



# CLSA - ASEAN CORPORATE ACCESS FORUM

Grand Hyatt Erawan Bangkok (13<sup>th</sup> - 15<sup>th</sup> March 2013)

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Prepared by:  
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GROUP FINANCE DIVISION



# CLSA - ASEAN CORPORATE ACCESS FORUM

## PART ONE

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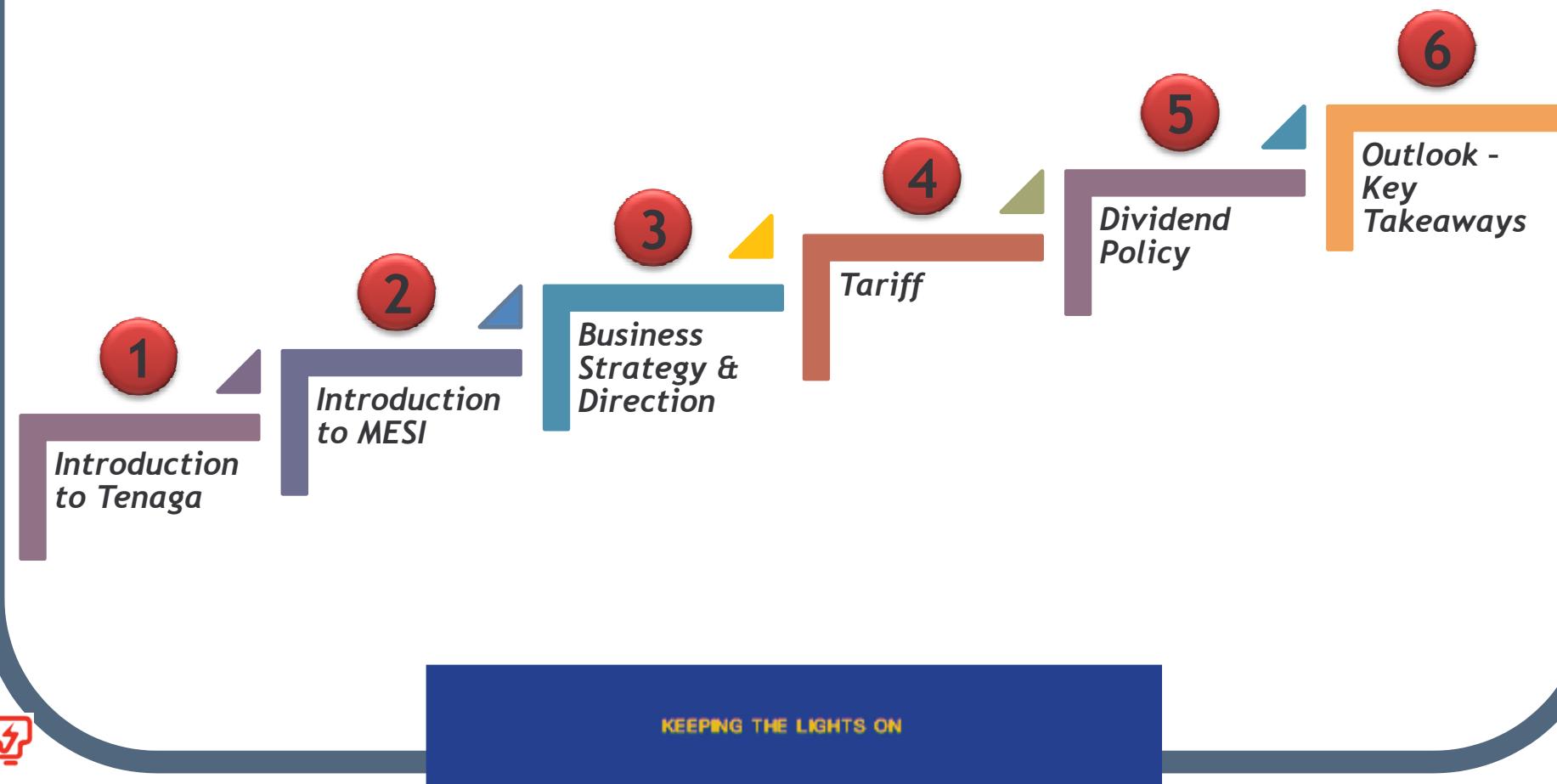


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# AGENDA

## CLSA - ASEAN CORPORATE ACCESS FORUM



## CLSA - ASEAN CORPORATE ACCESS FORUM

### ① INTRODUCTION TO TENAGA

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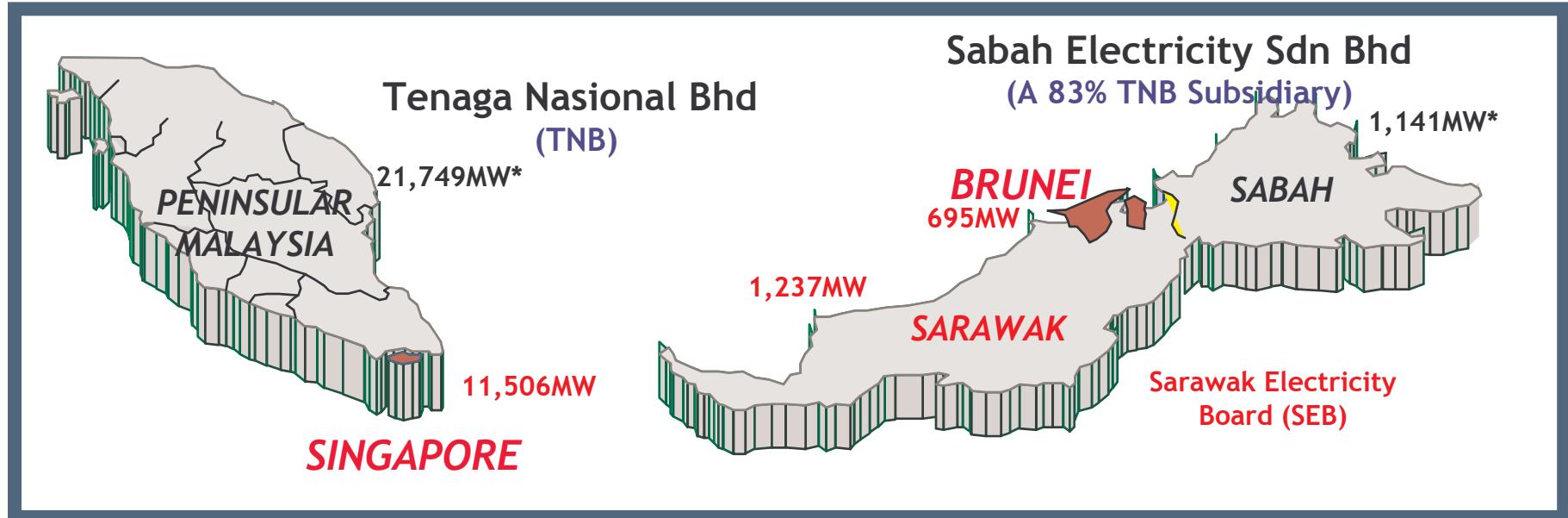


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# INTRODUCTION TO TENAGA

## Three Major Utilities in Malaysia



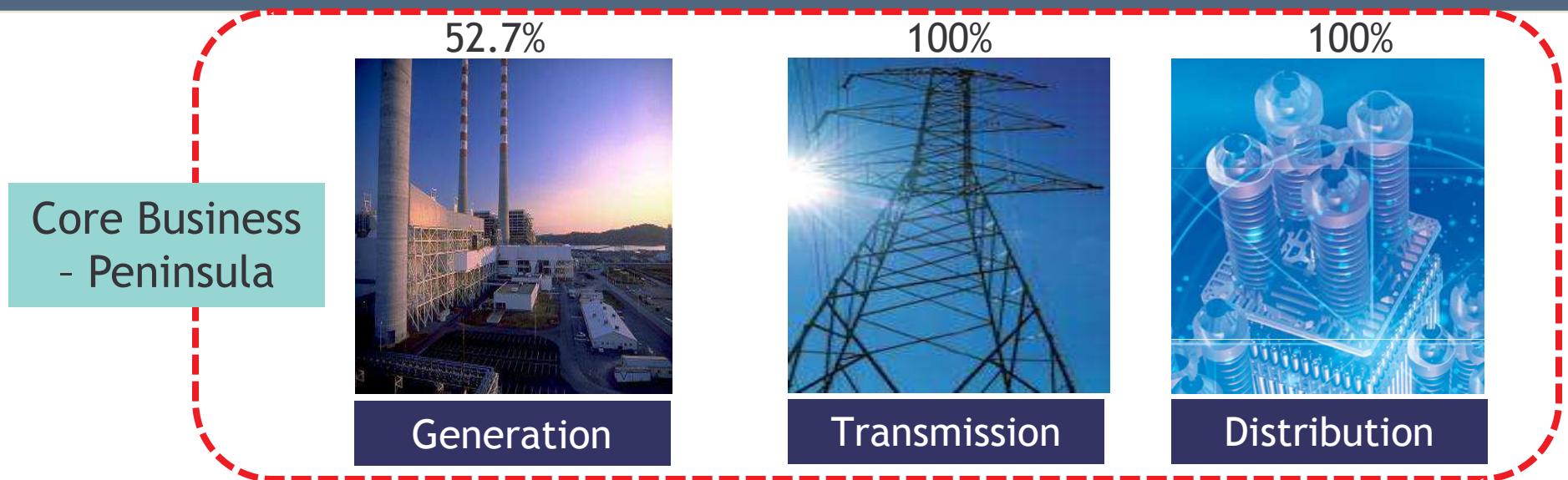
	FY'92	FY'99	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11	FY'12
TNB (Peninsular) Installed Capacity (MW)	5,652	7,520	11,464	11,515	11,515	11,530	11,530	11,530	11,462
Total units sold (Gwh)	22,631	49,322	82,215	86,545	90,650	87,780	95,196.6	97,1887.8	102,131.5
Total customers (million)	3.32	5.09	6.81	7.07	7.33	7.59	7.87	8.11	8.36
Total employees	22,752	24,786	28,067	28,822	29,210	29,149	30,535	31,935	33,568
Total assets (RM billion)	19.72	48.61	65.09	67.72	69.84	71.36	75.88	79.00	88.47



\* Includes IPPs

# INTRODUCTION TO TENAGA

## Vertically Integrated Utility



As at 1QFY'13:

Total Installed Capacity	21,749 MW	
Assets	RM 89.0 bn	(USD 29.3bn)
Revenue	RM 9.1 bn	(USD 3.0 bn)
Net Profit Attributable to Shareholders	RM 1.4 bn	(USD 0.5 bn)
Market Capitalisation (7 <sup>th</sup> )	RM 28.7 bn	(USD 9.4 bn)



