM0.23bn</li> </ul>  |  |
| Profit After Tax FY2018         | <ul style="list-style-type: none"> <li>• Reported profit of RM3.75bn</li> <li>• Normalized profit of RM5.44bn</li> </ul>   |  |
| Dividend FY2018                 | <ul style="list-style-type: none"> <li>• Group Adjusted PATAMI : RM5.42bn</li> <li>• Dividend payout : 56% @ RM3.03bn.</li> <li>• Total dividend : 53.3 sen per share                             <ul style="list-style-type: none"> <li>○ Interim dividend : 30.3 sen per share</li> <li>○ Final dividend : 23.0 sen per share</li> </ul> </li> </ul> |  |

# Normalised PAT of RM5.44bn After One-offs Adjustments



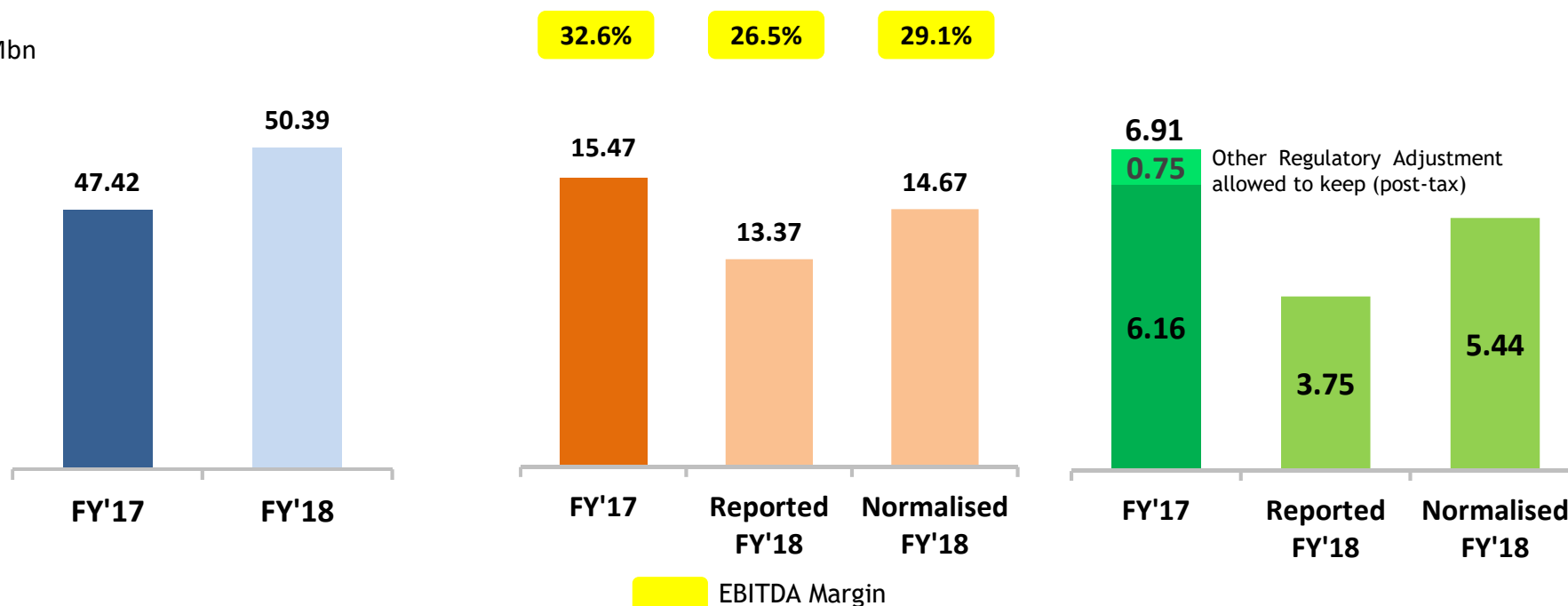
## KEY HIGHLIGHTS

## FINANCIAL DETAILS

## INDUSTRY OUTLOOK

## APPENDIX

RMbn



### REVENUE

- Higher revenue due to net increase in sales of electricity after other regulatory adjustments and ICPT



### EBITDA

- Lower EBITDA mainly due impairment for :
  - GAMA of RM0.50bn
  - GMR of RM0.30bn
  - Financial guarantee for GAMA of RM0.27bn



### PAT

- PAT further reduced due to substantial forex translation losses of RM0.39bn
- Normalised PAT of RM5.44bn After One-Off Adjustments

# High Dividend Payout at 56% of Adjusted PATAMI



KEY HIGHLIGHTS

FINANCIAL DETAILS

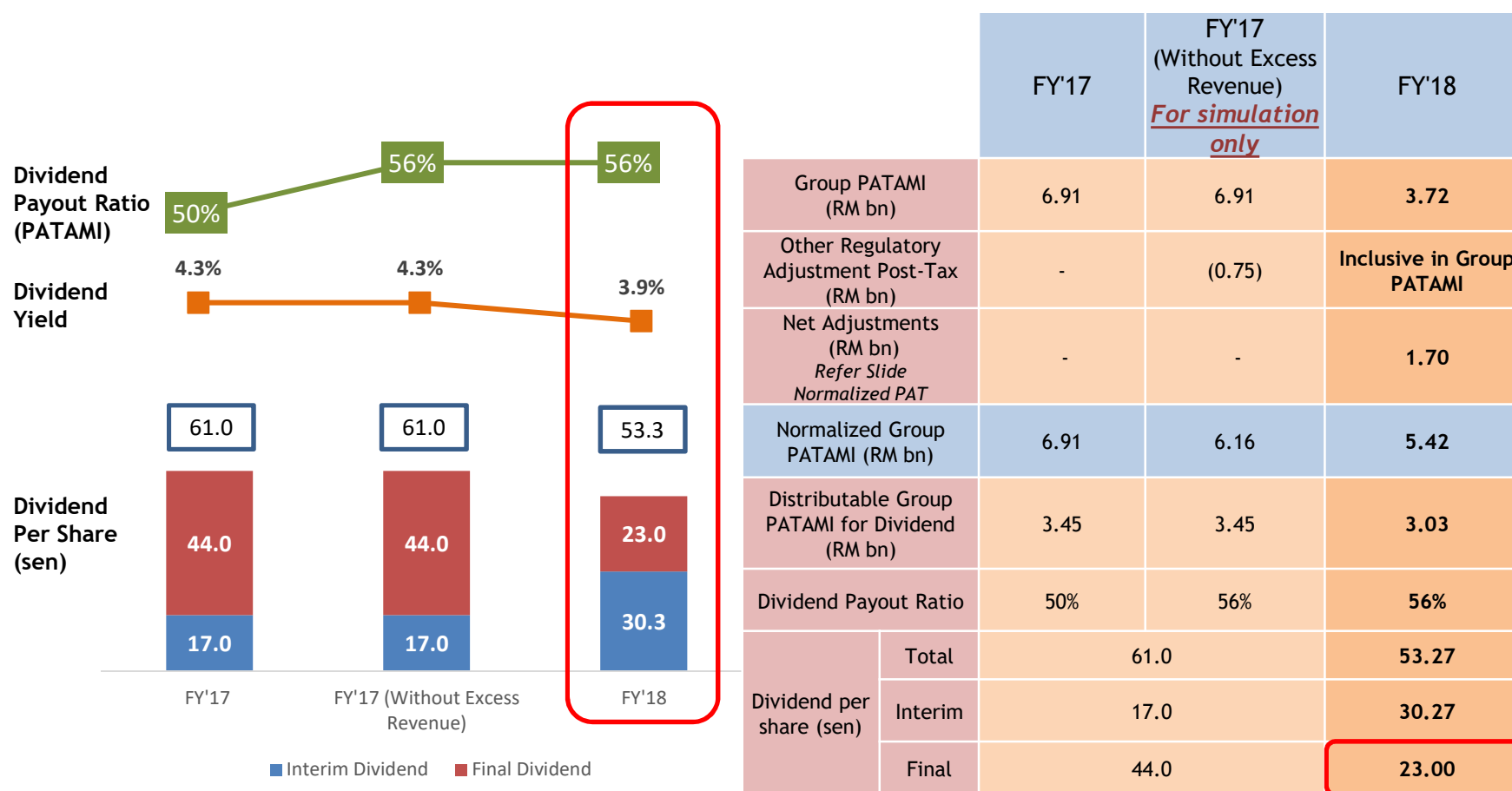
INDUSTRY OUTLOOK

APPENDIX

## Dividend Policy

Distribution of dividend is based on 30% to 60% dividend payout ratio, based on the reported Consolidated Net Profit

Attributable to Shareholders After Minority Interest, excluding Extraordinary, Non-Recurring items



# Lower Capex Towards Completion of Major Projects

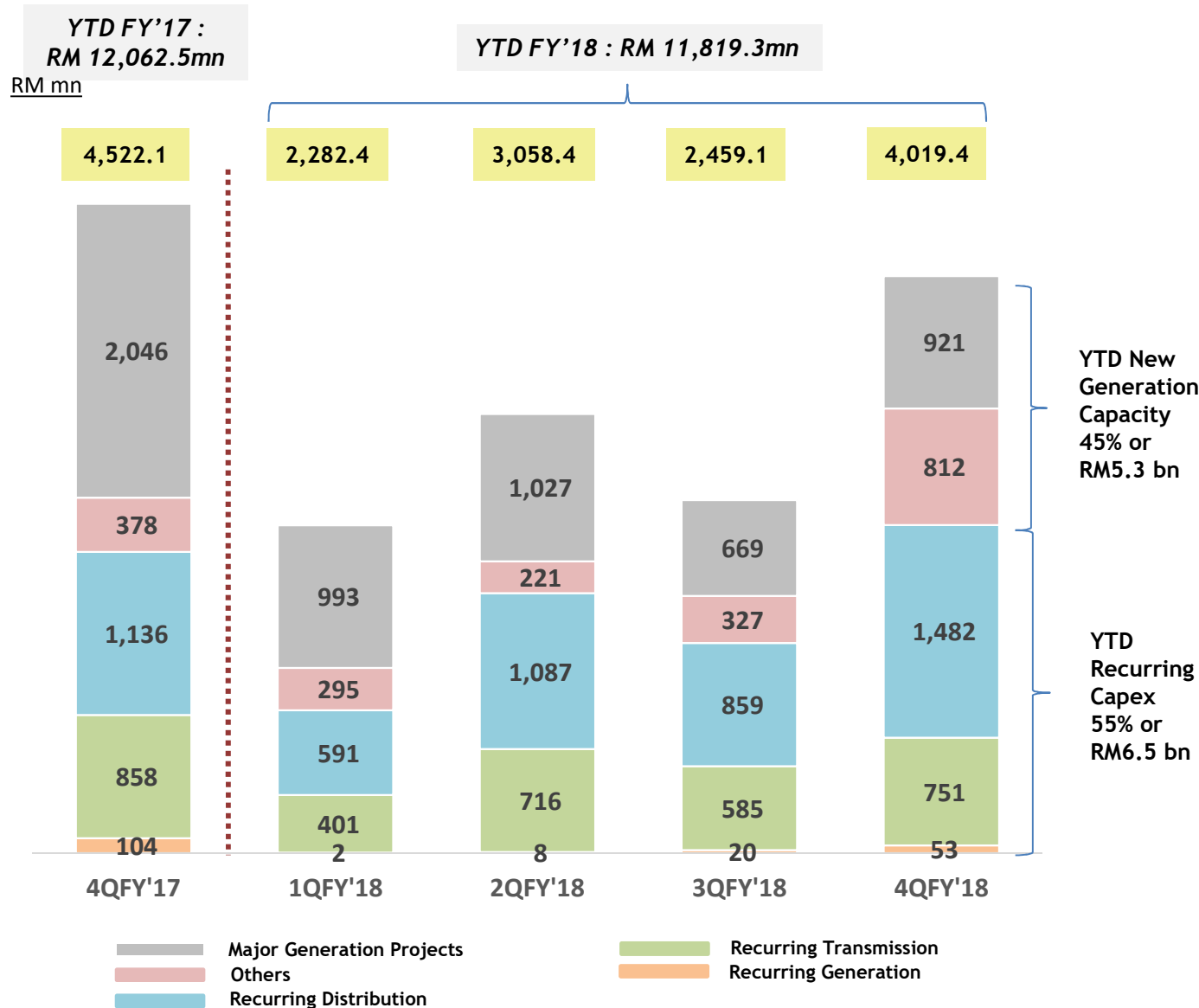


## KEY HIGHLIGHTS

## FINANCIAL DETAILS

## INDUSTRY OUTLOOK

## APPENDIX



## Major Generation Projects

### Jimah East Power

**Physical Progress**  
Planned 99%, Actual 98%



**2,000MW**

COD:

