CONTENTS

1. INTRODUCTION TO TENAGA
2. INCENTIVE BASED REGULATION (IBR)
3. BUSINESS STRATEGY & DIRECTION
4. DIVIDEND POLICY
5. FINANCIAL HIGHLIGHTS
INTRODUCTION TO TENAGA

Peninsula Installed Capacity vs. Generation mix

<table>
<thead>
<tr>
<th></th>
<th>FY'13</th>
<th>FY'14</th>
<th>FY'15</th>
<th>FY'16</th>
<th>1QFY'17</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNB - Peninsula Installed Capacity (MW)</td>
<td>11,462</td>
<td>10,814</td>
<td>11,708</td>
<td>12,904</td>
<td>12,880</td>
</tr>
<tr>
<td>Total units sold (Gwh)</td>
<td>105,479</td>
<td>108,102</td>
<td>110,837</td>
<td>115,505</td>
<td>29,548</td>
</tr>
<tr>
<td>Total customers (mn)</td>
<td>8.35</td>
<td>8.64</td>
<td>8.94</td>
<td>9.21</td>
<td>9.11</td>
</tr>
<tr>
<td>Total employees ('000)</td>
<td>35.0</td>
<td>36.1</td>
<td>36.0</td>
<td>35.6</td>
<td>35.6</td>
</tr>
<tr>
<td>Total assets (RM bn)</td>
<td>99.0</td>
<td>110.7</td>
<td>117.1</td>
<td>132.9</td>
<td>138.1</td>
</tr>
</tbody>
</table>

*Based on dependable capacity
INTRODUCTION TO TENAGA

Sectoral Sales Analysis

- Shift from Industrial-based to Service-based economy
- Commercial sector contributes the highest electricity sales margin
INTRODUCTION TO TENAGA
Industry Regulatory Framework

Prime Minister/Cabinet
- Ministry of Energy, Green Technology and Water (KeTTHA)
- Energy Commission (Regulator)
- Promote competition
- Protect interests of consumers
- Issue licenses
- Tariff regulation

Ministry of Finance/Khazanah Nasional Berhad
- Shareholders
- Public 6.8%
- Foreign 27.7%
- Other Corporations & Govt. Agencies:
  - EPF 14.9%
  - PNB 11.1%
  - Others 11.3%
- 28.2%
- Holds ‘Golden’ Share

Economic Planning Unit (EPU)
- Develops and complements Privatisation Policy
- Evaluates and selects IPPs
- Recommends ESI policies

Policy Maker

Tenaga Nasional Berhad
- IPPs
- Market Cap (3rd)
  - RM75.6bn (USD17.1bn)
  - As at 2nd Feb 2017

Consumers

As at Nov'16 % Based on Top 100 Shareholders
CONTENTS

1. INTRODUCTION TO TENAGA
2. INCENTIVE BASED REGULATION (IBR)
3. BUSINESS STRATEGY & DIRECTION
4. DIVIDEND POLICY
5. FINANCIAL HIGHLIGHTS
INCENTIVE BASED REGULATION (IBR)
The Move Towards Better Regulation

IBR mechanism to strengthen the following:

- The Economic Regulatory Framework for Regulating TNB
- The Tariff Setting Mechanism and Principles for Tariff Design
- Incentive Mechanisms to Promote Efficiency and Service Standards
- The Process of Tariff Reviews
- Creation of Regulatory Accounts and Its Annual Review Process

11 Regulatory Implementation Guidelines (RIGS) were Developed for IBR Implementation

*Source: EC*
INCENTIVE BASED REGULATION (IBR)

Electricity Tariff Review = Base Tariff + Imbalance Cost Pass-Through (ICPT)

**Imbalance Cost Pass-Through (ICPT):**
- Tariff adjustment to reflect uncontrollable fuel costs and other generation costs (difference between forecast and actual cost of procuring electricity that is beyond the control of utility)