\* Exchange rate of USD1 = RM3.04

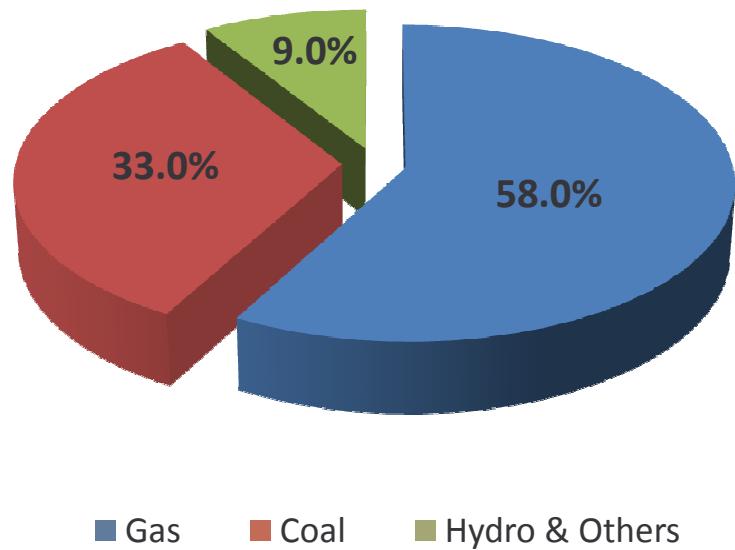
# INTRODUCTION TO TENAGA

## Installed Capacity vs Generation Mix



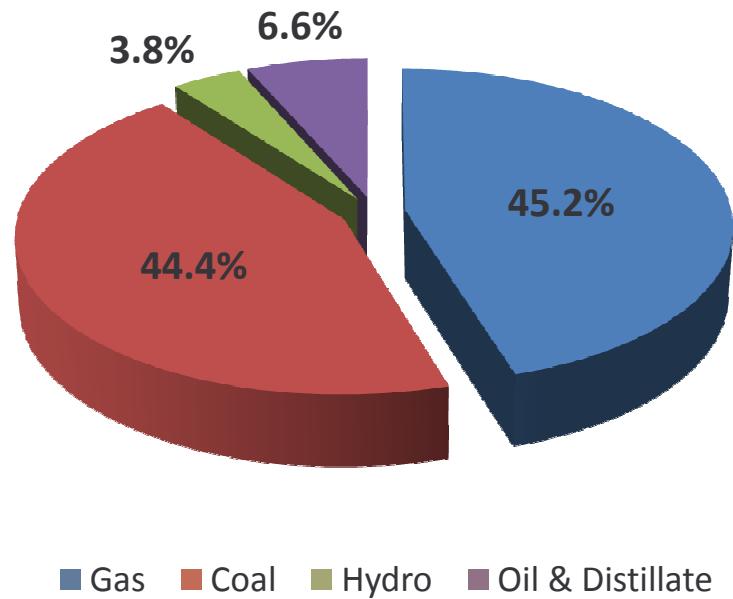
Total Installed Capacity

Installed Capacity Market Share:  
TNB : 52.7%  
IPP : 47.3%



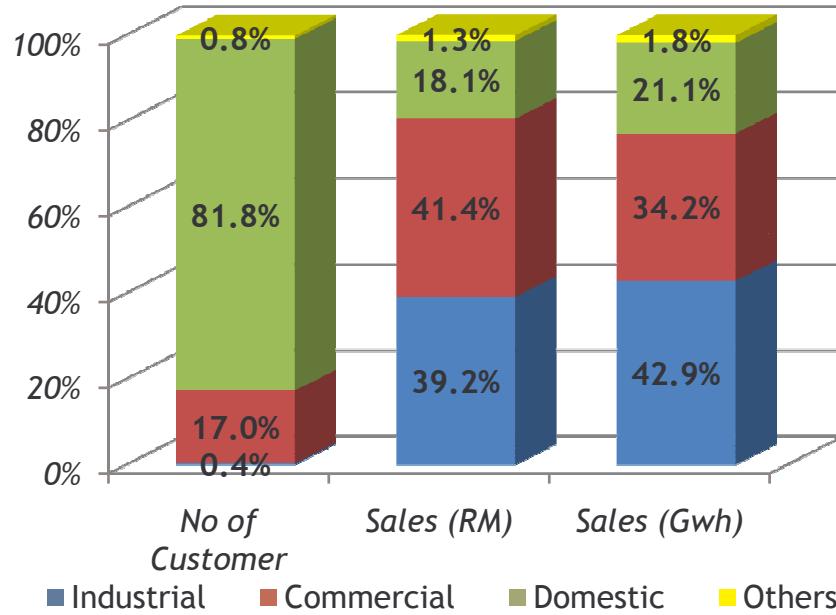
Generation Mix as at Nov 2012

Generation Market Share :  
TNB : 48.3%  
IPP : 51.7%

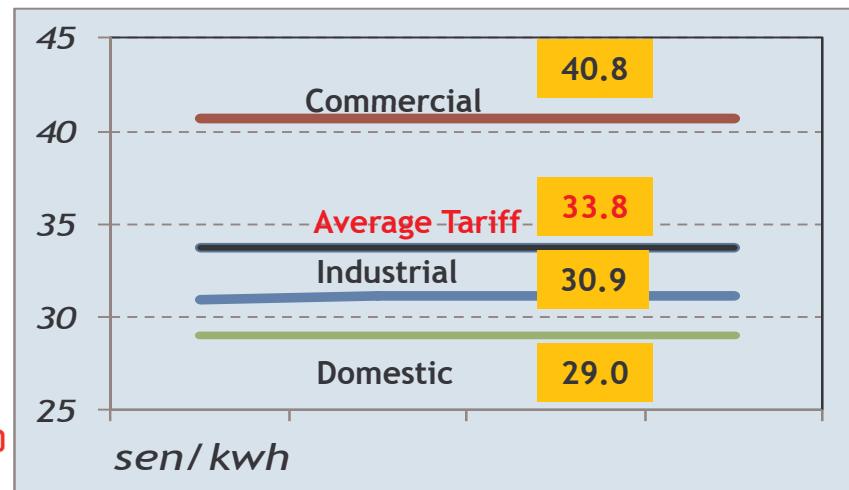


# INTRODUCTION TO TENAGA

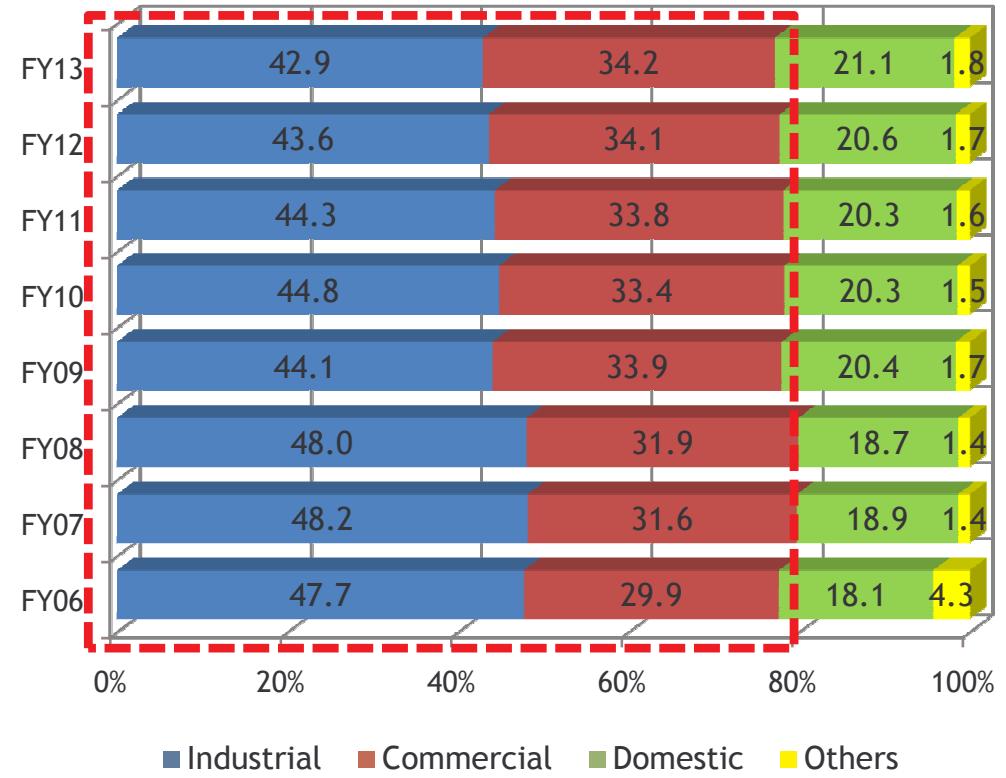
## No of Customer vs Sales Value vs Unit Sales



**Average Tariff by Sector**



**Sectoral Sales Analysis (Gwh)**



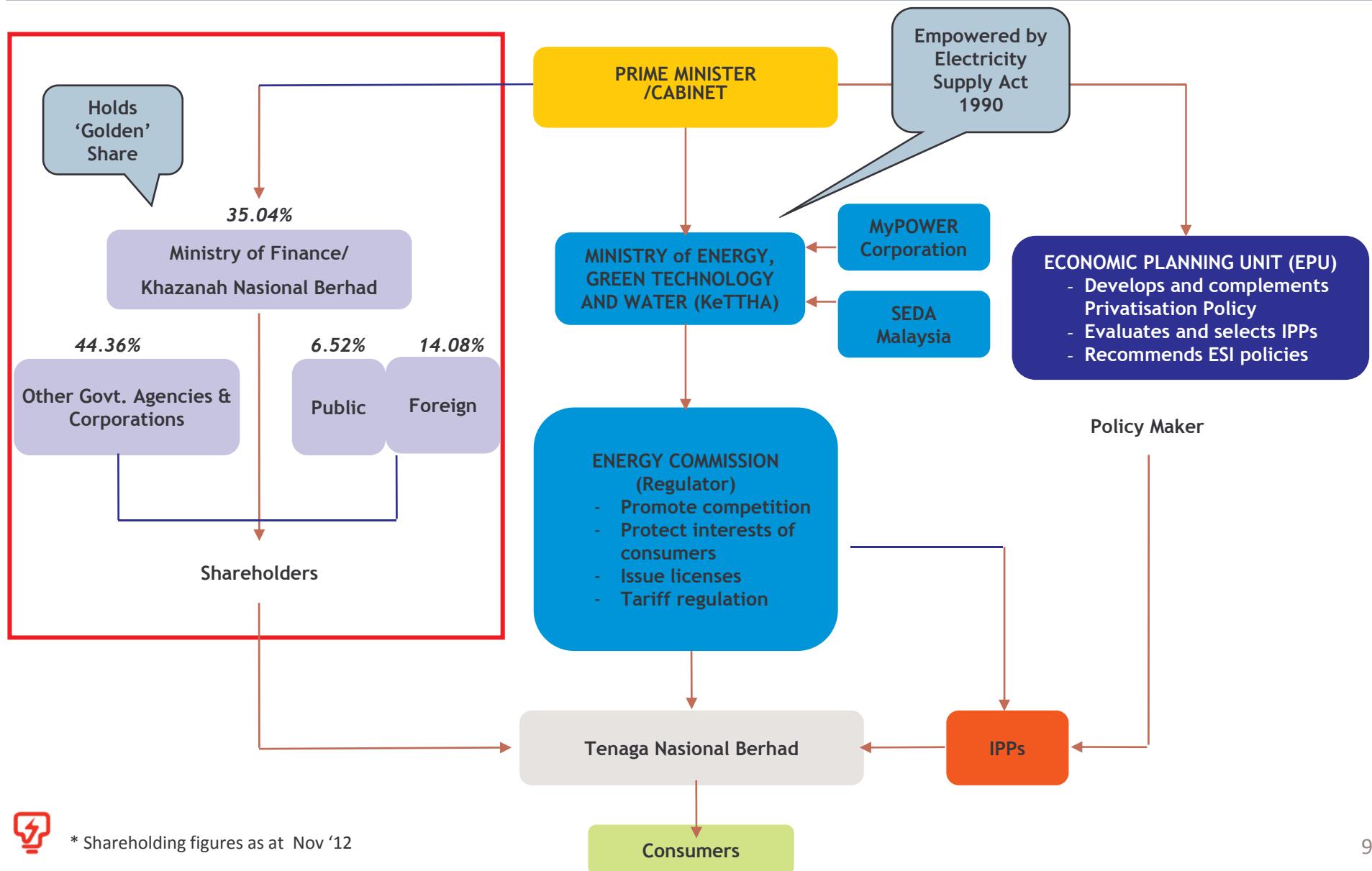
- Shift from Industrial-based to Service-based economy
- Increasing market share from Commercial sector
- Commercial sector contributes the highest electricity sales margin

\* 1QFY13

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# INTRODUCTION TO TENAGA

## Industry Regulatory Framework



\* Shareholding figures as at Nov '12

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**INTRODUCTION TO  
② MALAYSIAN ELECTRICITY  
SUPPLY INDUSTRY (MESI)**

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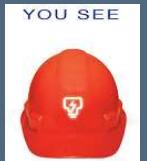


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# INTRODUCTION TO MESI

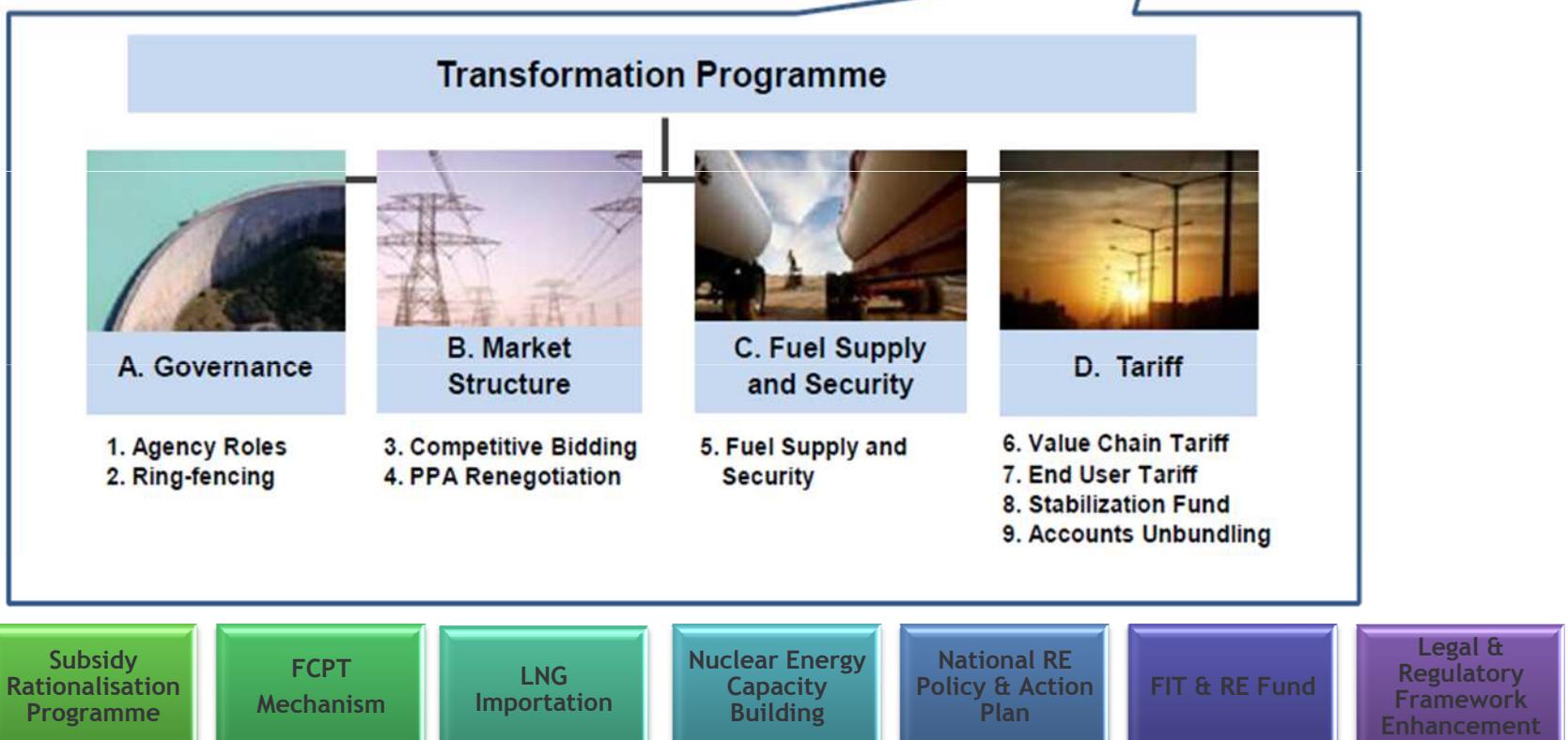
## Transformation Initiatives by Government