U1: 15<sup>th</sup> Jun 2019

U2: 15<sup>th</sup> Dec 2019

### Southern Power Generation (SPG)

**Physical Progress**  
Planned 71%, Actual 74%



**1,440MW**

COD:

1<sup>st</sup> July 2020

### TNB Bukit Selambau

**Physical Progress**  
Planned 19%, Actual 22%



**30MW**

COD:

31<sup>st</sup> Dec 2020

# Reducing Trend of Foreign Shareholding



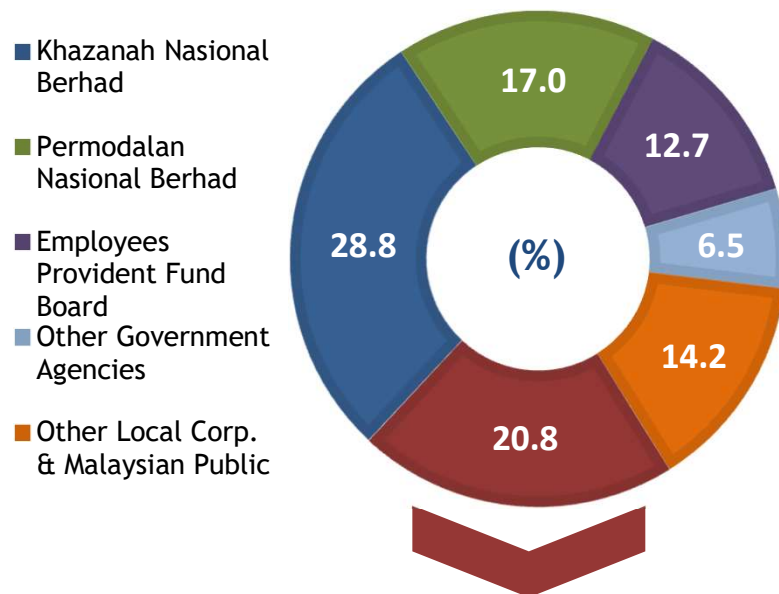
## KEY HIGHLIGHTS

## FINANCIAL DETAILS

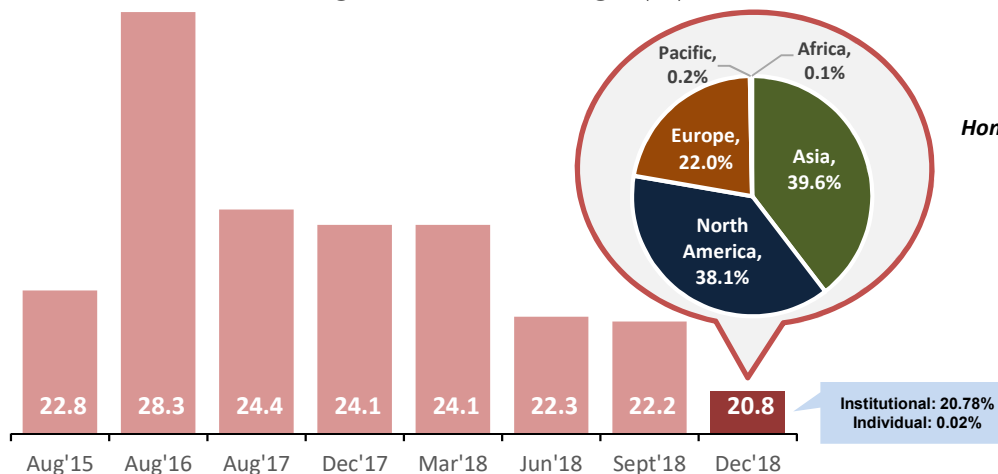
## INDUSTRY OUTLOOK

## APPENDIX

### Shareholding as at Dec'18

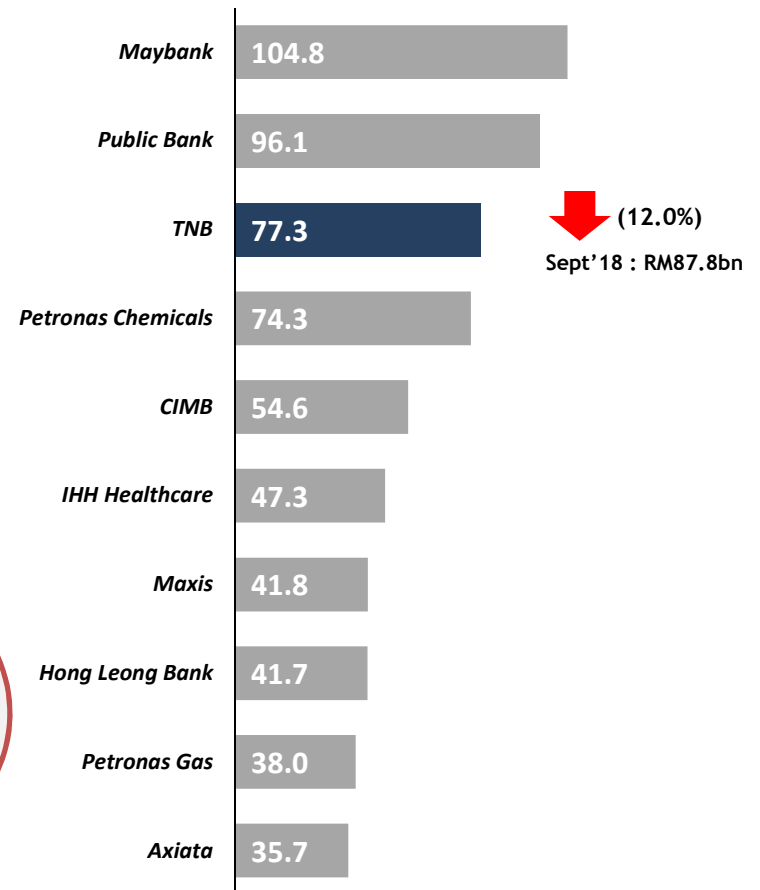


### Foreign Shareholdings (%)



### Top 10 KLCI Stocks by Market Capitalization as at Dec'18

(RM bn)



Note: TNB Latest Market Cap: RM76.8bn (3<sup>rd</sup>), as at 22<sup>nd</sup> Feb 2019

# Overall International Investment Performance



## KEY HIGHLIGHTS

## FINANCIAL DETAILS

## INDUSTRY OUTLOOK

## APPENDIX

|   | EBITDA                         |               |               |                |           | Status / Issue   |
|---|--------------------------------|---------------|---------------|----------------|-----------|--|
|   | 1Q                             | 2Q            | 3Q            | 4Q             | YTD FY'18 |  |
| <i>Associate Reporting period as at</i> | <i>Dec'17</i>                  | <i>Mar'18</i> | <i>Jun'18</i> | <i>Sept'18</i> |           |  |
| <b>Malaysian Shoaiba (RM mn)</b>        | Positive YTD EBITDA of RM122.4 |               |               |                |           | The investment entity is forecasted to continue distributing a stable dividend to its shareholders. Accumulated Dividend paid to date is RM154.0mn. YTD plants availability of is 93.6%. |
| <b>GAMA (USD mn)</b>                    | 31.6                           | 29.5          | 30.6          | 19.2           | 110.9     | Operationally, GAMA remains EBITDA positive. YTD plants availability of is 80.8%.  |
| <b>GMR (USD mn)</b>                     | 4.7                            | 61.6          | 25.4          | 20.7           | 112.5     | Operationally, GMR remains EBITDA positive. YTD plants availability of is 89.8%  |
| <b>Vortex* (RM mn)</b>                  | 17.1                           | 61.4          | 94.7**        |                | 173.2     | The fluctuation of the quarterly EBITDA is due to seasonal factors. YTD plants availability of is 96.1%.   |
| <b>Tenaga Wind Ventures* (RM mn)</b>    | N/A                            | 15.1          | 12.1          | 14.2           | 41.4      | Higher 4Q EBITDA due to stronger months between October to March (winter season). YTD plants availability of is 98.8%.   |