**Base Tariff under IBR framework reflects:**

a) CAPEX and OPEX of
   - transmission, distribution, system operation (SO) and single buyer operation (SB)

b) Power purchase cost charged by generators (including base price for fuel) to the SB

c) Return on regulated asset (rate base) of transmission, distribution, SO and SB business units

**Principle for ICPT Calculation**

Cost components comprise of:

- Actual vs forecast cost of fuels & other generation costs for the preceding 6-month period; and
- Piped gas price increase of RM1.50/mmBtu for the next 6-month period

*Source: EC*
INCENTIVE BASED REGULATION (IBR)

Imbalance Cost Pass-Through (ICPT) Comprises Two Components

**Imbalance Cost Pass-Through (ICPT)**

**Fuel Cost Pass Through (FCPT)**
- Adjustment in the following 6 month period, subject to government approval
- FCPT (gas/LNG and coal only)

Changes in gas/LNG and coal costs

**Generation Specific Cost Adjustment (GSCPT)**
- Adjustment in the following 6 month period, subject to government approval
- Actual cost of generation

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

---

**PPPAs** 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
INCENTIVE BASED REGULATION (IBR)

Average Base Tariff of 38.53 sen/kwh is Effective from 1st January 2014

<table>
<thead>
<tr>
<th>Tariff Components</th>
<th>sen/kWh</th>
<th>% increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Tariff (Jun 2011)</td>
<td>33.54</td>
<td></td>
</tr>
<tr>
<td><strong>Fuel Components:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Piped-gas regulated price (from RM13.70/mmBTU to RM15.20/mmBTU @1,000 mmscfd)</td>
<td>0.51</td>
<td>1.52</td>
</tr>
<tr>
<td>• Coal (market price) (from USD85/tonne to USD87.5/tonne CIF@CV 5,500kcal/kg)</td>
<td>0.17</td>
<td>0.51</td>
</tr>
<tr>
<td>• LNG RGT market price at RM41.68/mmBTU (for gas volume &gt; 1,000 mmscfd)</td>
<td>3.41</td>
<td>10.17</td>
</tr>
<tr>
<td><strong>Non-fuel component (TNB Base Tariff)</strong></td>
<td>0.90</td>
<td>2.69</td>
</tr>
<tr>
<td><strong>AVERAGE BASE TARIFF EFFECTIVE 1st JANUARY 2014</strong></td>
<td>38.53</td>
<td>14.89</td>
</tr>
</tbody>
</table>
## INCENTIVE BASED REGULATION (IBR)

Regulatory WACC for TNB under IBR (FY2014 - 2017) is 7.5%

<table>
<thead>
<tr>
<th>WACC Parameters</th>
<th>Actual market Parameters</th>
<th>TNB’s Proposal</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Return ($R_m$)</td>
<td>8.8%[2]</td>
<td>12.3%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Risk free ($R_f$)</td>
<td>4.0%</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Market Risk Premium ($R_m - R_f$)</td>
<td>4.8%</td>
<td>8.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Debt Margin ($D_m$)</td>
<td>2.19%</td>
<td>2.24%</td>
<td>2.24%</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>25.0%</td>
<td>25.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

### Weighted Cost of Capital Calculation

<table>
<thead>
<tr>
<th>Capital Structure</th>
<th>Cost</th>
<th>Capital Structure</th>
<th>Weighted Cost</th>
<th>Cost</th>
<th>Capital Structure</th>
<th>Weighted Cost</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Equity ($K_e$)</td>
<td>8.38%</td>
<td>60.5%</td>
<td>5.1%</td>
<td>15.91%</td>
<td>45.0%</td>
<td>7.16%</td>
<td>10.85%</td>
</tr>
<tr>
<td>Cost of Borrowing ($K_d$)[3]</td>
<td>6.18%</td>
<td>39.5%</td>
<td>1.8%</td>
<td>6.24%</td>
<td>55.0%</td>
<td>2.57%</td>
<td>6.24%</td>
</tr>
<tr>
<td><strong>Weighted Cost of Capital</strong></td>
<td><strong>6.9%</strong></td>
<td><strong>60.5%</strong></td>
<td><strong>5.1%</strong></td>
<td><strong>15.91%</strong></td>
<td><strong>45.0%</strong></td>
<td><strong>7.16%</strong></td>
<td><strong>10.85%</strong></td>
</tr>
</tbody>
</table>