Jun - Dec 2008  
Khazanah's MESI Study

Jan - Dec 2009  
KeTTHA-led syndication

4 Dec 2009  
Cabinet endorsement to transform ESI

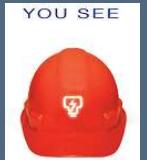


Aimed at delivering a reliable, transparent, efficient and sustainable ESI



\*Source: MyPower

# INTRODUCTION TO MESI Transformation Plan: Background



## KeTTHA has Embarked on a Power Sector Transformation Programme

- MyPOWER is a special purpose agency created to detail out the key reform initiatives of the **Malaysian Electricity Supply Industry (MESI)** that are aligned with the Government and Economic Transformation Programmes (ETP)
- **MESI Transformation Agenda** seeks to address the industry issues and long term needs with regards to reliability, transparency, efficiency, and sustainability in the electricity supply industry in Peninsular Malaysia
- Fragmented Governance for MESI:

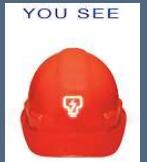
Influencer Decision making	New investments Generation	New investment T&D	Tariff setting	Fuel policy	Liberalization	Tax and incentives
<b>TENAGA NASIONAL BERHAD</b> <ul style="list-style-type: none"><li>• Incumbent utility</li><li>• Single buyer of IPP generation</li><li>• Full control over system dispatch</li><li>• Access to end users</li></ul>	Capacity required					
<b>EPU</b> ELECTRICITY REGULATORY AUTHORITY <ul style="list-style-type: none"><li>• Formulates energy policy</li><li>• Approves and develops recommendation on capacity expansion for cabinet approval</li><li>• Formulates privatization policy</li></ul>	PPA awards			Gas subsidies		
<b>KeTTHA</b> KEMENTERIAN TENAGA, TEKNOLOGI RAYA DAN AIR <ul style="list-style-type: none"><li>• Approves end user tariff</li><li>• Coordinates implementation of energy policy</li><li>• Minister KeTTHA chairs JPPPET</li></ul>			Policies			
<b>Energy Commission</b> <ul style="list-style-type: none"><li>• Implement and enforce electricity supply law (e.g., Grid code)</li><li>• Advisor to KeTTHA</li><li>• Monitors TNB's performance</li></ul>						
<b>MoF</b> <ul style="list-style-type: none"><li>• Windfall taxes for IPPs</li><li>• Bakun project</li></ul>						
<b>JPPPET</b> <ul style="list-style-type: none"><li>• Chaired by KeTTHA Minister, includes EPU, MoF, MITI, MIDA, ST, MTDCA, TNB, SESB, PETRONAS</li><li>• Discusses tariff review, plant-up programme and service standards</li></ul>				PETRONAS on gas supply		



\*Source: MyPower

# INTRODUCTION TO MESI

## Transformation Plan : Timeline



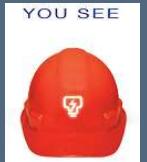
<ul style="list-style-type: none"> <li>• Competitive Bidding</li> <li>• Account Unbundling</li> <li>• Technical &amp; Financial Benchmarking</li> <li>• Fuel Supply Security</li> <li>• Generation Development Plan</li> <li>• Tariff Analysis</li> <li>• Transparency in dispatching</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Regulation Enhancement Plan</li> <li>• Industry Award Program</li> <li>• Energy Database</li> <li>• Performance Regulation</li> <li>• Activity-based licensing (G,T,D,Retail)</li> <li>• Fuel Pricing</li> <li>• Implementation of new ACP mechanism</li> <li>• Development of industry codes of Practice &amp; Guidelines</li> <li>• Enforcement of Grid &amp; Distribution Codes</li> </ul>	<ul style="list-style-type: none"> <li>• Effective service standard &amp; regulatory monitoring</li> <li>• Issuance of RIGs</li> <li>• Ring-fenced functions of GSO &amp; SB</li> <li>• Commence outsourcing of selected activities</li> <li>• Operationalisation of a more managed market</li> <li>• Implementation of new safety regime</li> <li>• Collaborative framework with other parties in regulatory activities</li> </ul>	<ul style="list-style-type: none"> <li>• Open access of gas network</li> <li>• Implementation of IBR (Gas)</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of competitive bidding &amp; expansion plan by SB</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of IBR (Electricity)</li> </ul>	<ul style="list-style-type: none"> <li>• Enactment of Competition Regulations</li> <li>• Establishment of Electricity market Authority</li> <li>• Formulation of market rules</li> <li>• Operationalisation of liberalised market</li> </ul>
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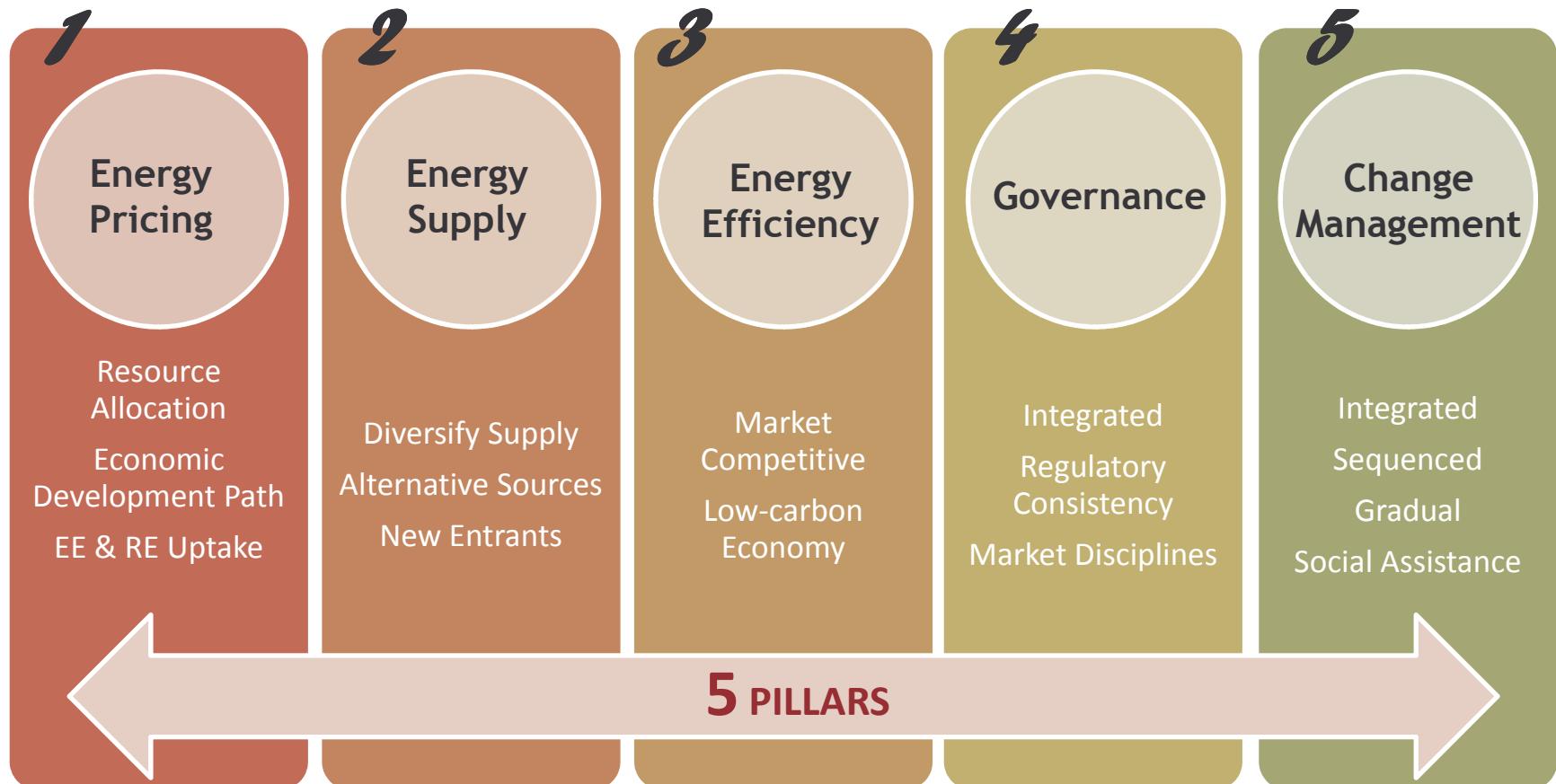
\*Source: EC

# INTRODUCTION TO MESI

## New Energy Policy



The New Energy Policy Addresses Economic Efficiency, Security of Supply and Social and Environmental Objectives



\*Source: EC

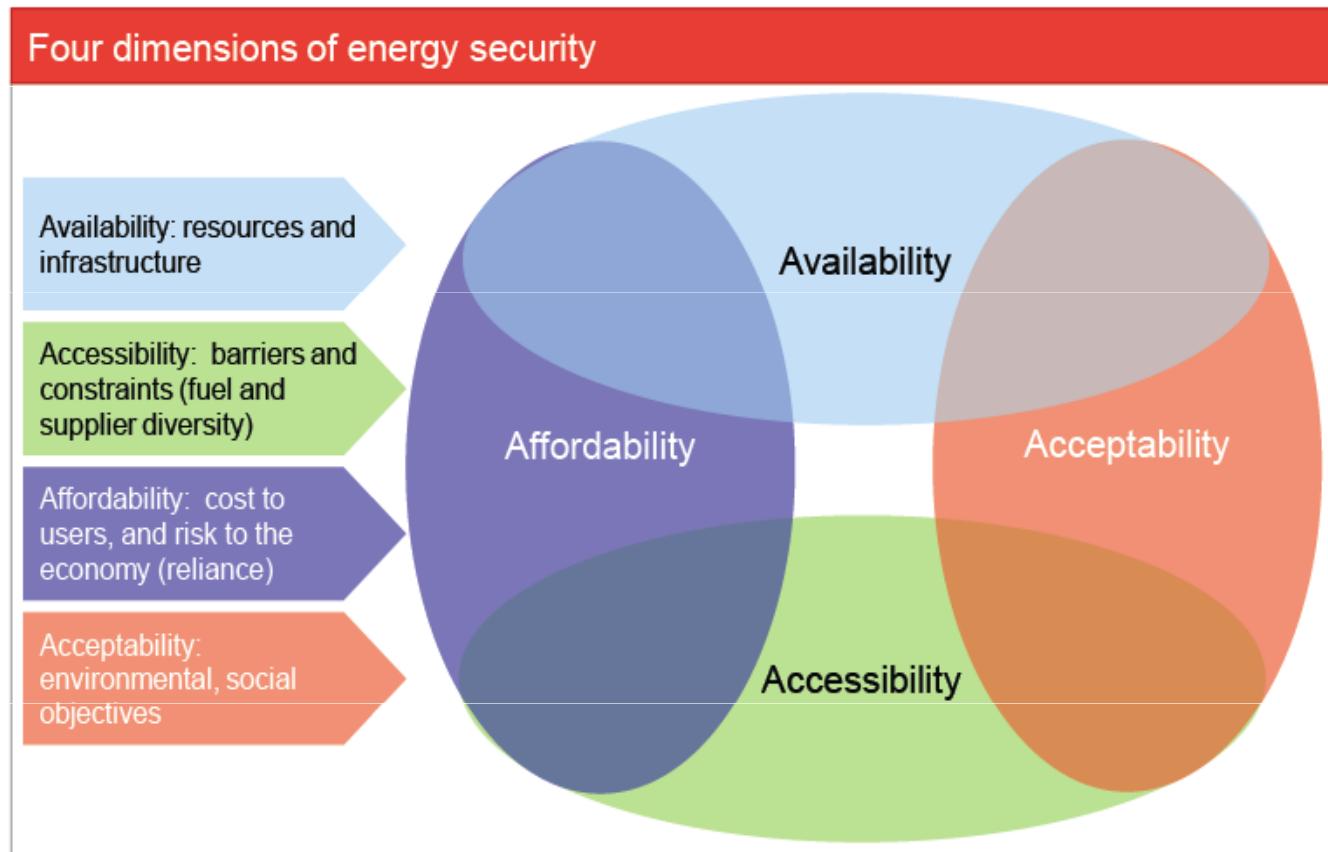
# INTRODUCTION TO MESI

## Four Dimensions of Energy Security



Fuel Mix and Fuel Supply Security Must Be Managed  
to Ensure A Reliable Electricity Supply

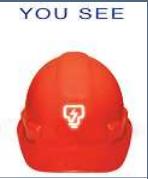
To ensure an **efficient, secure and environmentally sustainable** supply of energy  
– *source Malaysia National Energy Policy 1979*



\*Source: MyPower / Frontier Economics

# INTRODUCTION TO MESI

## Competitive Bidding - Track 1



Tenaga has been awarded by Energy Commission (EC) to develop 2 x 535MW Combined Cycle Gas Turbine (CCGT) Power Plant at Prai, Pulau Pinang to TNB Prai Sdn Bhd. The project is expected to be commissioned by January 2016.