\*Similar to TNB reporting period

\*\*Accumulated EBITDA for 6 months



# 4Q Revenue Impacted by Other Regulatory Adjustment & Lower Sales of Electricity



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX

|                               | 4QFY'18     |             | 3QFY'18   |             | 2QFY'18   |             | 1QFY'18   |             | Variance<br>4Q vs 3Q |
|-------------------------------|-------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|----------------------|
| UNITS SOLD                    | GWh         |             | GWh       |             | GWh       |             | GWh       |             | GWh                  |
| - TNB                         | 28,478.3    |             | 28,916.5  |             | 29,005.0  |             | 27,069.5  |             | (438.2)              |
| - EGAT (Export)               | -           |             | -         |             | (1.4)     |             | 5.2       |             | -                    |
| - SESB                        | 1,351.4     |             | 1,360.1   |             | 1,369.7   |             | 1,264.0   |             | (8.7)                |
| - UK WIND (TNBI)              | 29.0        |             | 16.2      |             | 15.3      |             | 8.4       |             | 12.8                 |
| - LPL                         | 390.9       |             | 570.7     |             | 140.1     |             | -         |             | (179.8)              |
| Total Units Sold (GWh)        | 30,249.6    |             | 30,863.5  |             | 30,528.7  |             | 28,347.1  |             | (613.9)              |
| REVENUE                       | RM mn       | Sen/<br>KWh | RM mn     | Sen/<br>KWh | RM mn     | Sen/<br>KWh | RM mn     | Sen/<br>KWh | (RM mn)              |
| Sales of Electricity          |             |             |           |             |           |             |           |             |                      |
| - TNB *                       | 11,272.3    | 39.6        | 11,512.8  | 39.8        | 11,531.0  | 39.8        | 10,712.5  | 39.6        | (240.50)             |
| - EGAT (Export)               | -           | -           | -         | -           | 0.4       | -           | 1.3       | -           | -                    |
| - SESB                        | 462.0       | 35.2        | 466.6     | 34.3        | 469.8     | 34.3        | 431.7     | 34.2        | (4.60)               |
| - UK WIND (TNBI)              | 29.9        | 121.9       | 19.2      | 124.6       | 20.2      | 128.7       | 10.3      | 122.6       | 10.70                |
| - LPL                         | 165.0       | 42.2        | 161.6     | 28.3        | 81.9      | 58.5        | 13.8      |             | 3.40                 |
| Sales of Electricity          | 11,929.2    | 39.4        | 12,160.2  | 39.4        | 12,103.3  | 39.6        | 11,169.6  | 39.4        | (231.0)              |
| LPL Operating Lease (MFRS117) | 9.3         |             | 9.3       |             | 12.0      |             | 6.6       |             | -                    |
| Unbilled Revenue              | 81.9        |             | 90.0      |             | (191.2)   |             | 144.2     |             | (8.1)                |
| Imbalance Cost Pass-Through   | ** 970.7    |             | 479.6     |             | 245.2     |             | 634.1     |             | 491.1                |
| Other Regulatory Adjustment   | *** (639.8) |             | -         |             | -         |             | -         |             | (639.8)              |
| SESB Tariff Support Subsidy   | (79.6)      |             | 120.9     |             | 119.2     |             | 111.8     |             | (200.5)              |
| Total Sales of Electricity    | 12,271.70   |             | 12,860.00 |             | 12,288.50 |             | 12,066.30 |             | (588.3)              |
| Goods & Services              | 208.8       |             | 180.8     |             | 128.1     |             | 124.9     |             | 28.0                 |
| Customers' Contribution       | 66.3        |             | 33.0      |             | 81.3      |             | 82.8      |             | 33.3                 |
| Total Revenue                 | 12,546.80   |             | 13,073.80 |             | 12,497.90 |             | 12,274.00 |             | (527.0)              |

\* Without ICPT

\*\* Please refer appendix 4 for more details. \*\*\* Please refer appendix 6 & 7 for more details.

# Steady Y-o-Y Sales Growth



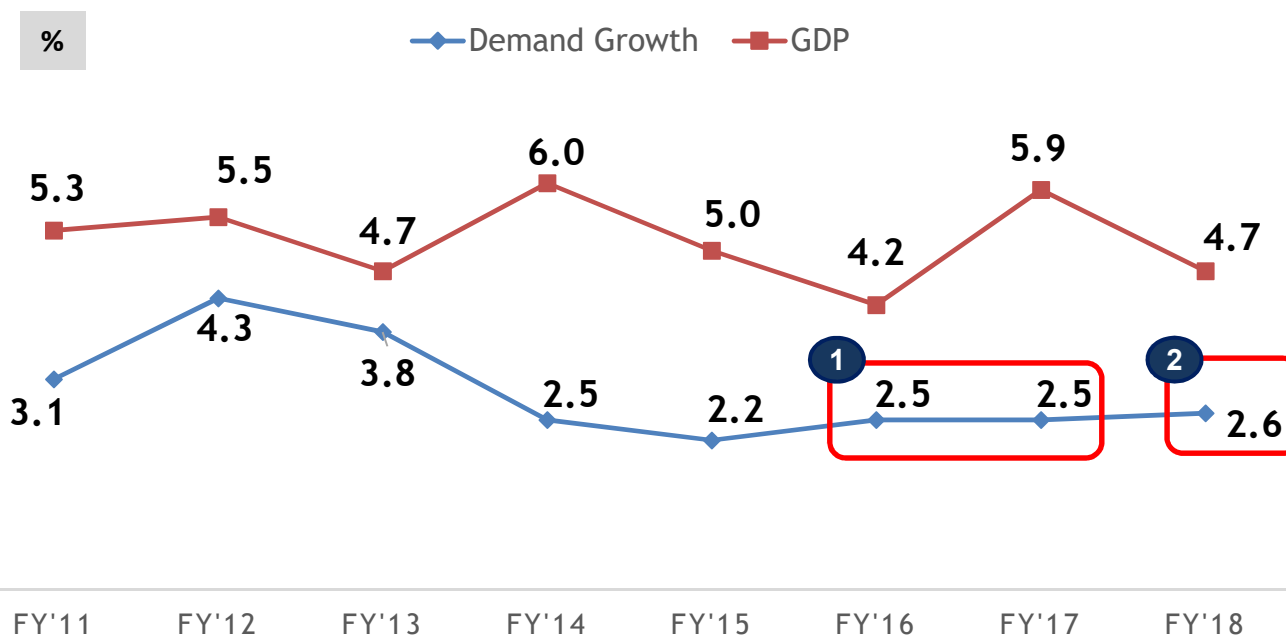
KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX

## GDP & Demand Growth by Financial Year



| By Calendar Year | Growth (%) |
|------------------|------------|
| JAN'16-DEC'16    | 4.6        |
| JAN'17-DEC'17    | 0.1        |
| JAN'18-DEC'18    | 2.6        |

1

Average demand growth for FY2016 & FY2017. This is to eliminate the one-off El-Nino phenomenon during 3QFY'16

2

Comparison between Jan'18-Dec'18 and Jan'17-Dec'17

# Positive Growth for All Sectors



KEY HIGHLIGHTS

FINANCIAL DETAILS

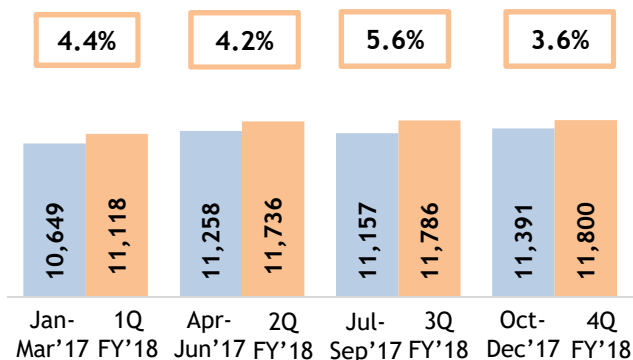
INDUSTRY OUTLOOK

APPENDIX

## Q-o-Q (Calendar Year Comparison) Sectoral Demand Growth

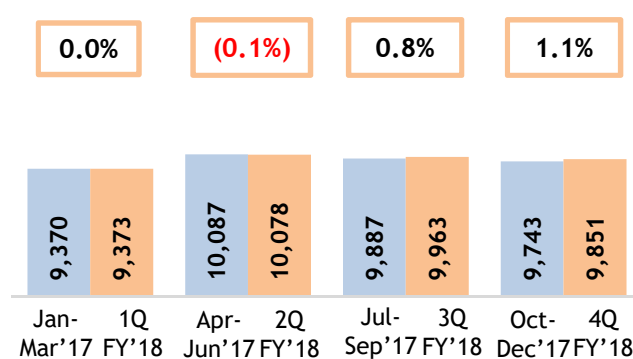
### Industrial

Gwh



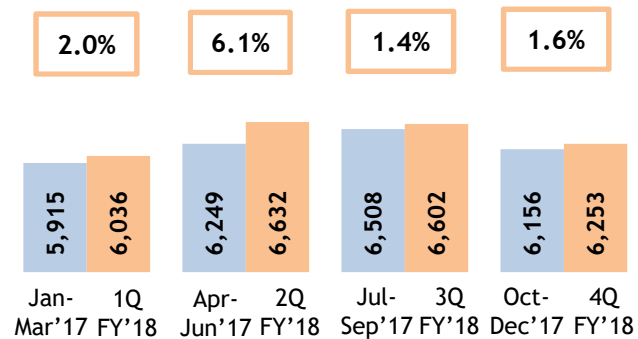
### Commercial

Gwh



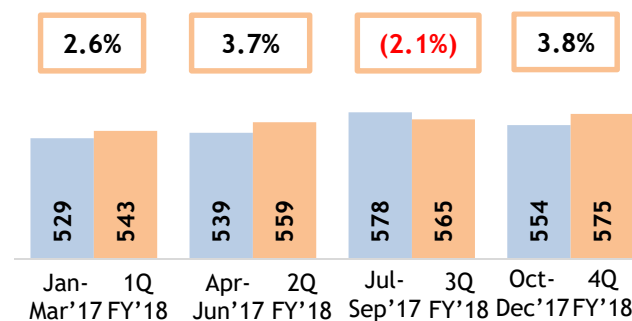
### Domestic

Gwh



### Others

Gwh



/ Unit Sales in 2017 / 2018

Growth in 2018 (Calendar Year)

# Q-o-Q Operating Expenses Increased by 2.6%



KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX

| RM mn  | 4QFY'18  | 3QFY'18  | 2QFY'18  | 1QFY'18 | Variance<br>4Q vs 3Q |        |
|--|----------|----------|----------|---------|----------------------|--------|
|  |          |          |          |         | RM'mn                | %      |
| Non-TNB IPPs Costs                             | 4,248.3  | 4,255.2  | 3,889.6  | 3,664.6 | (6.9)                | (0.2)  |
| Capacity Payment                               | 974.1    | 1,039.1  | 981.2    | 1,009.1 | (65.0)               | (6.3)  |
| Energy Payment                                 | 3,274.2  | 3,216.1  | 2,908.4  | 2,655.5 | 58.1                 | 1.8    |
| Fuel Costs                                     | 3,015.5  | 3,275.3  | 2,736.2  | 2,482.3 | (259.8)              | (7.9)  |
| Total Cost of Generation                       | 7,263.8  | 7,530.5  | 6,625.8  | 6,146.9 | (266.7)              | (4.0)  |
| Depreciation & Amortisation                    | 1,784.7  | 1,621.7  | 1,553.0  | 1,532.0 | 163.0                | 10.1   |
| Staff Costs                                    | 791.9    | 1,084.5  | 875.7    | 939.1   | 1 (292.6)            | (27.0) |
| Repair & Maintenance                           | 614.9    | 566.8    | 466.1    | 433.3   | 48.1                 | 8.5    |
| Net Loss on Impairment of Financial Instrument | 2 212.6  | -        | -        | -       | 212.6                | >100.0 |
| TNB General Expenses                           | 584.9    | 508.4    | 548.4    | 469.9   | 76.5                 | 15.0   |
| Subs. Cost of Sales & Opex                     | 848.1    | 479.0    | 614.4    | 245.6   | 3 369.1              | 77.1   |
| Total Non-Generation Costs                     | 4,837.1  | 4,260.4  | 4,057.6  | 3,619.9 | 576.7                | 14.2   |
| Total Operating Expenses                       | 12,100.9 | 11,790.9 | 10,683.4 | 9,766.8 | 310.0                | 2.6    |

1 Lower Staff Costs mainly due to :

- i) Non-recurring net salary adjustment of RM80mn due to MFRS119
- ii) Net operational staff cost reduction in OPEX of RM200mn due to higher staff cost capitalized for FY'18