Note:

[1] Based on beta for the period 2004-2012
[2] $R_m$ - Market return of 10 yrs KLSE Index
INCENTIVE BASED REGULATION (IBR)

IBR Regulatory Period Timeline & ICPT Review

Source: Regulatory Economics & Planning, TNB
CONTENTS

1. INTRODUCTION TO TENAGA
2. INCENTIVE BASED REGULATION (IBR)
3. BUSINESS STRATEGY & DIRECTION
4. DIVIDEND POLICY
5. FINANCIAL HIGHLIGHTS
OUR STRATEGY

TNB’s strategy to achieve our aspiration of becoming amongst the leading corporations in the energy & related business globally is centred on five focus areas: Enabling a stable regulatory environment, exceeding customer expectations, driving operational excellence and cost efficiencies, growing profitable business, and transforming our people and leadership.
Electrifying Malaysia and Powering its Industrial growth
- 99% electrification
- No major black out since 1996

Driving Performance as Malaysia Government-Linked Companies (GLC) Champion
- SAIDI reduced from 128 minutes in 2002 to 62 minutes in 2012
- 5th largest GLC employer in Malaysia

Establishing an Era of Growth and Sustainability through Key Result Areas (KRA) to emerge as a Domestic & Regional Champion (DRC)
- 6 KRAs ranging from regulation to new business growth and organizational transformation

Reimagining TNB to deliver on the aspiration to become a top 10 power company globally
- Transforming TNB businesses to address the challenges and opportunities over the next decade
BUSINESS STRATEGY & DIRECTION

Reshaping TNB Future: Key Pillars of Value

Aspirations in the Disrupted World
anchored on value creation

Future Generation Sources

Grid of the Future

Winning the Customer

Anticipating Future Regulations Changes

Value creation and capital allocation implications

Corporate structure and capabilities

Build conviction with TNB leadership
TNB 2025 Growth Aspiration

TNB aspires to grow our EBIT from RM8 billion currently to RM20 billion in 2025 through domestic and international investment.
**BUSINESS STRATEGY & DIRECTION**

**TNB International Footprint: Currently One of the Largest Electricity Company in Asia**

- **REMACO O&M for 225MW Sabiya Power Generation & Water Distillation Plant (KUWAIT)**
- **REMACO O&M for Shuaiba North Co-Gen (USD320mn) 780MW Power; 204,000 m³/day water (KUWAIT)**
- **30% equity ownership in GAMA Enerji A.S.**
- **TNEC JV with Abu Dhabi Al Samah for District Cooling**
- **REMACO O&M Services for Shuaibah IWPP**
  - **IWPP: Shuaibah (USD2.7bn) 900MW Power; 880,000 m³/day water; 150,000 m³/day water**
- **REMACO O&M for 210MW Doha West Power Generation & Water Distillation Plant(KUWAIT)**
- **IPP: Liberty Power Ltd (USD272m) 235MW**
- **30% equity ownership in GMR Energy Limited**
- **TNB International Footprint: Currently One of the Largest Electricity Company in Asia**
  - **Development of the Sumatera – Peninsular Malaysia HVDC Interconnection, Coal-fired power plant & coal mine mouth projects**
  - **REMACO O&M services for Liberty Power Ltd**
  - **REMACO O&M services for Bong Hydro Plant in Pakistan**

**Equity ownership**
- **IPP, IWPP & Development Projects**
- **Supply & Services**
**BUSINESS STRATEGY & DIRECTION**

International Acquisition: 30% Significant Minority Stake in GAMA Enerji A.S.

---

**GAMA Enerji A.S.**

- On 13 April 2016, TNB had completed the acquisition of 30% equity interest of GAMA Enerji A.S. from GAMA Holding A.S., International Finance Corporation (IFC) and IFC Global Infrastructure Fund Holding.