Capacity	2 x 535 MW
Main Fuel	Natural Gas
Commercial Operation Date	1 <sup>st</sup> January 2016
Project Duration	32 months
Technology	Siemens' latest H-Class technology gas turbine with a supercritical, once-through Benson-type Heat Recovery Steam Generator (HRSG), with a combined-cycle efficiency of greater than 50%
Levelised Tariff	34.7 sen/kWh
Signing of PPA	30 <sup>th</sup> November 2012

On 21<sup>st</sup> January 2013, Tenaga has signed 3 agreements for a RM2.47 billion CCGT power plant at Prai:

Engineering, Procurement & Construction (EPC)	TNB Northern Energy Berhad and Samsung Engineering & Construction Malaysia Sdn Bhd
Long Term Service Agreement (LTSA)	TNB Prai Sdn Bhd and Siemens AG
Operation and Maintenance Agreement (OMA)	TNB Prai Sdn Bhd and TNB REMACO



# INTRODUCTION TO MESI

## Competitive Bidding - Track 2 Renewal of 1<sup>st</sup> Generation IPPs



### Bidding invitation:

- Restricted tender are open to 6 IPPs + 5 TNBs
- Closing date was 30<sup>th</sup> July 2012
- Bidding results announcement was 9<sup>th</sup> October 2012

No	Company	Existing Site	Existing Capacity	Expiry PPA
1	YTL	Paka, Terengganu	780 MW	Sept 2015
2	YTL	Pasir Gudang, Johor	390 MW	Sept 2015
3	Genting Sanyen	Kuala Langat, Selangor	720 MW	Feb 2016
4	Segari	Lumut, Perak	1,303 MW	Jun 2017
5	PD Power	Tanjung Gemuk, PD	436 MW	Jan 2016
6	Powertek	Teluk Gong, Melaka	434 MW	Jan 2016
7	TNB	Connaught Bridge (OC)	478 MW	Aug 2014
8	TNB	Paka, Terengganu	999 MW	Aug 2017
9	TNB	Pasir Gudang (CC)	249 MW	Aug 2017
10	TNB	Pasir Gudang (OC)	205 MW	Aug 2016
11	TNB	Serdang (Unit,1,2,3)	326 MW	Aug 2014/15

### Bidding Results:

- Letter of invitation to negotiate were issued to all shortlisted bidders to respectively negotiate and finalise the bid agreements

IPP	Levelised Tariff (sen/kWh)	Status
GENTING Sanyen Power Sdn Bhd (675MW)	35.3	TNB has signed Supplementary PPA and Extension PPA with all successful bidders on 25 <sup>th</sup> Feb 2013 to meet growing demand starting 2016 at the lowest energy cost and minimum completion risks:
SEGARI Energy Ventures Sdn Bhd (1,303MW)	36.3	i. <i>Supplementary Agreement</i> - for the reduced rates offered effective 1 <sup>st</sup> March 2013 until expiry of current PPA
TNB Pasir Gudang Energy Sdn Bhd (275MW)	37.4	ii. <i>Extension PPA</i> - for the extension periods of 10 yrs for Genting & Segari and 5 years for TPGE



# INTRODUCTION TO MESI

## Competitive Bidding - Track 3 Project 3A & 3B



### 1,000MW (Fast Track Project 3A)

- Supercritical/ultra-supercritical coal fired power plant to be commissioned in October 2017.
- As at 7th February 2013, the Energy Commission has completed the evaluations of two (2) RFQ. Submissions dated 21st January 2013 from :
  1. Tenaga & Marubeni Corporation
    - Site : Manjung, Perak
  2. 1Malaysia Development Berhad & Mitsui & Co. Ltd.
    - Site : Jimah, Negeri Sembilan
- Closing date for RFP : 20<sup>th</sup> May 2013

### 2x1,000MW (Project 3B)

- Scheduled to be in operation in stages in October 2018 and April 2019.
- Closing date: 11<sup>th</sup> March 2013.
- Bidders will be responsible for identifying & securing an appropriate site.
- The project scope will include the transmission line to the 500kv grid system.

Shortlisted bidders are invited to purchase the Request For Proposal (RFP) document for the 1,000MW Project 3A beginning 8th February 2013



# INTRODUCTION TO MESI

## Incentive Based Regulation (IBR)



Economic regulation methodology proposed by Energy Commission (EC)  
to promote efficiency and transparency  
through incentive and penalty mechanism

3 broad efficiency categories offered by IBR:

### Operational Efficiencies

- Rewarded for seeking efficiencies in operational and capital expenditure

### Financial Efficiencies

- Rewarded for maintaining an efficient capital structure

### Performance Efficiencies

- Rewarded for delivering improvements in network performance

# INTRODUCTION TO MESI

## Incentive Based Regulation (IBR)



### Submission of IBR Proposal

- Tenaga has submitted its full IBR proposal for the Interim Year FY 2014 and First Regulatory Period of FY 2015-FY 2017 in November 2012 to EC.
- The IBR submission consists of:

Proposed Regulatory cost elements which facilitates:

- Specified regulatory cost recovery procedures
- Reward based on KPI performance

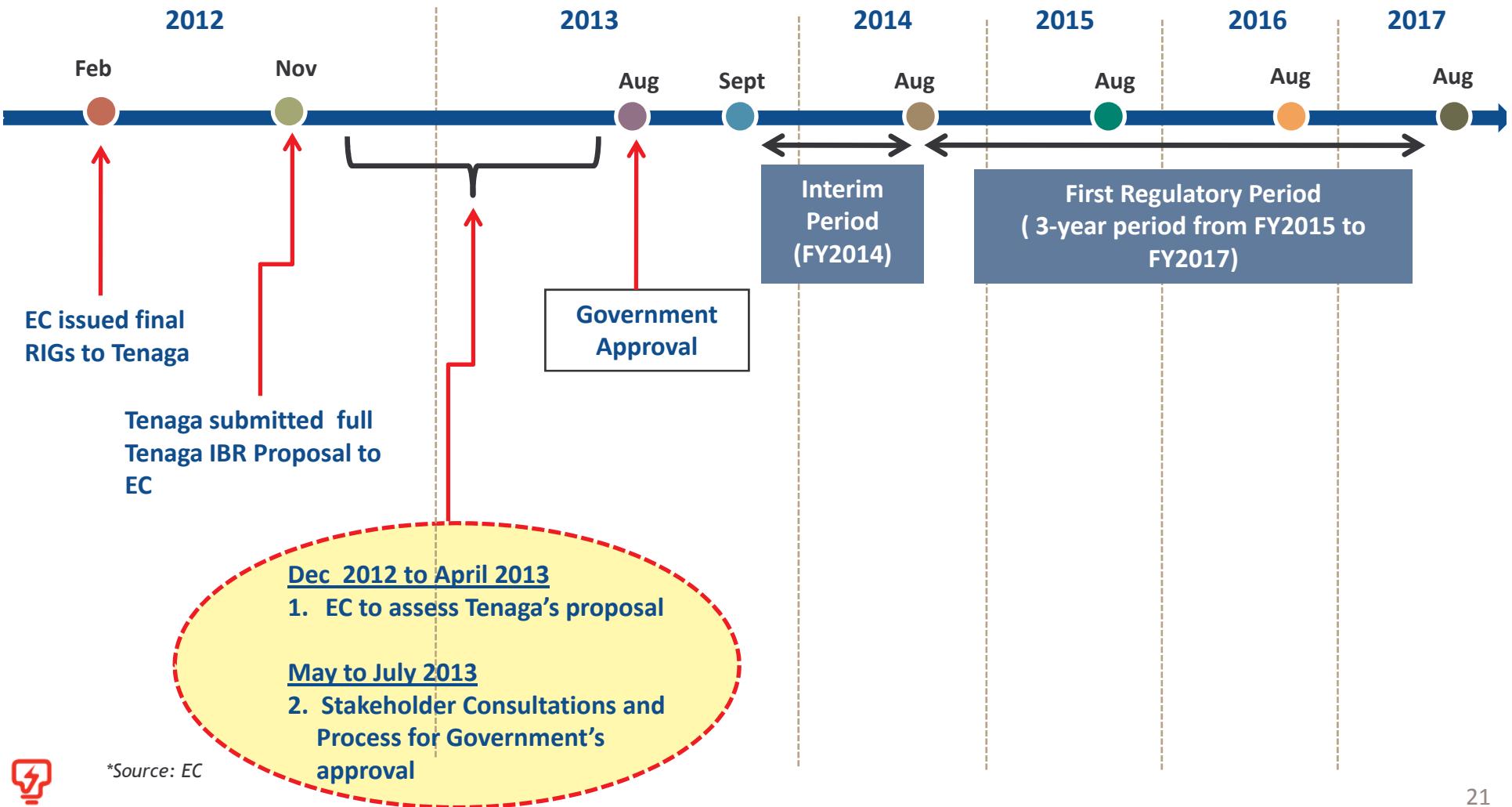
- ✓ To recover the revenue requirement for its operational expenditure, invest in new assets, to sustain a secure and reliable electricity supply to customers.
- ✓ To provide Tenaga with market based return equivalent to its regulatory WACC.
- ✓ To recover any fuel related costs due to changes in fuel price and quantity and other generation specific cost.