2 Includes impairment of financial guarantee made to GAMA of RM269.9mn (YTD)

3 Include Impairment of GMR of RM304.7mn

# Q-o-Q Lower Units Generated and Reduction in Gas Consumption



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX

| Fuel Costs (RM mn) |         |         |         |         |                      |        |
|--------------------|---------|---------|---------|---------|----------------------|--------|
| Fuel Type          | 4QFY'18 | 3QFY'18 | 2QFY'18 | 1QFY'18 | Variance<br>4Q vs 3Q |        |
|                    |         |         |         |         | RM mn                | %      |
| Gas                | 2,374.2 | 2,649.0 | 2,409.4 | 2,115.3 | (274.8)              | (10.4) |
| LNG                | 116.4   | 60.7    | 19.6    | 17.0    | 55.7                 | 91.8   |
| Coal               | 3,116.9 | 3,225.6 | 2,905.9 | 2,454.1 | (108.7)              | (3.4)  |
| Dist.              | 10.9    | 0.7     | 23.2    | 11.8    | 10.2                 | >100.0 |
| Oil                | 4.3     | 0.7     | 6.9     | 7.3     | 3.6                  | >100.0 |
| Solar              | -       | -       | -       | -       | -                    | -      |
| Total              | 5,622.7 | 5,936.7 | 5,365.0 | 4,605.5 | (314.0)              | (5.3)  |

| Unit Generated (Gwh) |          |          |          |          |                      |          |
|----------------------|----------|----------|----------|----------|----------------------|----------|
| Fuel Type            | 4QFY'18  | 3QFY'18  | 2QFY'18  | 1QFY'18  | Variance<br>4Q vs 3Q |          |
|                      |          |          |          |          | Gwh                  | (%)      |
| Gas & LNG            | 12,047.2 | 13,760.3 | 12,352.1 | 12,444.6 | (1,713.1)            | (12.4)   |
| Coal                 | 17,999.7 | 17,669.7 | 18,460.9 | 16,242.2 | 330.0                | 1.9      |
| Dist.                | 0.0      | 0.0      | 21.5     | 4.8      | 0.0                  | >100.0   |
| Oil                  | (3.3)    | 1.7      | 22.3     | 14.0     | (5.0)                | >(100.0) |
| Hydro                | 1,231.7  | 1,080.3  | 1,096.9  | 1,493.9  | 151.4                | 14.0     |
| Solar                | 32.6     | -        | -        | -        | 32.6                 | >100.0   |
| Total                | 31,307.9 | 32,512.0 | 31,953.7 | 30,199.5 | (1,204.1)            | (3.7)    |

| Q-o-Q                                      | 4QFY'18 | 3QFY'18 | 2QFY'18 | 1QFY'18 |
|--|---------|---------|---------|---------|
| Daily Average Gas Volume (mmscfd)          | 902     | 1,016   | 923     | 949     |
| Average LNG Price (RM/mmbtu)               | 33.25   | 31.63   | 30.98   | 30.05   |
| Average Piped Gas Price (RM/mmbtu)         | 25.70   | 25.70   | 24.20   | 24.20   |
| Average Coal Price Delivered (USD/MT)(CIF) | 98.96   | 102.5   | 91.1    | 92.1    |
| Average Coal Price Delivered (RM/MT)(CIF)  | 411.14  | 422.60  | 361.4   | 361.7   |
| Coal Consumption (mn MT)                   | 8.0     | 7.7     | 8.0     | 7.1     |

| Average Coal Price Delivered (USD/MT) |         |         |         |         |                      |        |
|---------------------------------------|---------|---------|---------|---------|----------------------|--------|
|                                       | 4QFY'18 | 3QFY'18 | 2QFY'18 | 1QFY'18 | Variance<br>4Q vs 3Q |        |
|                                       |         |         |         |         | USD                  | %      |
| FOB                                   | 90.7    | 94.3    | 83.5    | 84.8    | (3.6)                | (3.8)  |
| Freight                               | 7.9     | 7.7     | 7.4     | 6.8     | 0.2                  | 2.6    |
| Others                                | 0.4     | 0.5     | 0.2     | 0.5     | (0.1)                | (20.0) |
| CIF                                   | 99.0    | 102.5   | 91.1    | 92.1    | (3.5)                | (21.2) |

# Q-o-Q Improved Coal Plants Performance

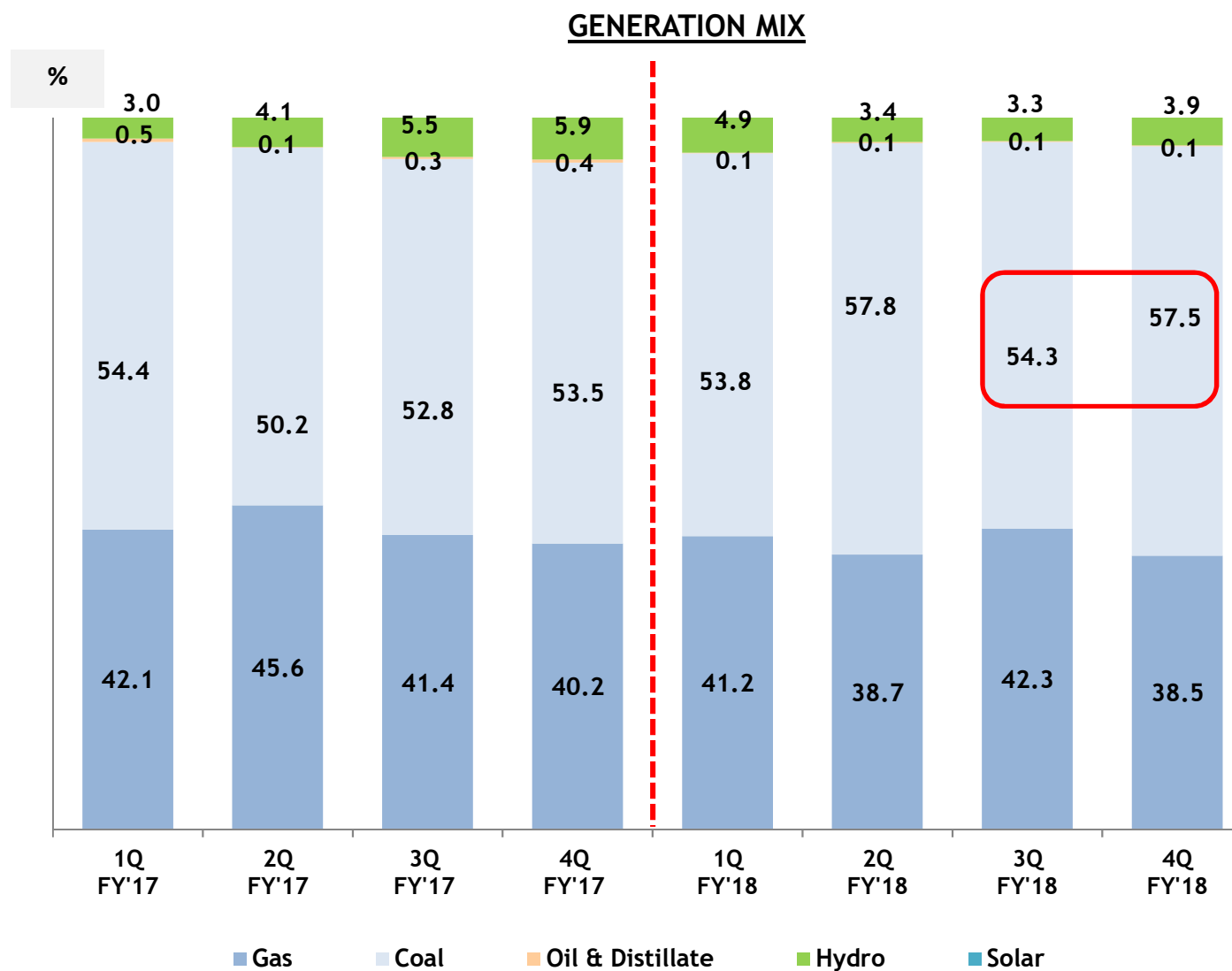


KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX



# Higher Coal Requirement Expected for 2019



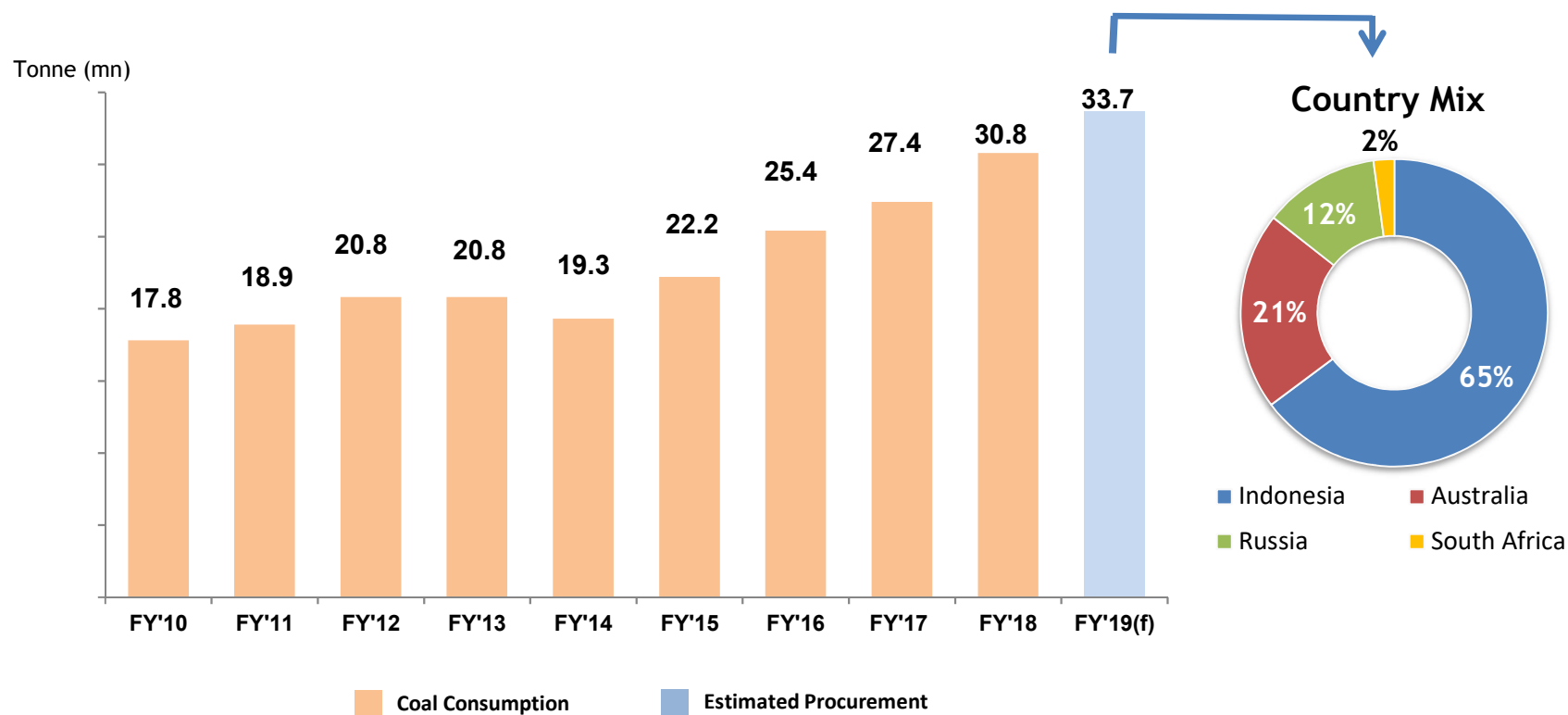
KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX

| Average Coal Price (CIF) | FY'10 | FY'11 | FY'12 | FY'13 | FY'14 | FY'15 | FY'16 | FY'17 | FY'18 |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| USD/metric tonne         | 88.2  | 106.9 | 103.6 | 83.6  | 75.4  | 66.0  | 55.7  | 72.7  | 95.9  |
| RM/metric tonne          | 293.8 | 325.9 | 321.9 | 259.5 | 244.6 | 236.0 | 231.1 | 314.7 | 388.1 |