- Total cash consideration: USD255.0 mn.

- GAMA Enerji A.S. assets include:
  - 840MW natural gas-fired plant
  - 45MW wind power plant under construction
GMR Energy Limited

- On 4 November 2016, TNB had completed the acquisition of 30% equity interest of GMR Energy Limited via a bilateral transaction.
- Total cash consideration: USD300.0 mn.
- GMR Energy Limited assets include 2,298MW coal, gas and solar plants.
Vortex Solar

- On 6 January 2017, TNB via wholly owned subsidiary had entered into a Subscription and Funding Agreement with Beaufort Investments S.a.r.l., a wholly owned subsidiary of EFG Hermes Holding to subscribe for 50.0% new equity shares in Vortex Solar Investments S.a.r.l.
- The transaction is expected to be completed by the third quarter of 2017.
- Total cash consideration: GBP86.0 mn.
- Vortex Solar assets include 24 operational solar PV Farm across England and Wales with net installed capacity of about 365MW.
Evolution on National Energy Policies

- **National Energy Policy (1979)**
- **National Depletion Policy (1980)**
- **National Fuel Policy (1981)**
- **National Fuel Policy (2001)**
- **National Green Technology Policy (2009)**
- **RE Act and SEDA Act (2011)**

**8th Malaysia Plan (2001-2005)**
- RE as the fifth fuel
- Target: 5% RE in energy mix

**9th Malaysia Plan (2006-2010)**
- RE Grid-connectivity
  - Target:
    - Peninsula 300 MW
    - Sabah 50 MW

**10th Malaysia Plan (2011-2015)**
- RE installed capacity
  - Target: 985 MW of RE by 2015

**11th Malaysia Plan (2016-2020)**
- Reduction in GHGs emission intensity of GDP compared to 2005 level
  - Up to 40%
- Formulation of a comprehensive demand side management master plan
- In renewable energy installed capacity by 2020 (7.5% energy mix)
  - DSM 2,080 MW

**Government Green Development Plan**

- Minimise negative impacts on the environment
- Promote efficient utilisation of energy
- Green Technology as the driver to accelerate the national economy
- Promote Sustainable Development

**As at Aug 2016**: 326 MW
TNB is committed to support the national green agenda and minimise the environmental impact of our business by applying sustainable, efficient operations and delivering green energy through the application of appropriate technologies and investments.

TNB RE Targets by 2020

**Domestic**
- 60-80 percent of national targets by 2020 (1,248 -1,664 MW)

**International**
- In accordance to TNB Investment policy and guidelines on ventures, M&A and bidding for Green Energy Projects
50MW Large Scale Solar Photovoltaic Plant

- On 21 December 2016, TNB had received Letter of Acceptance of Offer from the Energy Commission (EC) dated 15 December 2016 for TNB to develop a 50MW Large Scale Solar Photovoltaic Plant in Mukim Tanjung Duabelas, Daerah Kuala Langat, Selangor subsequent to a competitive bid process conducted by the EC.

- The Letter of Acceptance of Offer requires TNB to satisfy certain obligations, including completion of negotiations and execution of Project Documents prior to EC issuing the formal Letter of Award for the Project.
TNB endeavours to adopt a dividend policy that would provide stable and sustainable dividends to shareholders while maintaining an efficient capital structure and sufficient to cater to its business prospects, capital requirements growth / expansion strategy and other factors considered relevant by the Board.

### Previous Policy

Dividend is paid out based on 40% to 60% of its Company’s Annual Free Cashflow; Cashflow from Operations less Normalised Capex and Interest Servicing.