# INTRODUCTION TO MESI

## Incentive Based Regulation (IBR)



### IBR Implementation Timeline by Energy Commission (EC)



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### ③ BUSINESS STRATEGY & DIRECTION

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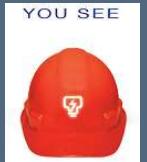


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# BUSINESS STRATEGY & DIRECTION

## 20-Year Strategic Plan



THE PLAN LAYS DOWN THE PATH TOWARDS  
REALISING OUR VISION OF GLOBAL LEADERSHIP  
It builds upon the progress of T7



### SERVICE EXCELLENCE 2010

- Improve Core Operations under T7 Strategy
- Place Tenaga as the best performing company in Malaysia by 2007 and as the Regional best by 2010

### GEOGRAPHICAL EXPANSION (SERVICES) 2015

- Expand works and services related to the energy sector
- Creation of new revenue stream leveraging on Tenaga's knowledge and competencies in the energy business

### OVERSEAS INVESTMENT 2020

- Improve financial position and human resource readiness of Tenaga

- Venture into power/energy related investments in the international arena

### GLOBAL LEADERSHIP 2025

- Excel in:
  - All business areas
  - Reputation as a strong business partner
  - Ability to continue to create shareholder value
- Tenaga acknowledged as amongst the most admired companies globally



# BUSINESS STRATEGY & DIRECTION

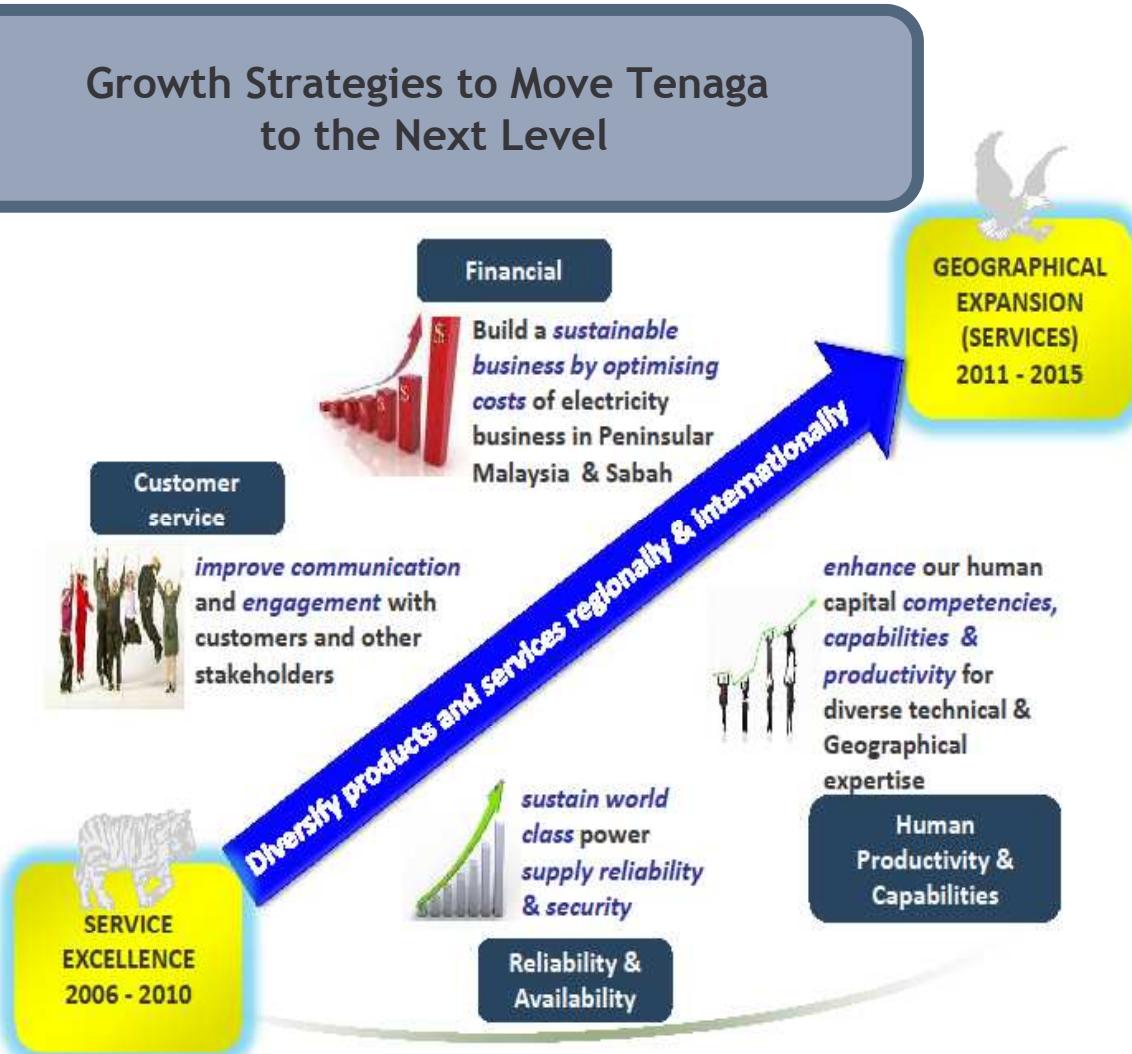
## 2nd Phase of the 20-Year Strategic Plan: Geographical Expansion



### Growth Strategies to Move Tenaga to the Next Level

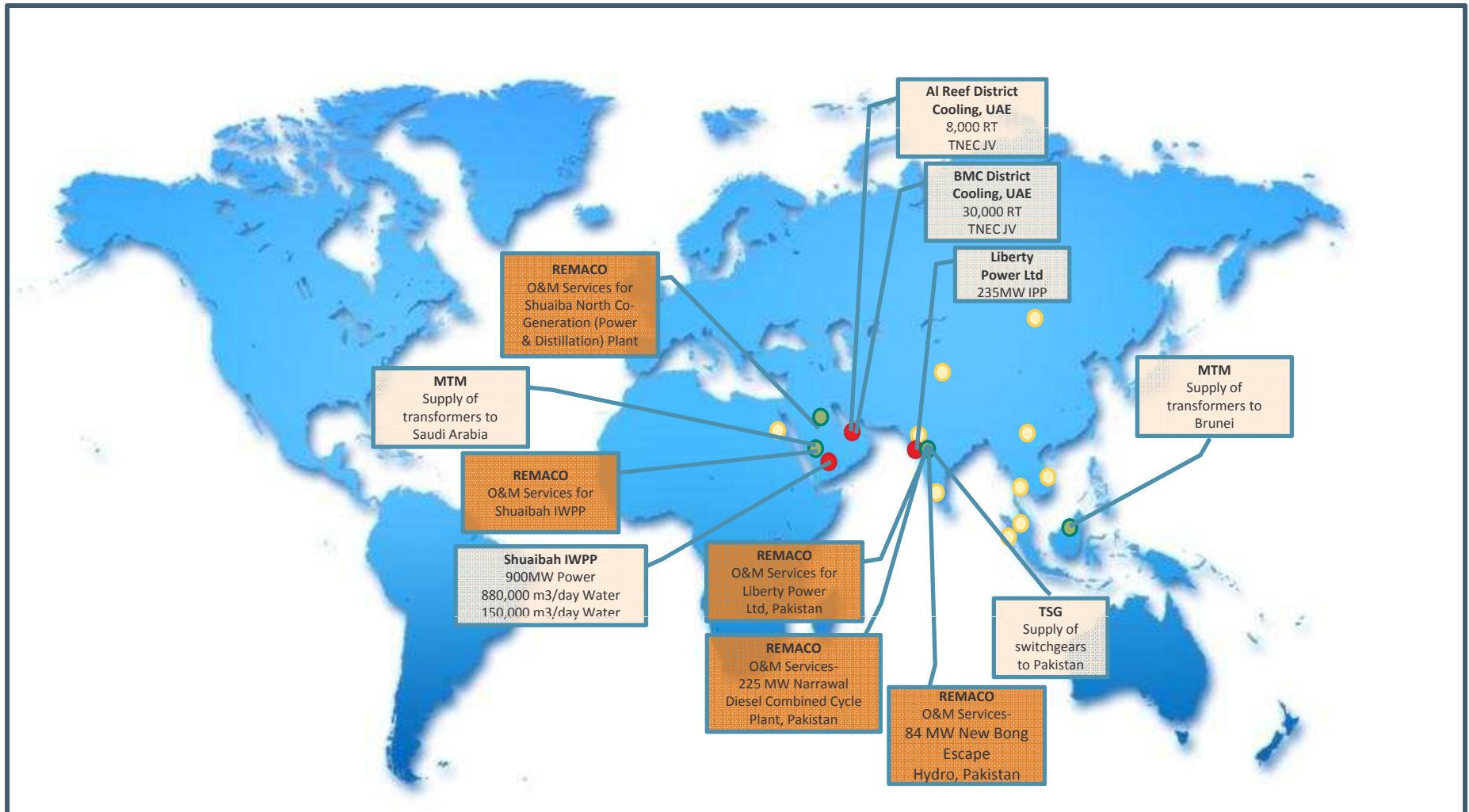
Leverage on Tenaga's capabilities (in Middle East and North Africa "MENA" area) in pursuing International Business (O&M), Project Management in generation Business

Utilise existing related services (consultation & training) and manufacturing products as stepping stone for future business in new frontier countries



# BUSINESS STRATEGY & DIRECTION

## International Experience (Completed/Ongoing Projects)



● IPP, IWPP & Development Projects

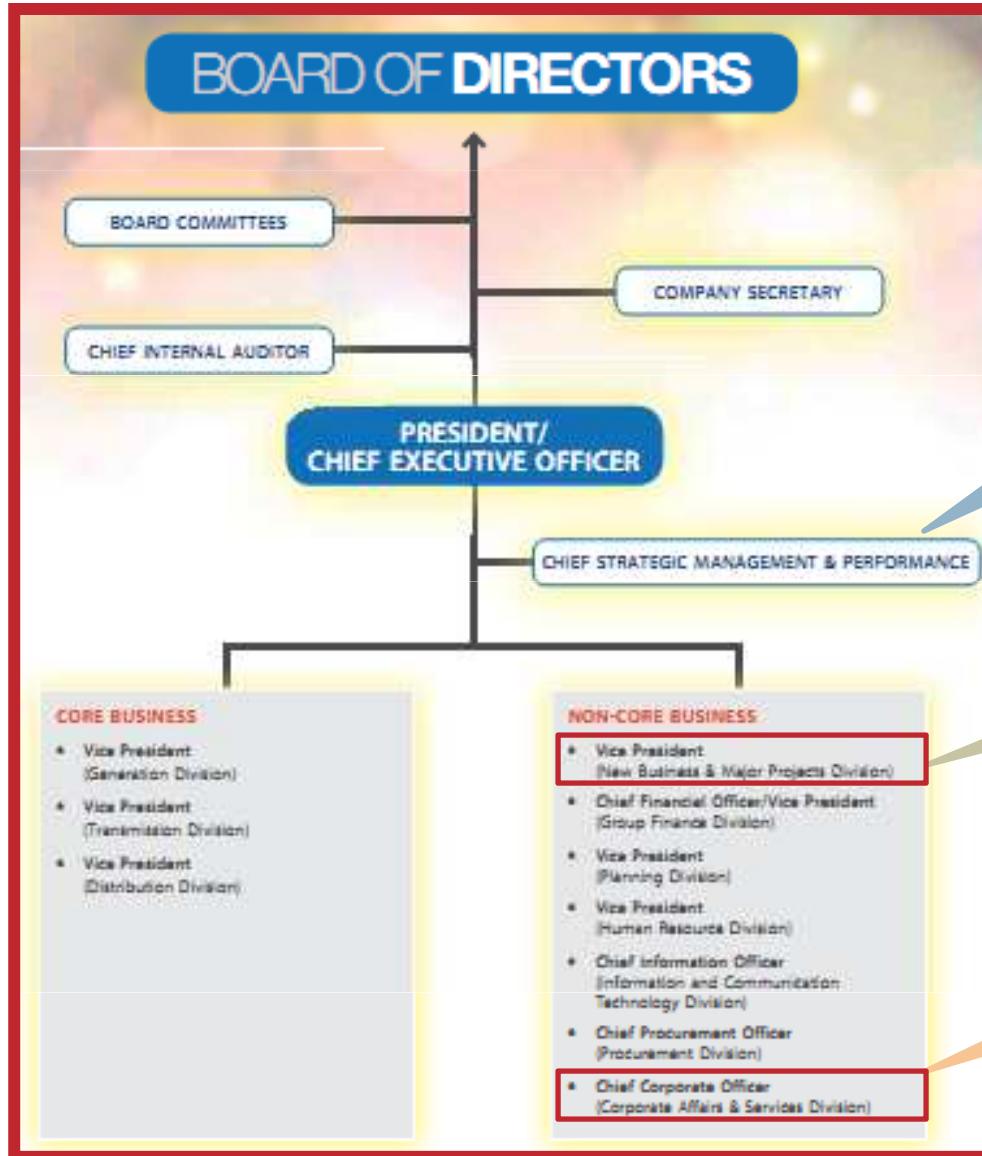
● Supply & Services

● ILSAS continues to provide services for power companies in emerging countries including Vietnam, Yemen, Mongolia, Laos, Indonesia, Thailand, Nepal, Egypt and Pakistan



# BUSINESS STRATEGY & DIRECTION

## Vibrant Workforce, Productivity Revolution



Focusing on Performance Management

Focusing on Non-Regulated Businesses

Focusing on Improvement in Communication and Stakeholders Engagement



# BUSINESS STRATEGY & DIRECTION

## Vibrant Workforce, Productivity Revolution



Leveraging on Four Core Success Thrust

Building Trust  
and Relationship

Building  
Capacity

**VIBRANT WORKFORCE  
PRODUCTIVITY REVOLUTION**

Building  
Performance

Building Growth

# BUSINESS STRATEGY & DIRECTION

## Achievements During 1<sup>st</sup> Phase TNB 20-Year Strategic Plan



Most Targets that were Set in 2005 were Met Ahead of Target Date

		FY2010	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010
		Target Set in 2005	Actual	Actual	Actual	Actual	Actual	Actual
Financial Indicators	Return on Assets (ROA)	6.5%	2.2%	3.3%	6.3%	4.6%	4.0%	4.7%
	Gearing	< 60.0%	64.9%	58.1%	49.9%	46.9%	46.5%	42.5%
Technical Indicators	Unplanned Outage Rate (UOR)	No targets set for 1st Phase	6.1%	4.7%	2.2%	3.3%	2.9%	2.7%
	T&D Losses	No targets set for 1st Phase	10.5%	11.0%	10.0%	9.5%	9.7%	9.5%
	Sys. Minutes (mins)	9.0	14.0	7.3	9.3	6.6	1.0	0.9
	SAIDI (mins)	< 100.0	148.0	101.6	83.0	78.0	68.6	* 65.0