# Normalized FY'18 EBITDA After One-offs Adjustments

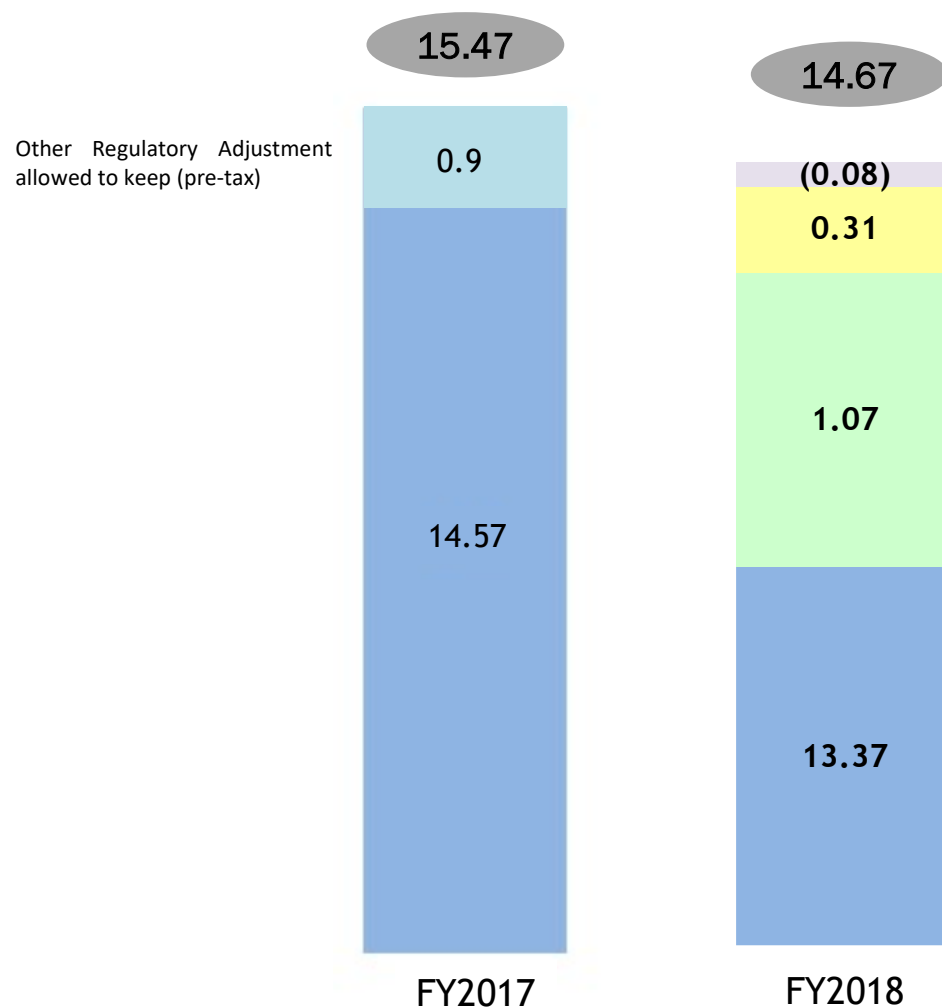


KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX



| Components                         | RM bn  |
|------------------------------------|--------|
| Normalized EBITDA                  | 14.67  |
| Net Salary Adjustment              | (0.08) |
| SESB Tariff Subsidy & Fuel Subsidy | +0.31  |
| Impairment                         | +1.07  |
| EBITDA FY'18                       | 13.37  |



1

Breakdown of the YTD impairments :

- Impairment for GAMA RM498.0mn
- Impairment for GMR RM304.7mn
- Impairment of Financial guarantee for GAMA RM269.9mn



# Normalized FY'18 PAT After One-offs Adjustments

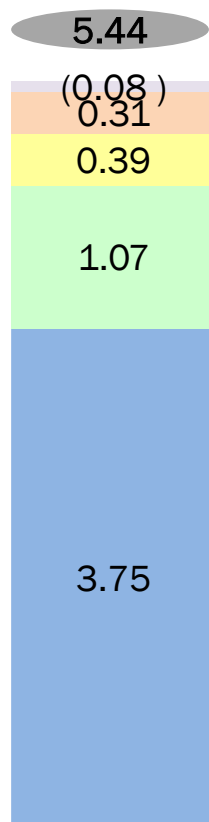


KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX



FY2018

| Components                         | RM bn  |
|------------------------------------|--------|
| Normalized PAT                     | 5.44   |
| Net Salary Adjustment              | (0.08) |
| SESB Tariff Subsidy & Fuel Subsidy | +0.31  |
| Forex Translation (Gain)/ Loss     | +0.39  |
| Impairment                         | +1.07  |
| PAT FY'18                          | 3.75   |



# Why is FY'18 Normalized PAT is still lower than FY'17 PAT?



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX

1

For simulation purposes, Other Regulatory Adjustment for FY17 of RM0.75bn is deducted since the normalized PAT of FY18 of RM5.44bn is excluding Other Regulatory Adjustment of RM0.64bn.

6.91

0.02

0.31

0.39

0.75

5.44

FY2018

| Components   | RM bn |
|--|-------|
| PAT FY'17  | 6.91  |
| Other net movement   | +0.02 |
| Movement between FY'18 and FY'17 Share of Loss in associate      | +0.31 |
| Additional Depreciation in FY'18                                 | +0.39 |
| Other Regulatory Adjustment Allowed to Keep for FY'17 (Post Tax) | +0.75 |
| Normalized PAT FY'18   | 5.44  |

2

Mainly from recognition of full year depreciation of Manjung 5

2

1

# Gearing Level Registered at 44.8%

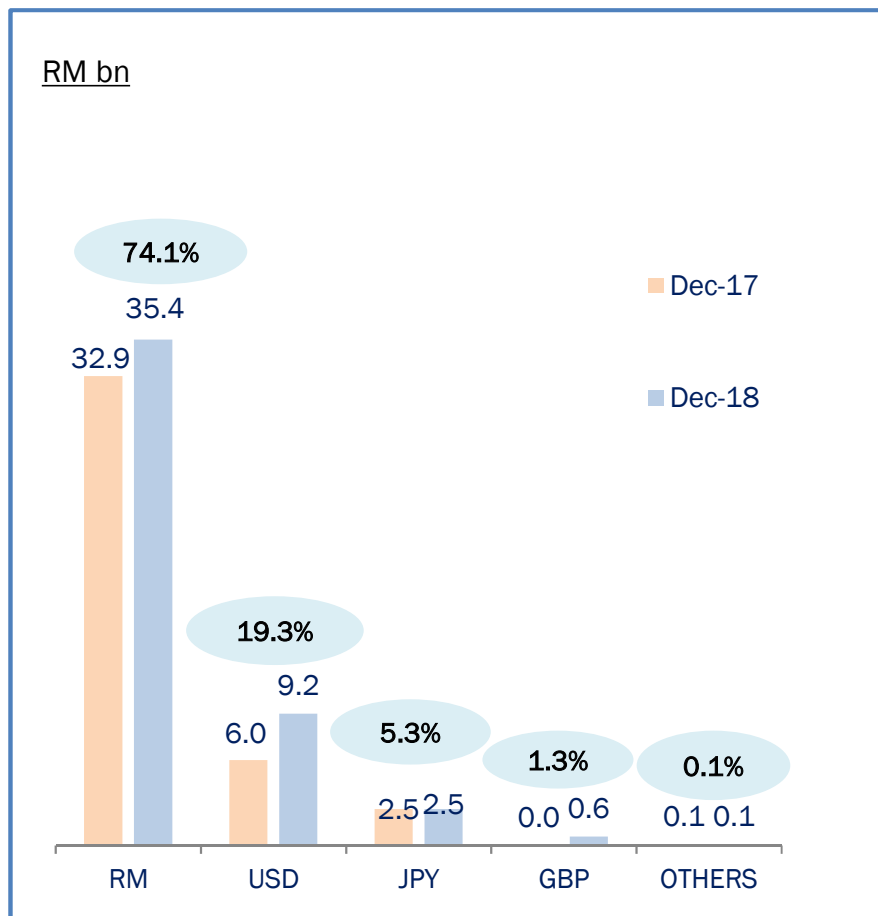


KEY HIGHLIGHTS

**FINANCIAL DETAILS**

INDUSTRY OUTLOOK

APPENDIX



Note:

Debt consists of Principal + Accrued Interest + Accounting Treatment (FRS139)

| Statistics                         | 31 <sup>st</sup> Dec'18 |
|------------------------------------|-------------------------|
| Total Debt (RM' Bil)               | 47.8                    |
| Net Debt (RM' Bil)*                | 29.8                    |
| Gearing (%)                        | 44.8                    |
| Net Gearing (%)                    | 27.9                    |
| Fixed : Floating                   | 95:5                    |
| Weighted Average Cost of Borrowing | 4.98                    |
| Final Exposure**                   | 4.99                    |

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

\*\* Inclusive of interest rate swap

| Closing FOREX | 31 <sup>st</sup> Dec'18 |
|---------------|-------------------------|
| USD/RM        | 4.14                    |
| 100YEN/RM     | 3.75                    |
| GBP/RM        | 5.27                    |
| USD/YEN       | 110.28                  |

# The Malaysian Electricity Supply Industry (MESI) has continuously undergone reforms over the past decades



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX

## Future of MESI Beyond

### Electrifying the nation *Pre 1990s*

- **National grid completed** to supply electricity to Peninsular Malaysia
- Increase in electrification to 94%
- Electricity supplied by **National Electricity Board (NEB)**

### Privatisation of the industry *1990s -2000*

- **Electricity Supply Act** introduced in **1990**
- **TNB privatised** in 1990 and listed on the Kuala Lumpur Stock Exchange in 1992
- The **first generation of Independent Power Producers (IPPs)** introduced competition into the Generation segment

### Instilling good governance *2001 -2013*

- **Energy Commission (ST)** established in 2001
- Cabinet approved **MESI Reform 1.0** in late 2009, including
  - Competitive IPP award tenders
  - Incentive Based Regulation (IBR) with Imbalance Cost Pass Through (ICPT)
  - Accounting unbundling
  - Gradual rationalization of gas subsidies

### Increasing efficiency and sustainability *2014 -2018*

- **Launch of IBR framework** in 2014 to encourage cost efficiencies and ensure financial sustainability of the system
- **IBR guidelines refreshed** for second regulatory period (RP2) starting 2018
  - Revenue cap expanded to both Transmission Grid and Distribution Network
  - Productivity targets imposed on cost allowance