### New Policy

Distribution of dividend is based on 30% to 50% dividend payout ratio, based on the reported Consolidated Net Profit Attributable to Shareholders After Minority Interest, excluding Extraordinary, Non-Recurring items.
DIVIDEND

5-Year Dividend Payout

IBR (RP1)

FY2012
FY2013
FY2014
FY2015
FY2016

Dividend Paid per Share (sen)

20.1
25.0
29.0
29.0
32.0

% PATAMI
25.0%
26.1%
25.5%
27.0%
24.7%

Dividend Yield (%)
2.9%
2.9%
2.3%
2.6%
2.2%

FY2017 Onwards
30% - 50% PATAMI

Dividend Paid per Share (sen)

- Orange

% PATAMI

- Green

Dividend Yield (%)

- Blue
CONTENTS

1. INTRODUCTION TO TENAGA
2. INCENTIVE BASED REGULATION (IBR)
3. BUSINESS STRATEGY & DIRECTION
4. DIVIDEND POLICY
5. FINANCIAL HIGHLIGHTS
COAL REQUIREMENT

Base Coal Price for IBR RP1 was at RM271.25/mt

<table>
<thead>
<tr>
<th>Average Coal Price (CIF)</th>
<th>FY’10</th>
<th>FY’11</th>
<th>FY’12</th>
<th>FY’13</th>
<th>FY’14</th>
<th>FY’15</th>
<th>FY’16</th>
<th>1QFY’17</th>
</tr>
</thead>
<tbody>
<tr>
<td>(USD/metric tonne)</td>
<td>88.2</td>
<td>106.9</td>
<td>103.6</td>
<td>83.6</td>
<td>75.4</td>
<td>66.0</td>
<td>55.7</td>
<td>63.0</td>
</tr>
<tr>
<td>(RM/metric tonne)</td>
<td>293.8</td>
<td>325.9</td>
<td>321.9</td>
<td>259.5</td>
<td>244.6</td>
<td>236.0</td>
<td>231.1</td>
<td>264.7</td>
</tr>
</tbody>
</table>

Coal Consumption

Country Mix

- Indonesia: 56%
- Australia: 29%
- South Africa: 4%
- Russia: 11%
Major Projects Represent 45.4% of Total CAPEX
3 Generation Projects With Capacity Over 3,000MW Currently in the Pipeline

**Jimah East Power**
- 33%
- 2,000MW
- COD:
  - U1: 15th Jun 2019
  - U2: 15th Dec 2019

**Janamanjung Unit 5**
- 98%
- 1,000MW
- COD:
  - 1st Oct 2017

**Hulu Terengganu Hydro**
- 99%
- 15MW
- Tembat
- COD:
  - U3: end Feb 2017
  - U4 Completed: 23rd Dec 2016
DEBT EXPOSURE & GEARING

Improved Gearing due to Multicurrency Sukuk Issuance of USD750mn in October 2016

"The Group is required to hedge a minimum of 50.0% of TNB’s known foreign currency exposure up to 12 months period. The Group uses forward exchange contracts and currency options contract to hedge its foreign currency risk. Most of the forward exchange contracts have maturities of less than three months.

HEDGING POLICY

<table>
<thead>
<tr>
<th>Statistics</th>
<th>30th Nov’16</th>
<th>31st Aug’16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gearing (%)</td>
<td>40.7</td>
<td>39.5</td>
</tr>
<tr>
<td>Net Gearing (%)</td>
<td>19.5</td>
<td>19.7</td>
</tr>
<tr>
<td>Fixed : Floating (%)</td>
<td>96.4 : 3.6</td>
<td>96.4 : 3.6</td>
</tr>
<tr>
<td>Final Exposure (%)</td>
<td>96.4 : 3.6</td>
<td>96.4 : 3.6</td>
</tr>
<tr>
<td>Weighted Average Cost of Debt (%)</td>
<td>4.63</td>
<td>5.06</td>
</tr>
<tr>
<td>Final Exposure (%)</td>
<td>4.63</td>
<td>5.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closing</th>
<th>30th Nov’16</th>
<th>31st Aug’16</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/RM</td>
<td>4.47</td>
<td>4.06</td>
</tr>
<tr>
<td>100YEN/RM</td>
<td>3.96</td>
<td>3.96</td>
</tr>
<tr>
<td>USD/YEN</td>
<td>112.88</td>
<td>102.53</td>
</tr>
</tbody>
</table>

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

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THANK YOU