\* 87.4 mins based on revised formula

# BUSINESS STRATEGY & DIRECTION

## Headline KPIs : 2<sup>nd</sup> Phase TNB 20-Year Strategic Plan



	INITIATIVES	ACTUAL FY 2011	ACTUAL FY 2012 (Restated)	YTD FY 2013	TARGET FY2015
Financial Indicators	Return on Assets (ROA) (%)	2.1	4.5	5.4	6 - 7
Technical Indicators	Company CPU (sen/kwh)	32.7	31.9	29.0	< 29.9
	Revenue from Non-Regulated Business (RM bn)	1.8	2.3	0.5	5.0
	Unplanned Outage Rate (UOR)(%)	7.1	3.5	5.0	< 4.0
	T & D Losses (%)	9.0	8.2	8.7	6 - 7
	Transmission System Minutes (mins)	1.0	1.0	0.1	< 1.0
	Distribution SAIDI (mins)	78.9	62.3	15.1	< 50.0

# CLSA - ASEAN CORPORATE ACCESS FORUM

## ④ TARIFF

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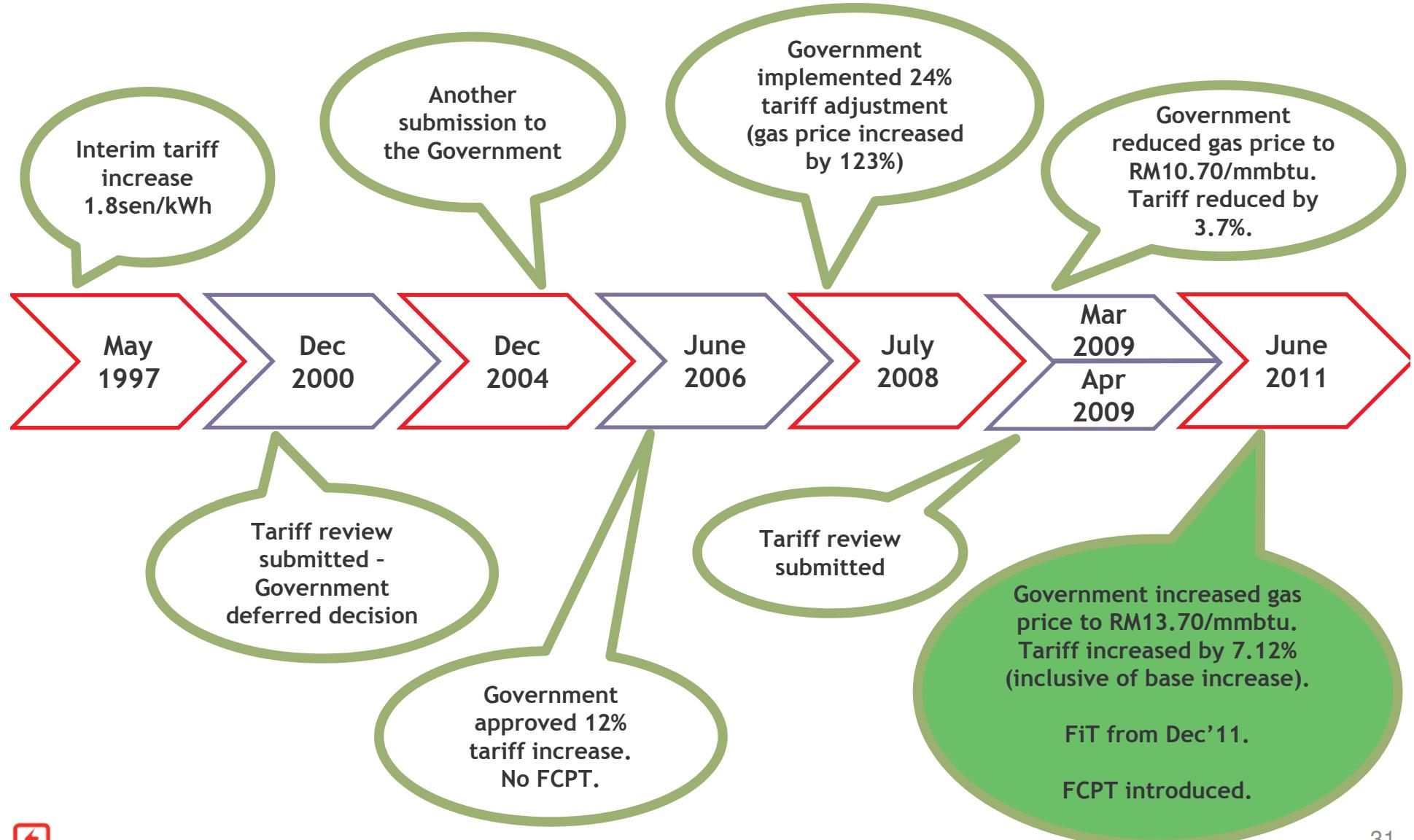


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# TARIFF

## History: Timeline

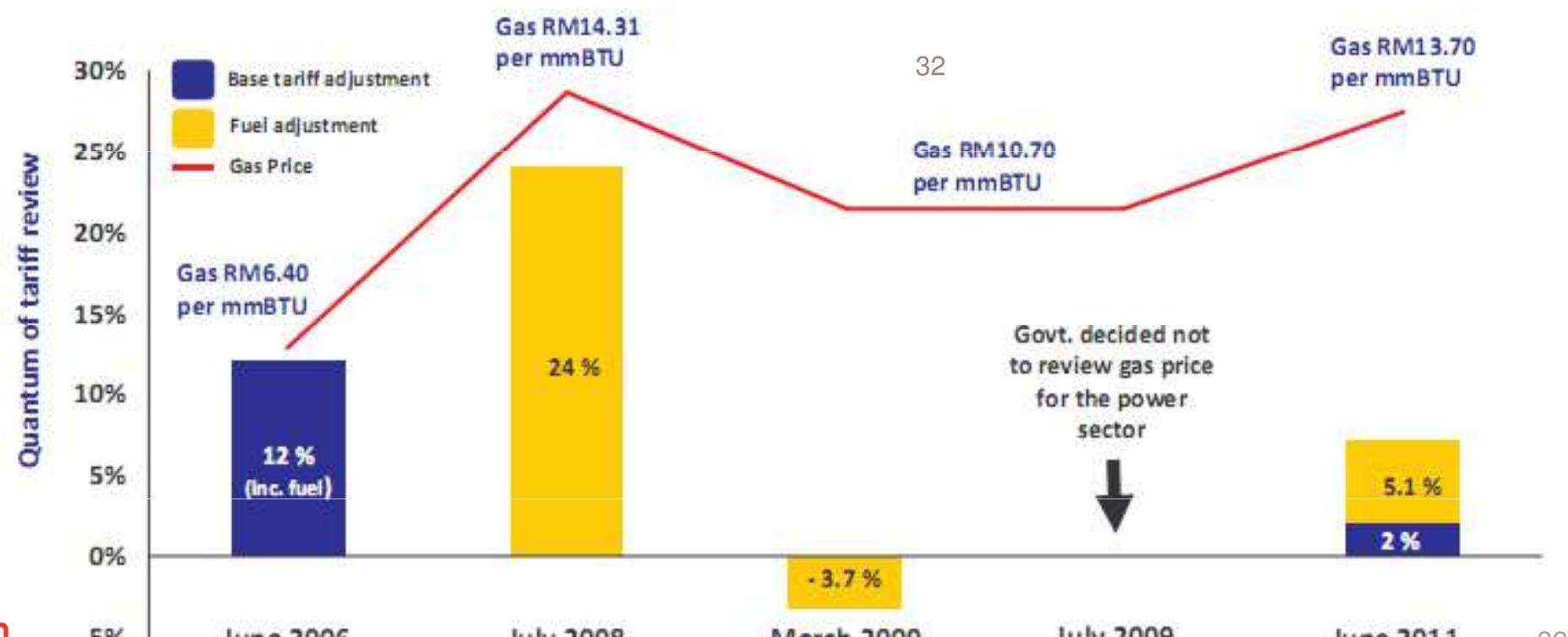


# TARIFF

## Electricity Tariff Review



Approval date	May 2006	Jun 2008	Feb 2009	Jun 2009	May 2011
Effective date	Jun 2006	Jul 2008	Mar 2009	Jul 2009	Jun 2011
Quantum	12%	23 – 24%	(3.7%)	Neutral	7.1%
Gas (RM/mmbtu)	6.40	14.31	10.70	10.70	13.70
Coal (USD/MT)	45.00	75.00	85.00	85.00	85.00
Average Tariff (sen/kWh)	26.2	32.5	31.3	31.3	33.5



# TARIFF

## Electricity Tariff Review: Sectoral Revision



To encourage domestic users to use energy efficiently

In support of the Government's efforts to introduce an economic stimulus package to mitigate the economic slowdown

In line with the Government's effort to restructure and gradually reduce subsidies

Revision	June 2006	July 2008	March 2009	June 2011
Quantum	12%	23 – 24%	(3.7%)	7.1%

### SECTOR TARIFF(Average):

Commercial	Average increase between 0 to 12%	Average increase between 18 to 26%	Average reduction of 2.7% (-2.6 to -2.7%)	Average increase of 8.3% (6.2 to 8.3%)
Industrial	Average increase between 0 to 12%	Average increase between 18 to 26%	Average reduction of 5.0% (-4.8 to -5.2%)	Average increase of 8.3% (6.2 to 10%)
Domestic	Average increase between 0 to 12%	Average increase between 0 to 11%	Average reduction of 2.54% (-3.0 to -4.7%)	Average increase of 10%

59% of household consumers were not affected

59.1% of household consumers were not affected

No tariff increase for 75% of the household consumers

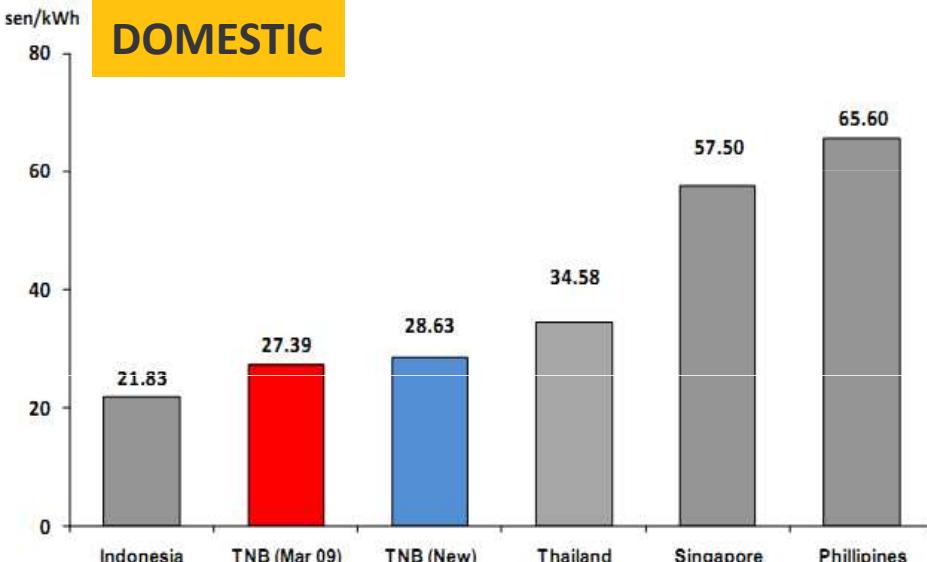


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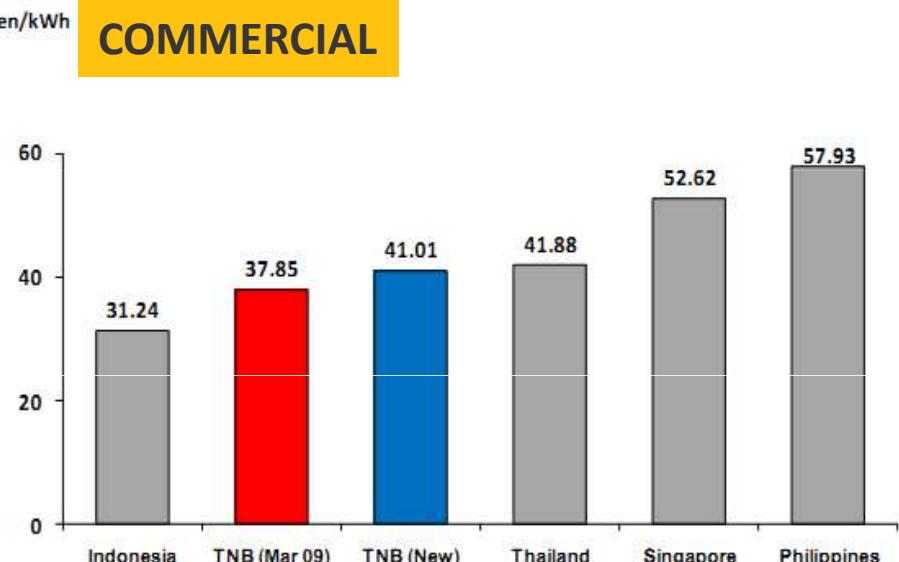
## Benchmarking: Comparison with Regional Countries