- **MESTECC** announced intent to pursue **MESI 2.0 reforms**

# Reimagining TNB was developed in 2016 to prepare TNB for the evolving landscape

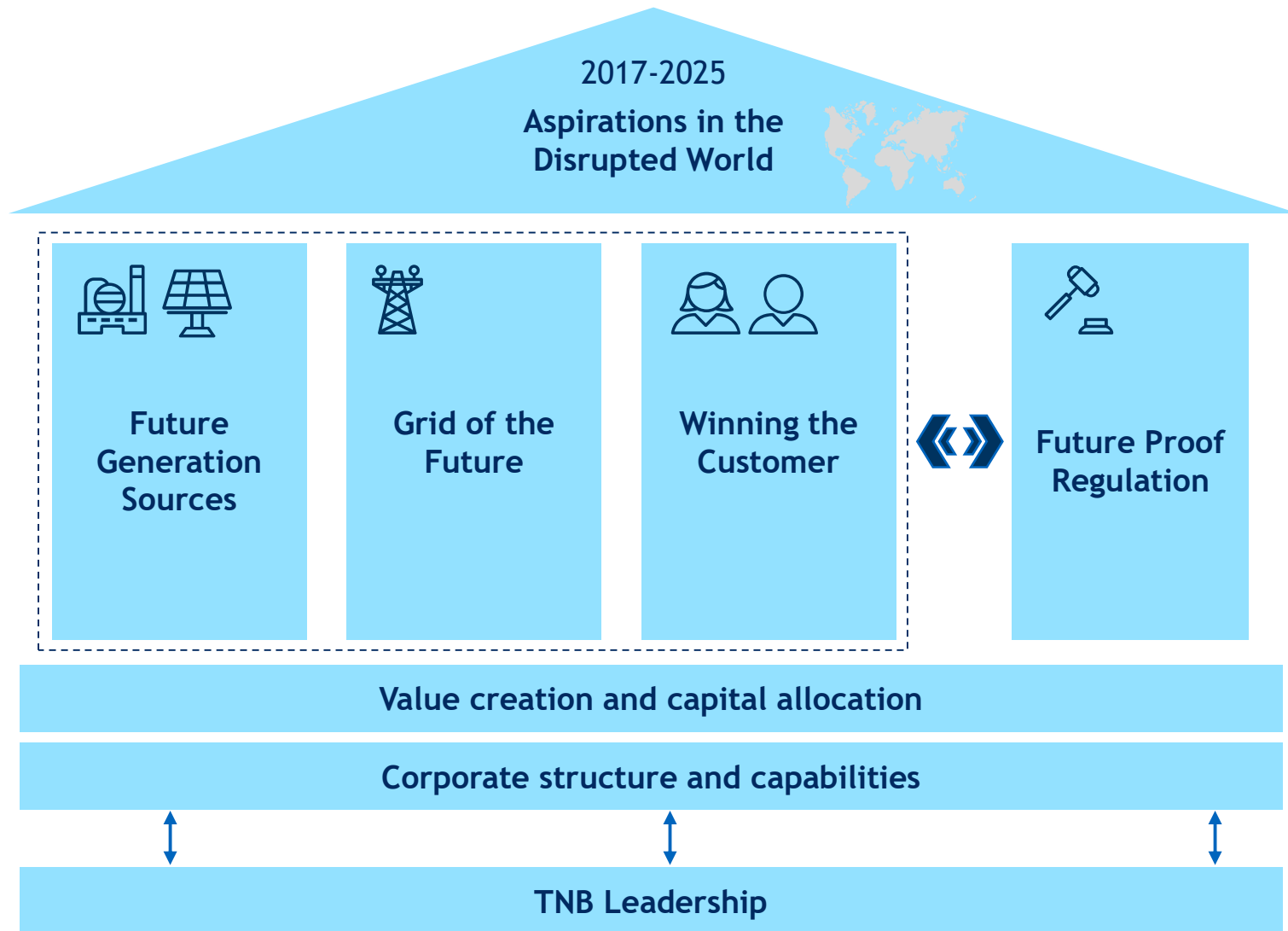


KEY HIGHLIGHTS

FINANCIAL DETAILS

**INDUSTRY OUTLOOK**

APPENDIX



# Under MESI 2.0, TNB supports reforms to deliver against 5+1 key objectives

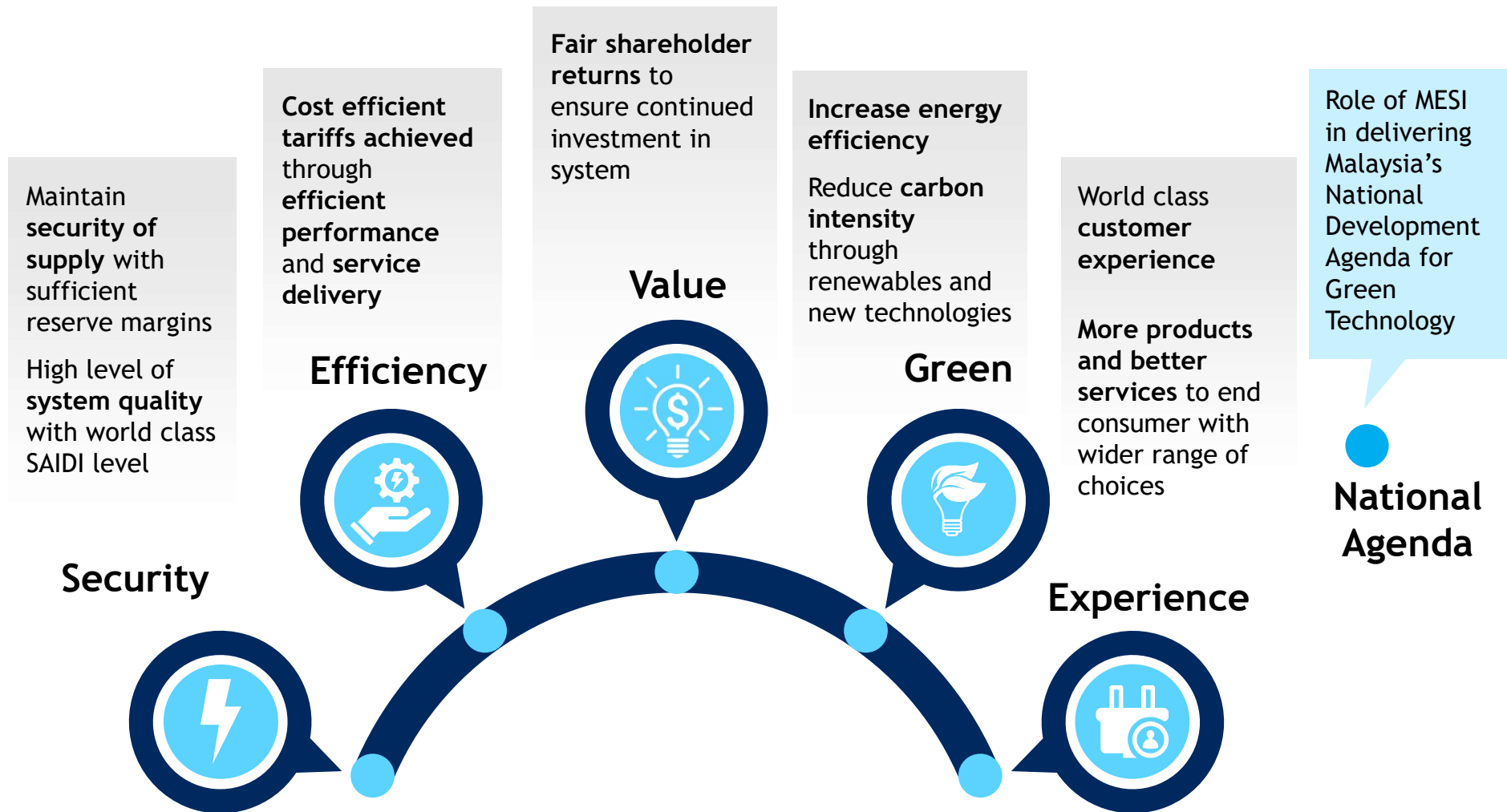


KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX



## MESI 2.0

# TNB has already taken steps that are in support of the objectives for MESI



KEY HIGHLIGHTS

FINANCIAL DETAILS

**INDUSTRY OUTLOOK**

APPENDIX



## Security

- Malaysia has **strong security of supply** with high generation reliability and stable fuel supply
- SAIDI has improved to **48.22 minutes** from 64.20 minutes in FY2013



## Efficiency

- TNB is committed to delivering **increased efficiency and productivity** under IBR determination for 2<sup>nd</sup> regulatory period (2018-2020)
- Launched **Generation Division Business Turnaround Programme** to deliver efficiencies across TNB power plants



## Value

- **Incentive Based Regulation (IBR)** as the cornerstone of regulation since 2014
- **Imbalance Cost Pass Through (ICPT)**, primarily for fuel costs, has been consistently adhered to per regulations since 2014
- **Positive signal for market** that Government is committed to providing a **fair and stable regulatory framework**



## Green

- **50MW Large Scale Solar** at Sepang, Selangor started operations
- Innovative Rooftop Solar Leasing Plans by **GSPARX**
- **Energy efficiency (EE)** initiatives in support of MESTECC's aspirations of achieving 8% savings from EE by 2025
- **Multiple products launched** e.g., Smart Meter rollout, Home Energy Report saved 47.8 GWh, MaEVI Home Energy Management System launched



## Experience

- **Dedicated Retail division** established with **Chief Retail Officer** appointed
- **Customer Satisfaction Index** at **8.1** up from 7.5 in FY2013

**TNB supportive of and in close discussions with Government on view of path forward for MESI 2.0**

# Question & Answer





# THANK YOU

## CoE INVESTOR RELATONS GROUP FINANCE DIVISION

Tenaga Nasional Berhad  
4<sup>th</sup> Floor, TNB Headquarters  
No.129, Jalan Bangsar,  
59200 Kuala Lumpur, MALAYSIA  
Tel : +603 2296 6748  
Fax : +603 2284 0095  
Email : [tenaga\\_ird@tnb.com.my](mailto:tenaga_ird@tnb.com.my)  
Website : [www.tnb.com.my](http://www.tnb.com.my)

### IR OFFICERS:

- 1) *Anis Ramli*
  - +603 2296 6821
  - [AnisRa@tnb.com.my](mailto:AnisRa@tnb.com.my)
- 2) *Nizham Khan*
  - +603 2296 6951
  - [nizham.jamil@tnb.com.my](mailto:nizham.jamil@tnb.com.my)
- 2) *Sathishwaran Naidu*
  - +603 2296 3618
  - [sathishwaran@tnb.com.my](mailto:sathishwaran@tnb.com.my)



## Disclaimer

All information contained herein is meant strictly for the use of this presentation only and should not be used or relied on by any party for any other purpose and without the prior written approval of TNB. The information contained herein is the property of TNB and it is privileged and confidential in nature. TNB has the sole copyright to such information and you are prohibited from disseminating, distributing, copying, re-producing, using and/or disclosing this information.