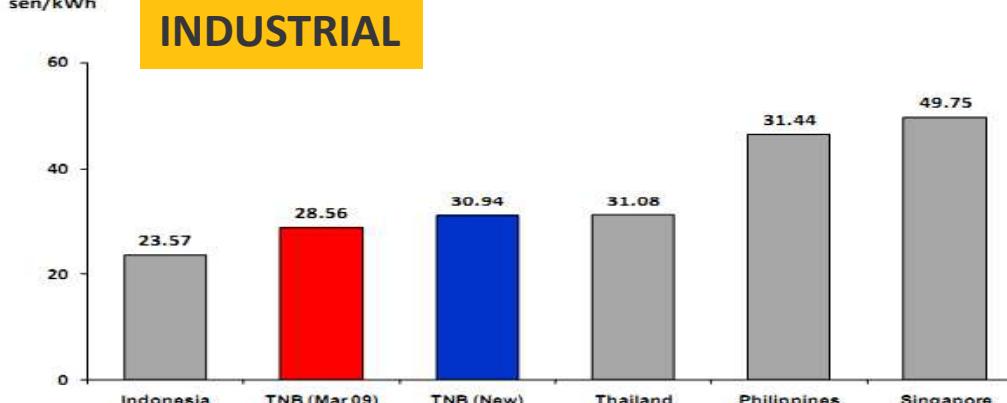
### DOMESTIC



### COMMERCIAL



### INDUSTRIAL



#### Notes:

1. Singapore - Average reduction of 3.3% from 1<sup>st</sup> Oct 2010 based on latest fuel cost pass-through
  2. Thailand - Jan-Dec 2010, include fuel adjustment, (Ft). Ft has been maintained since Jan 2009.
  3. Indonesia (PLN) - 10% tariff increase effective 1<sup>st</sup> July 2010 , Indonesia Govt. subsidy of about USD7billion per year
  4. Philippines (Meralco) - Jan-Dec 2008
  5. TNB (New) - average 7.12% increase effective 1<sup>st</sup> June 2011
- Source: TNB Analysis, ASEAN Utility Data Exchange, SP Services



## CLSA - ASEAN CORPORATE ACCESS FORUM

### 5 DIVIDEND

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# DIVIDEND

## Policy and Yield

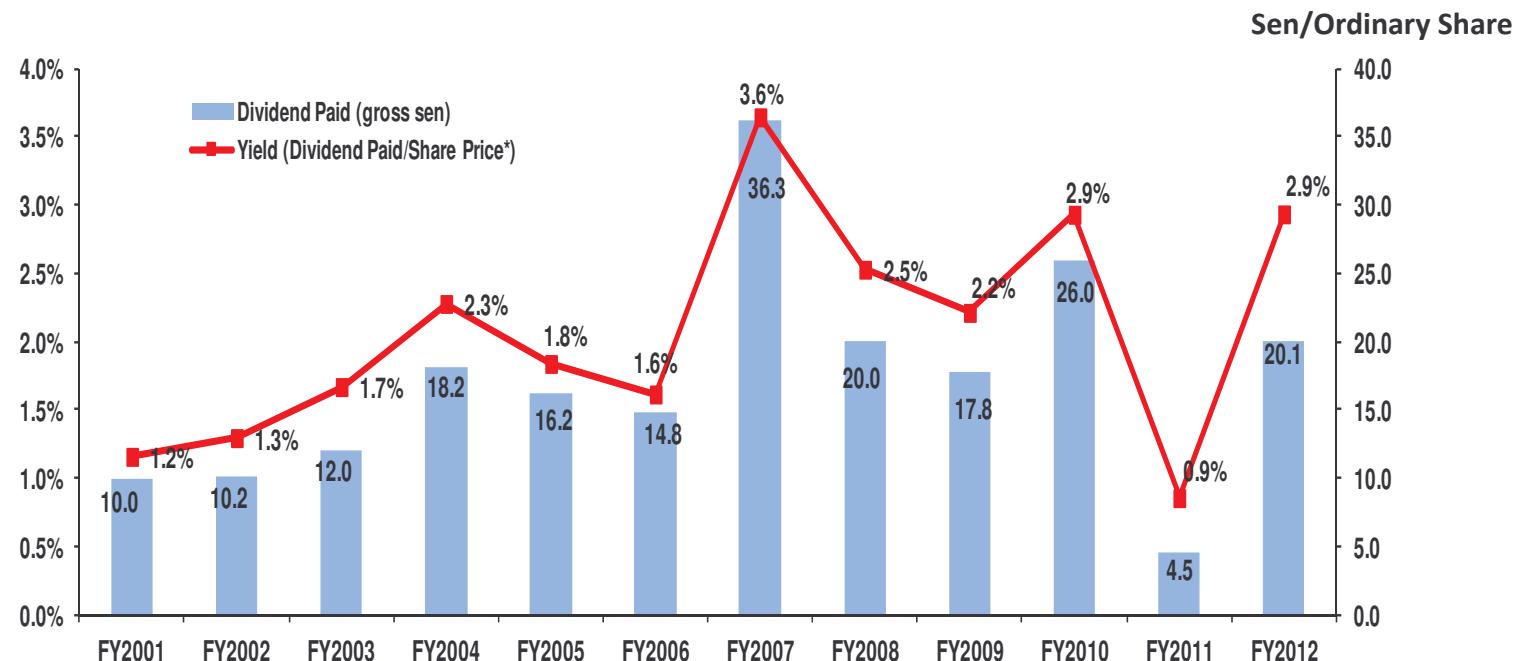


Tenaga is committed to pay out dividend based on its Dividend Policy whereby:

Dividend is paid out based on 40% to 60% of its Company's annual free cash flow;  
Cash flow from Operations less Normalized Capex and Interest Servicing

FY12

The Board of Directors has recommended a final single-tier dividend of 15.0 sen per ordinary share in respect of the financial year ending 31st August 2012.



## CLSA - ASEAN CORPORATE ACCESS FORUM

### ⑥ OUTLOOK - KEY TAKEAWAYS

YOU SEE



KEEPING THE LIGHTS ON





# OUTLOOK - KEY TAKEAWAYS

## Outlook FY2013 - Demand

Group's Performance for the FY Ending 31<sup>st</sup> August 2013  
is Expected to Remain Challenging

1

### DEMAND

Remains healthy with the implementation of Economic Transformation Programme.

The forecasted GDP of 4.5% - 5.5% for 2013.

The power industry is also expected to benefit from the Government's initiative to turn Malaysia into a global integrated trading hub for oil and gas. This may result in a more stable supply of fuel and assist Tenaga in relation to fuel security.

# OUTLOOK - KEY TAKEAWAYS

## Outlook FY2013 - Gas



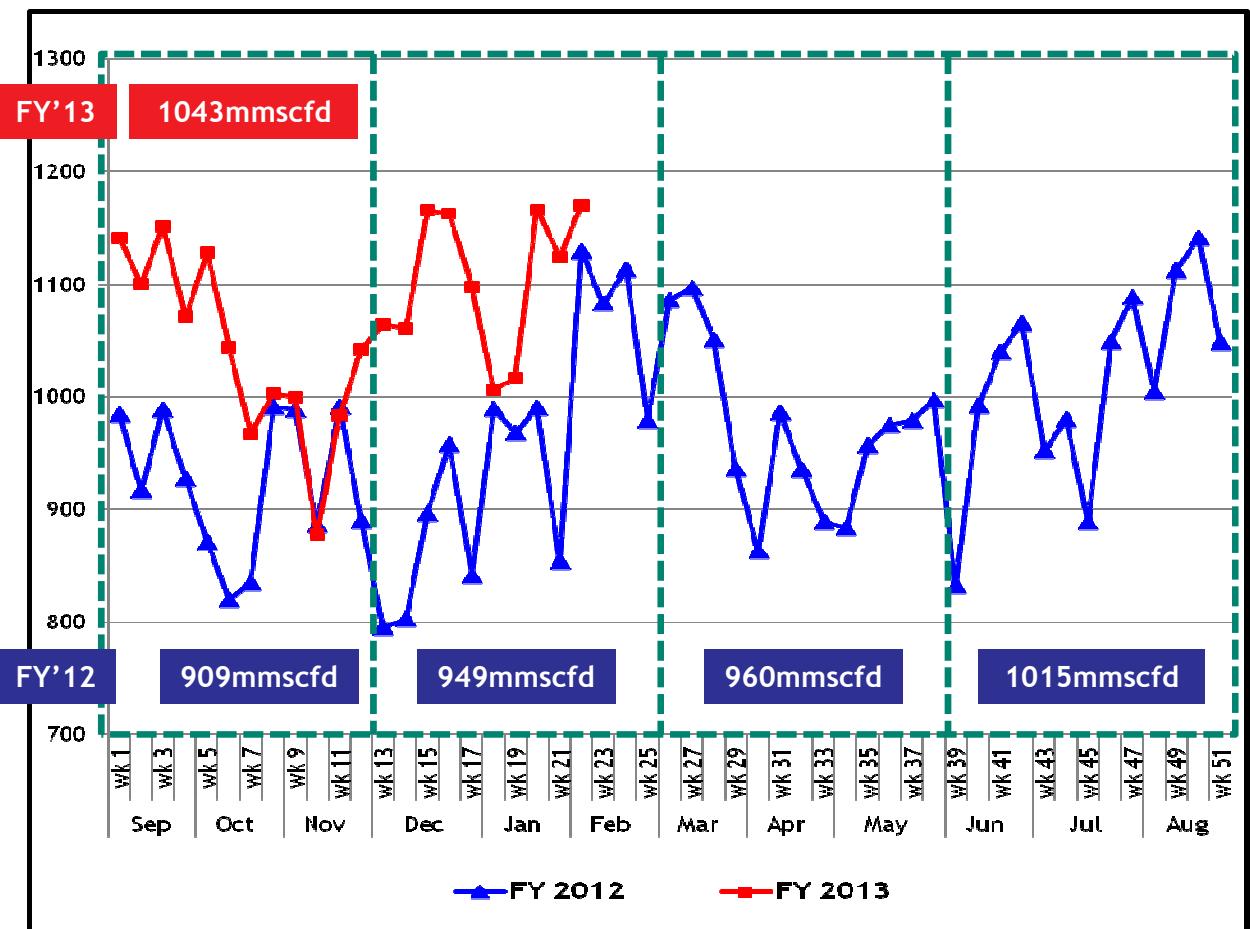
Group's Performance for the FY Ending 31<sup>st</sup> August 2013  
is Expected to Remain Challenging

2

### GAS VOLUME

Expected to be around  
1,000mmscfd.