# Consistent Technical Performances



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX **1**

## Equivalent Plant Availability Factor (EAF)



**89.92%\***  
*FY'17 87.30%\**

## Transmission System Minutes



**0.35 mins**  
*FY'17 : 0.23 mins*

## Distribution SAIDI



**48.19 mins**  
*FY'17 : 50.20 mins*

Note :

\*The figure is for all TNB plants

Previously, the EAF figure disclosed only include SLA plants and JMKG : 89.94% as at FY'18 / 89.5% as at FY'17

# YEAR-ON-YEAR (Y-o-Y) ANALYSIS



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX 2

- Higher Revenue due to Increase in Sales of Electricity of RM1.6bn
- Higher OPEX due to One –Offs Adjustments of RM1.3bn\*
- Further Reduction of Profit Contributed by Forex Translation Loss & Loss in Share of Associates

| RM mn   | FY'18<br>(Jan-Dec'18) | FY'17<br>(Sept'16-Aug'17) | Variance<br>(RM mn) | Variance<br>(%) |
|---|-----------------------|---------------------------|---------------------|-----------------|
| Revenue   | 50,392.5              | 47,416.9                  | 2,975.6             | 6.3             |
| Operating expenses (without depreciation)       | (37,850.7)            | (32,969.2)                | (4,881.5)           | 14.8            |
| Other operating income                          | 825.1                 | 1,021.3                   | (196.2)             | (19.2)          |
| EBITDA  | 13,366.9              | 15,469.0                  | (2,102.1)           | (13.6)          |
| EBITDA Margin (%)                               | 26.5%                 | 32.6%                     |                     |                 |
| Depreciation                                    | (6,491.3)             | (6,105.0)                 | (386.3)             | 6.3             |
| EBIT  | 6,875.6               | 9,364.0                   | (2,488.4)           | (26.6)          |
| Foreign exchange:                               |                       |                           |                     |                 |
| - Transaction gain / (loss)                     | (25.2)                | 21.6                      | (46.8)              | >(100.0)        |
| - Translation gain / (loss)                     | (393.1)               | (13.7)                    | (379.4)             | >(100.0)        |
| Share of results of joint ventures              | 27.2                  | 25.0                      | 2.2                 | 8.8             |
| Share of results of associates                  | (209.9)               | 103.3                     | (313.2)             | >(100.0)        |
| Profit before finance cost                      | 6,274.6               | 9,500.2                   | (3,225.6)           | (34.0)          |
| Fair value of financial instrument              | 36.7                  | 48.4                      | (11.7)              | (24.2)          |
| Finance income                                  | 423.8                 | 216.7                     | 207.1               | 95.6            |
| Finance cost                                    | (1,688.5)             | (1,483.5)                 | (205.0)             | 13.8            |
| Profit from ordinary activities before taxation | 5,046.6               | 8,281.8                   | (3,235.2)           | (39.1)          |
| Taxation and Zakat:                             |                       |                           |                     |                 |
| - Company and subsidiaries                      | (1,034.8)             | (643.7)                   | (391.1)             | 60.8            |
| - Deferred taxation                             | (266.8)               | (726.0)                   | 459.2               | (63.3)          |
| Profit for the period                           | 3,745.0               | 6,912.1                   | (3,167.1)           | (45.8)          |
| Attributable to:                                |                       |                           |                     |                 |
| - Owners of the Company                         | 3,723.7               | 6,904.0                   | (3,180.3)           | (46.1)          |
| - Non-controlling interests                     | 21.3                  | 8.1                       | 13.2                | >100.0          |
| Profit for the period                           | 3,745.0               | 6,912.1                   | (3,167.1)           | (45.8)          |

# Normalised Maximum Demand for 4QFY'18

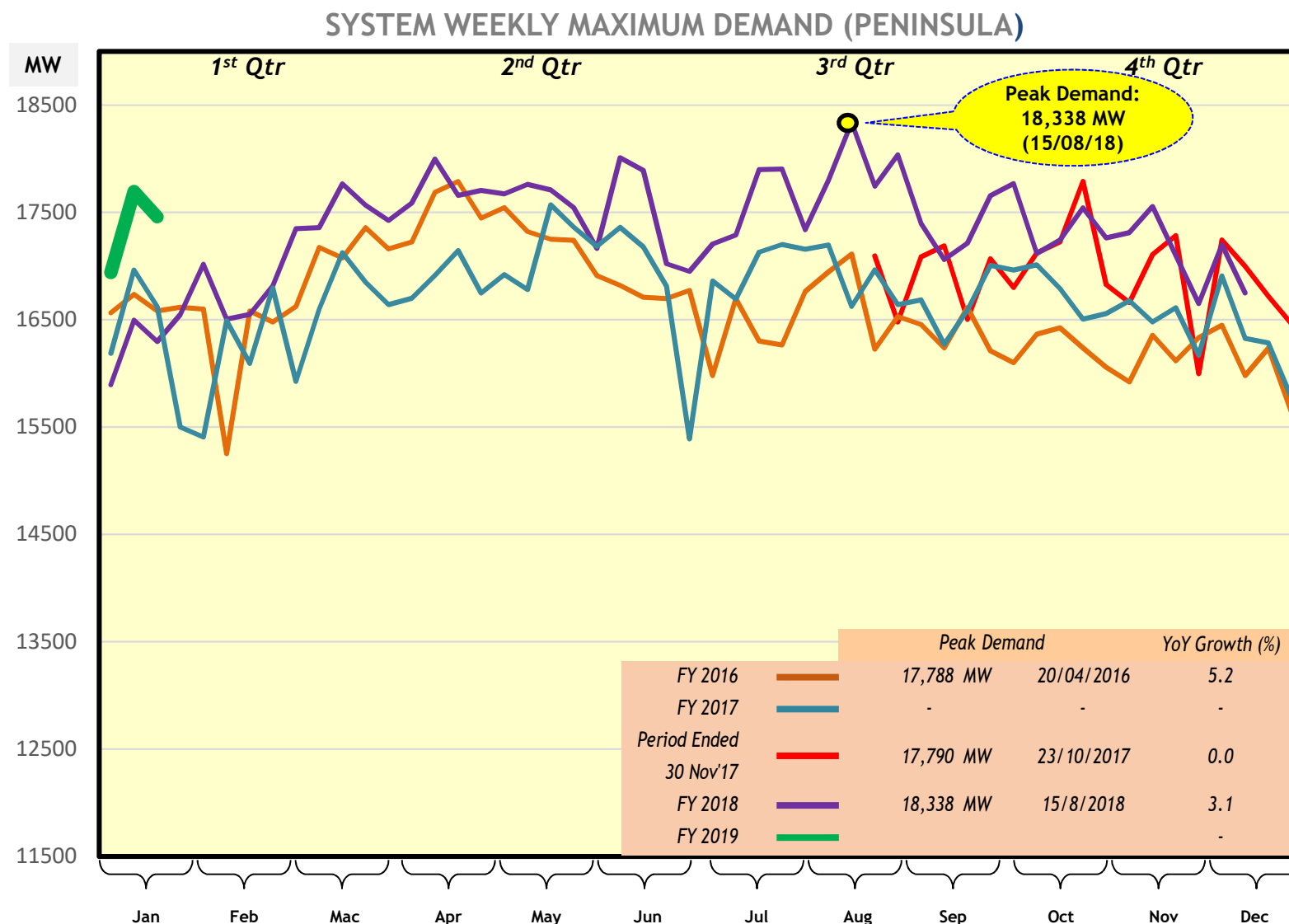


KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX 3



\*The quarter arrangement is base on the new Financial Year (Jan - Dec)

# Continuous Effective ICPT Implementation



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX 4

|  | 1QFY'18<br>(RM mn) | 2QFY'18<br>(RM mn) | 3QFY'18<br>(RM mn) | 4QFY'18<br>(RM mn) | FY'18<br>(RM mn) |
|--|--------------------|--------------------|--------------------|--------------------|------------------|
| Total Cost of Generation                           | 6,146.9            | 6,625.8            | 7,530.5            | 7,263.8            | 27,567.0         |
| Adjustment not related to IBR:                     | 293.7              | 58.5               | (464.6)            | 8.6                | (103.8)          |
| 1 Fuel Price Adjustment                            | 212.6              | (22.0)             | (422.4)            | 114.1              | (117.7)          |
| 2 MFRS117  | 262.8              | 315.3              | 264.4              | 296.4              | 1,138.9          |
| 3 SESB Net Generation Cost                         | (181.5)            | (159.5)            | (184.6)            | (286.9)            | (812.5)          |
| LPL Fuel Cost                                      | (0.2)              | (75.3)             | (122.0)            | (115.0)            | (312.5)          |
| TNB Capacity and VOR: SLA & SPV                    | 1,458.5            | 1,406.2            | 1,234.2            | 1,401.0            | 5,499.9          |
| <b>Total Generation Costs<br/>(Related to IBR)</b> | <b>7,899.1</b>     | <b>8,090.5</b>     | <b>8,300.1</b>     | <b>8,673.4</b>     | <b>32,963.1</b>  |
|  | 1QFY'18<br>(RM mn) | 2QFY'18<br>(RM mn) | 3QFY'18<br>(RM mn) | 4QFY'18<br>(RM mn) | FY'18<br>(RM mn) |
| Single Buyer Actual Generation Costs: (A)          | 7,899.1            | 8,090.5            | 8,300.1            | 8,673.4            | 32,963.1         |
| Actual Sales (Gwh)                                 | 27,069.5           | 29,001.1           | 28,920.4           | 28,478.3           | 113,469.3        |
| Single Buyer Tariff (RM/kwh)                       | 0.2705             | 0.2705             | 0.2705             | 0.2705             | 0.2705           |
| Actual Gen Cost Recovered (RM mn) (B)              | 7,322.3            | 7,844.8            | 7,821.4            | 7,703.4            | 30,691.9         |
| <b>ICPT Surcharge (C)<br/>(C = A - B)</b>          | <b>576.8</b>       | <b>245.7</b>       | <b>478.8</b>       | <b>970.0</b>       | <b>2,271.3</b>   |
| (+) Prior Year Accounting Adjustment               | 57.3               | (0.5)              | 0.8                | 0.7                | 58.3             |
| <b>ICPT as at FY'18</b>                            | <b>634.1</b>       | <b>245.2</b>       | <b>479.6</b>       | <b>970.7</b>       | <b>2,329.6</b>   |

1

## Coal price & ACP comparison

|                       | 3Q     | 4Q     |
|-----------------------|--------|--------|
| Coal Price (RM/MT)    | 411.14 | 422.60 |
| Coal price (RM/mmBtu) | 18.84  | 19.36  |
| ACP (RM/mmBtu)*       | 16.49  | 19.63  |

\*Source : Energy Commission Website

In 4Q, the base ACP (RM19.63/mmBtu) used for billing the generators/single buyer is higher than the coal price paid to supplier (RM19.36/mmBtu). Hence, TNB Fuel over-recovered the differential amount from the IPPs. Any movement in FPA will be reconciled in the following quarter.

2

Adjustment required under MFRS117 - leasing

3

Reversal of provision for SESB tariff subsidy & fuel subsidy

# Fuel Costs (TNB & IPPs - Peninsula)



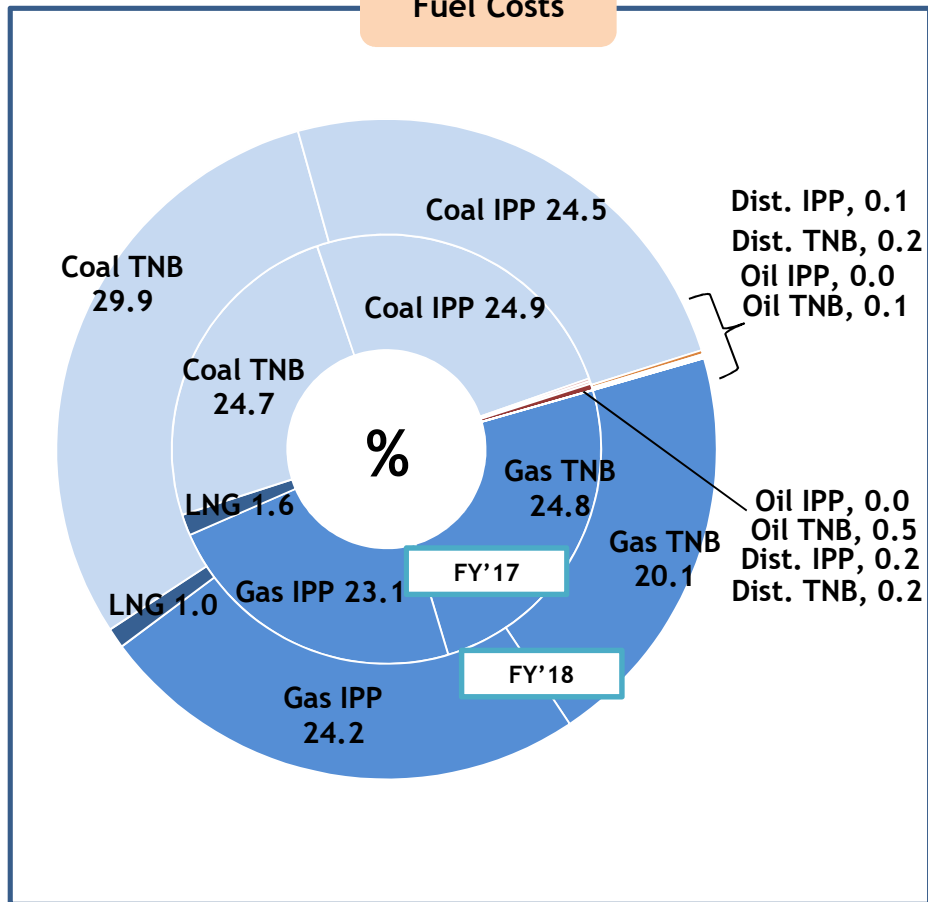
KEY HIGHLIGHTS

FINANCIAL DETAILS

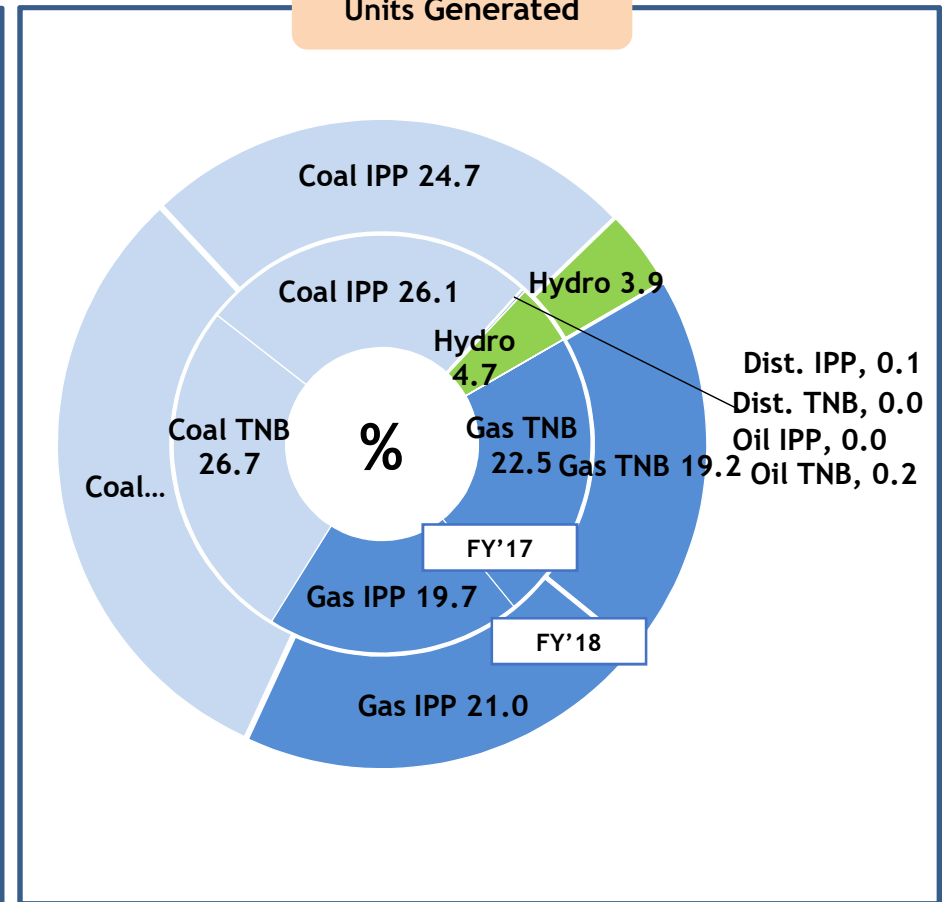
INDUSTRY OUTLOOK

APPENDIX 5

Fuel Costs



Units Generated



% indicates generation market share

# Other Regulatory Adjustment



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

APPENDIX 6

| Components of Other Regulatory Adjustment            | (RM mn) |
|--|---------|
| Excess Revenue for Revenue Cap & Price Cap           | 1 442.9 |
| Refund of Interests on Customer Deposits             | 59.10   |
| Refund of Excess Single Buyer Working Capital        | 56.90   |
| Refund of Other Income Related to Regulated Business | 80.90   |
|  | 2 639.8 |

1 Previously calculated at RM367.4mn. The differences between actual and estimate of sales Gwh in Q4

2 Other Regulatory Adjustment for FY18 was fully recognized in 4QFY18 due to finalized guidelines for IBR 2018 which was only published in December 2018 which clearly mentioned the annual treatment for Revenue Cap and Price Cap entities (return if ASP is higher than base tariff or reimbursed otherwise). Moving forward, any regulatory related adjustment will be provided for on the monthly basis.

# Other Regulatory Adjustment



KEY HIGHLIGHTS

FINANCIAL DETAILS

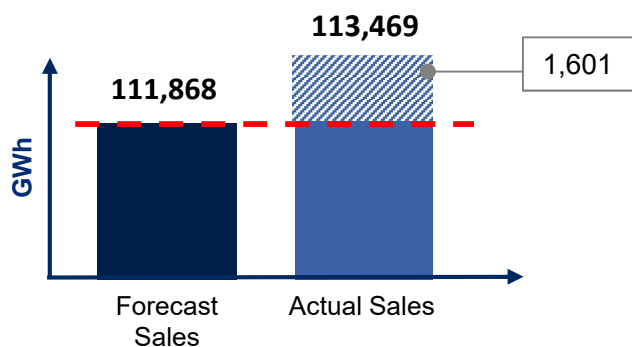
INDUSTRY OUTLOOK

APPENDIX 7

## Revenue Cap (Transmission, Dist. Net, GSO & SBO)

- Revenue cap entities are not allowed to earn a revenue higher than their allowed annual revenue. Any excess must be passed-through to the customers via cost and revenue adjustment mechanism
- This year's higher actual sales leads to higher revenue earned by the revenue cap entities

2018 Variations in Sales (in GWh)

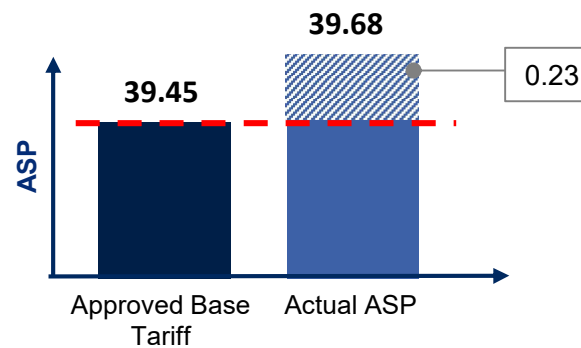


| Business Entities    | Allowed Tariff (sen/kWh) | Variations in Sales (GWh) | Adjustment (RM Mil) |
|----------------------|--------------------------|---------------------------|---------------------|
| Revenue Cap Entities | 11.36                    | + 1,601                   | 181.9               |

## Price Cap (Customer Services)

- Any excess revenue earned due to higher Average Selling Price (ASP) compared to Base Tariff must be passed-through to the customers via cost and revenue adjustment mechanism
- For 2018, the ASP is recorded to be higher than the Base Tariff

2018 Variations in ASP (sen/kWh)



| Business Entities | Actual Sales (GWh) | Variations in ASP (sen/kWh) | Adjustment (RM Mil) |
|-------------------|--------------------|-----------------------------|---------------------|
| CS                | 113,469            | + 0.23                      | 261.0               |



# Guidance on MFRS 15, 9 & 16



KEY HIGHLIGHTS

FINANCIAL DETAILS

INDUSTRY OUTLOOK

**APPENDIX 8**

|   | 2017 (PRE ADOPTION) |  | 2018 (POST ADOPTION) |   |   |
|---|---------------------|--|----------------------|---|---|
|   | RM mn               | Where is it reported?                                  | RM mn                | Where is it reported?   | Justification   |
| <b>REVENUE (MFRS 15)</b>                |                     |  |                      |   |   |
| Sales Of Electricity                    | 45,630.1            | Revenue - Sales of Electricity                         | 47,363.2             | Revenue - Sales of Electricity  | Actual increase of 2.6% in sales of electricity (Gwh) is due to demand growth and not due to MFRS 15 implementation |
| Recognition Of Customers' Contributions | 687.2               | Revenue - Recognition Of Customers' Contributions      | 263.4                | Revenue - Customers' Contribution                                       | Revenue is amortised for 20 years under MFRS 15   |
| <b>NON-GENERATION COST (MFRS 9)</b>     |                     |  |                      |   |   |
| Impairment Of Financial Instruments     | (588.4)             | Reported in provisions of doubtful debt as part of GOE | (487.3)              | Under MFRS 9, it is recorded under Impairment of Financial Instruments. | Separated from GOE  |
| EBITDA                                  | 15,469.0            |  |                      | Minimal impact on EBITDA  |   |
| PAT                                     | 6,912.0             |  |                      | Minimal impact on PAT   |   |

| MFRS 16  | 2018 (PRE ADOPTION)<br>RM mn | 2019 (POST ADOPTION) GUIDANCE   |
|--|------------------------------|---|
| Total Cost<br>(Generation Cost,<br>Finance Cost And<br>Depreciation) | 35,706.4                     | Non cash accounting adjustment with a net impact of around RM0.3bn, adjusted for Jimah East Power and Southern Power Generation. This is derived from a net increase in Generation Cost, Finance Cost And Depreciation. |