	Daily average gas volume (mmscfd)
4QFY2012	1,015
1QFY2013	1,043

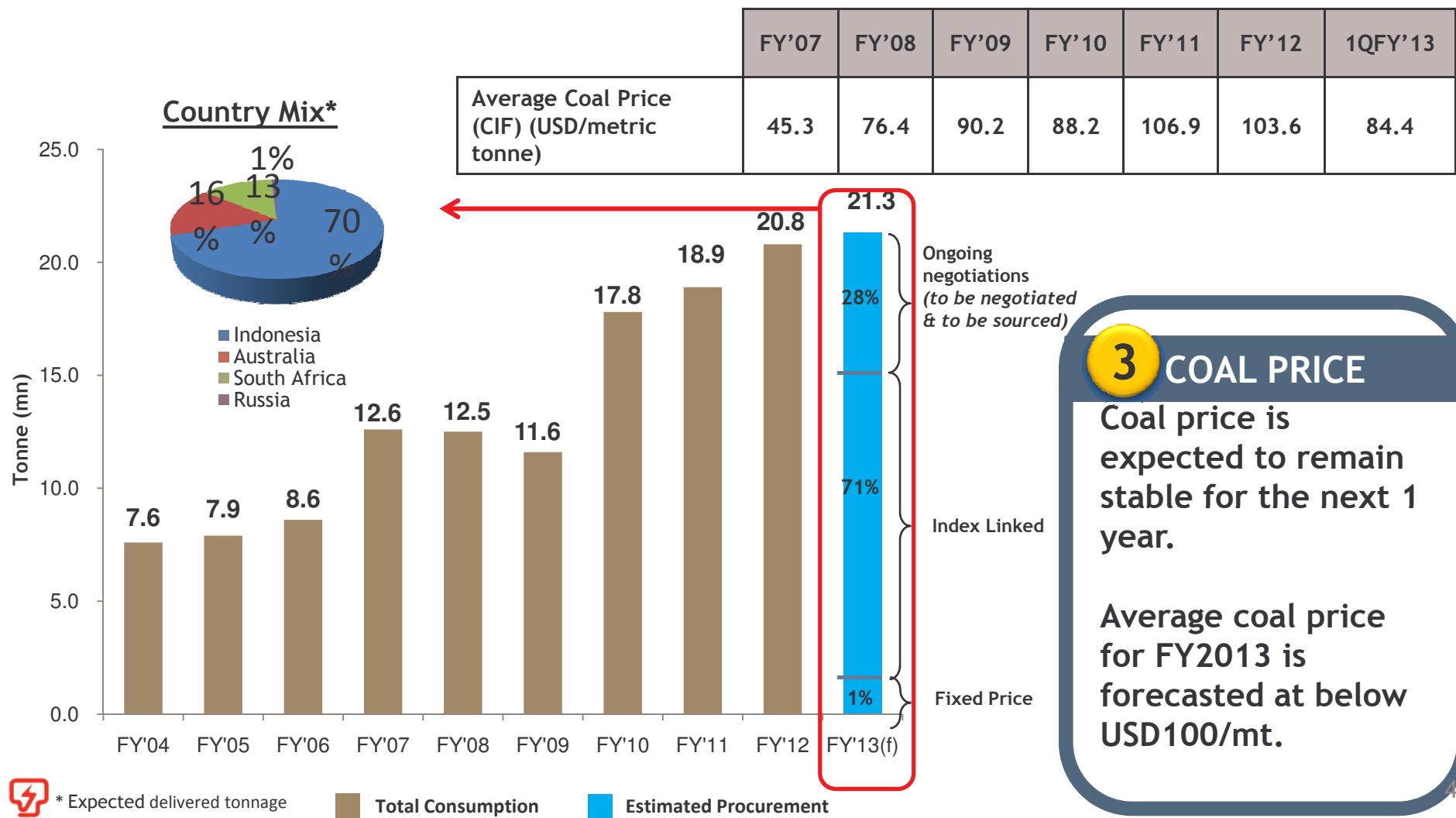




# OUTLOOK - KEY TAKEAWAYS

## Outlook FY2013 - Coal

Coal Procurement Estimate for FY2013 is at 21.3 mn MT





## CLSA - ASEAN CORPORATE ACCESS FORUM

# PART TWO

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**CLSA - ASEAN CORPORATE ACCESS FORUM**

# **1QFY2013 RESULTS SNAPSHOT**

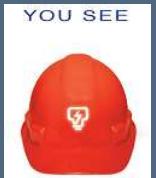
YOU SEE



KEEPING THE LIGHTS ON



# 1QFY2013 RESULTS SNAPSHOT



3-Month Ended 30<sup>th</sup> November 2012 (1<sup>st</sup> Quarter FY2013)

- Net Profit of RM1.4 billion (1QFY2012: Net loss of RM0.1 billion).
- EBITDA margin at 31.0% (1QFY2012: 18.0%).
- 3.5% unit electricity demand growth in Peninsular Malaysia mainly driven from the Commercial sector.
- Average Coal Price of USD84.4/mt (1QFY2012: USD110.0/mt).
- Strengthening of RM against Yen and USD by 7.4% and 2.7% respectively.

**CLSA - ASEAN CORPORATE ACCESS FORUM**

# **1QFY2013 RESULTS HIGHLIGHTS**

YOU SEE



KEEPING THE LIGHTS ON



# 1QFY2013 RESULTS HIGHLIGHTS

## Unaudited Income Statement (Group)



- 5.0% Increase in Group Revenue against 9.6% Decrease in Operating Expenses
- Operating Profit Increased Mainly Attributed to Lower Coal Price
- Net Profit Attributable to the Owners of the Company of RM1.4bn

RM'mn

### Continuing Operations:

Revenue	8,694.4	9,130.8	5.0
Operating expenses	(8,259.8)	(7,465.9)	9.6
Operating income	94.9	92.9	(2.1)
Operating profit	529.5	1,757.8	>100.0
Forex			
- Transaction Gain / (Loss)	(1.1)	2.4	>100.0
- Translation Gain / (Loss)	(419.1)	397.4	>100.0
Share of results of jointly controlled entities and associates (net of tax)	19.8	25.6	29.3
Profit before finance cost	129.1	2,183.2	>100.0
Finance income	69.4	49.0	(29.4)
Finance cost	(211.9)	(229.6)	(8.4)
Profit/(Loss) before taxation	(13.4)	2,002.6	>100.0
Taxation and Zakat			
- Company and subsidiaries	(18.8)	(551.0)	>(100.0)
- Deferred taxation	(44.2)	(36.2)	18.1
Profit/(Loss) from continuing operations	(76.4)	1,415.4	>100.0
Discontinued Operations:			
Profit/(Loss) from discontinued operations (net of tax)	-	-	-
Profit/(Loss) for the financial period	(76.4)	1,415.4	>100.0
Attributable to:			
- Owners of the Company	(74.1)	1,415.5	>100.0
- Non-controlling interests	(2.3)	(0.1)	95.7
	(76.4)	1,415.4	>100.0

	YTD 1QFY 2012 Restated	YTD 1QFY 2013	Variance %
Revenue	8,694.4	9,130.8	5.0
Operating expenses	(8,259.8)	(7,465.9)	9.6
Operating income	94.9	92.9	(2.1)
Operating profit	529.5	1,757.8	>100.0
Forex			
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	(76.4)	1,415.4	>100.0



# 1QFY2013 RESULTS HIGHLIGHTS

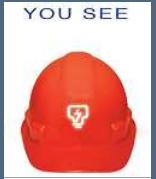


- The Fuel Cost Sharing Mechanism was approved to address the current increased cost borne by Tenaga due to gas shortage.
- The decision provides that Tenaga, Petronas and the Government will each equally share the differential cost incurred by Tenaga due to dispatching of alternative fuels and also imports.
- The Fuel Cost Sharing Mechanism will continue until the Regasification Terminal in Melaka is in operation, projected by middle 2013.

## ANALYSIS OF FINANCIAL RESULTS WITH RESTATED FUEL COST COMPENSATION

# 1QFY2013 RESULTS HIGHLIGHTS

## Adjusted Net Profit (Restated Fuel Cost Compensation)



**37.2% Improvement in Adjusted Net Profit Before Forex Translation  
Mainly Attributed to Lower Coal Price**

RM bn	1QFY 2012 (Restated)	** 1QFY 2013	Variance
Net Profit Attributable to the Owners of the Company	(74.1)	1,415.5	>100%
<i>Adjustments *</i>			
Fuel Cost Compensation	529.6		
Tax	(132.4)		
Adjusted Net Profit	323.1	1,415.5	>100%
Forex Translation Gain/(Loss)	(419.1)	397.4	
<b>Adjusted Net Profit Before Forex Translation Gain/(Loss)</b>	<b>742.2</b>	<b>1,018.1</b>	<b>37.2%</b>

\* Mechanism was approved in Apr 2012, and only recognised and restated into respective periods in 3QFY12

\*\* Includes Fuel Cost Compensation of RM538.5mn

Summary of FCC(RM'bil)	FY'10-11	FY'12				FY13	Total
		1QFY12	2QFY12	3QFY12	4QFY12	1QFY13	
Fuel Cost Compensation	1.68	0.53	0.17	0.44	0.33	0.54	3.69
Amounts Received	1.68	0.53	0.17	0.39	0.28	-	3.05

# 1QFY2013 RESULTS HIGHLIGHTS

Year-on-Year Analysis (Restated Fuel Cost Compensation)



Improved EBITDA Margin Resulted from Lower Generation Costs & Steady Demand from Commercial Sector

RM mn	YTD 1QFY 2012 (Restated)	YTD 1QFY 2013
Total Units Sold (GWh)	25,225.0	26,070.4
Revenue	8,694.4	9,130.8
Operating Expenses (before depreciation)	6,698.5	6,394.5
Operating Income	94.9	92.9
EBITDA	2,090.8	2,829.2
EBITDA Margin (%)	24.0%	31.0%
Depreciation and Amortisation	1,031.7	1,071.4
EBIT	1,059.1	1,757.8
EBIT Margin (%)	12.2%	19.3%
Finance Cost	211.9	229.6
Profit Before Tax & Forex Translation	935.3	1,605.2
Net Profit Before Forex Translation	742.2	1,018.1
Translation Gain / (Loss)	(419.1)	397.4
Net Profit attributable to :		
Equity Holders	323.1	1,415.5
Non-controlling Interest	(2.3)	(0.1)

COAL PRICE & CONSUMPTION	1st Qtr (Sept-Nov)		
	FY'12	FY'13	Var (%)
Average Coal Price Consumed (USD/MT) *			
FOB	100.8	75.5	-25.1%
Freight	8.7	8.4	-3.4%
Others	0.5	0.5	0.0%
CIF	110.0	84.4	-23.3%
Average Coal Price Consumed (RM/MT) (CIF)	342.0	258.7	-24.4%
Coal Consumption (mn MT)	5.0	5.1	2.0%



# 1QFY2013 RESULTS HIGHLIGHTS

## Year-on-Year Analysis OPEX (Restated Fuel Cost Compensation)



**3.4% Decrease in Operating Expenses due to Lower Coal Price  
and Recognition of Fuel Cost Compensation**

RM mn	YTD 1QFY2012 [Restated]	YTD 1QFY2013	Variance RM mn	Variance %
<b>Total IPPs Purchases/Costs</b>	<b>3,547.7</b>	<b>3,631.6</b>	<b>83.9</b>	<b>2.4</b>
Fuel Costs	1,850.4	1,385.0	(465.4)	(25.2)
Repair & Maintenance	292.9	311.5	18.6	6.4
Staff Costs	680.0	682.3	2.3	0.3
TNB General Expenses	180.2	210.2	30.0	16.6
Subs. Gen Exp, Cost of Sales & Provision	147.3	173.9	26.6	18.1
Depreciation & Amortisation	1,031.7	1,071.4	39.7	3.8
<b>Total Operating Expenses</b>	<b>7,730.2</b>	<b>7,465.9</b>	<b>(264.3)</b>	<b>(3.4)</b>

# 1QFY2013 RESULTS HIGHLIGHTS

## Fuel Analysis: Year-on-Year Generation Mix (Peninsula)



**Y-o-Y Analysis Shows Lower Fuel Costs due to  
Lower Coal Price and Strengthening of RM Against USD**

Fuel Cost (RM mn)				
Fuel Type	YTD		Variance	
	1QFY'12	1QFY'13	RM mn	%
Gas	1,408.1	1,423.8	15.7	1.1
Coal	1,827.0	1,326.8	(500.2)	(27.4)
Dist.	413.8	612.5	198.7	48.0
Oil	593.3	393.8	(199.5)	(33.6)
Hydro	0.0	0.0	-	-
<b>Sub Total</b>	<b>4,242.2</b>	<b>3,756.9</b>	<b>(485.3)</b>	<b>(11.4)</b>
<b>Fuel Cost Compensation</b>	<b>529.6</b>	<b>538.5</b>	<b>8.9</b>	<b>1.7</b>
<b>Total</b>	<b>3,712.6</b>	<b>3,218.4</b>	<b>(494.2)</b>	<b>(13.3)</b>

Units Generated (Gwh)				
Fuel Type	YTD		Variance	
	1QFY'12	1QFY'13	Gwh	%
Gas	11,244.8	12,244.9	1,000.1	8.9
Coal	11,848.9	12,010.8	161.9	1.4
Dist.	718.5	1,019.3	300.8	41.9
Oil	1,114.7	744.5	(370.2)	(33.2)
Hydro	1,357.8	1,037.5	(320.3)	(23.6)
<b>Total</b>	<b>26,284.7</b>	<b>27,057.0</b>	<b>772.3</b>	<b>2.9</b>

Consumption	YTD 1QFY'12	YTD 1QFY'13	Variance
Oil (MT)	271,949	184,207	(87,742)
Distillate (mn litres)	169	250	81



# 1QFY2013 RESULTS HIGHLIGHTS

## Headline Key Performance Indicators



INITIATIVES	ACTUAL FY 2012 (Restated)	YTD FY 2013
Return on Assets (ROA) (%)	4.5	5.4
Company CPU (sen/kwh)	31.9	29.0
Revenue from Non-Regulated Business (RM bn)	2.3	0.5
Unplanned Outage Rate (UOR)(%)	3.5	5.0
T & D Losses (%)	8.2	8.7
Transmission System Minutes (mins)	1.0	0.1
Distribution SAIDI (mins)	62.3	15.1



# 1QFY2013 RESULTS HIGHLIGHTS

## Analysis of Electricity Growth in Peninsula



Year-on-Year Demand Growth of 3.5% Mainly Driven by Commercial Sector of 5.0%

UNITS SALES		FY 2012												FY 2013			
		Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Industrial	Gwh	3,500	3,310	3,620	3,396	3,455	3,247	3,301	3,642	3,520	3,683	3,593	3,655	3,395	3,518	3,628	3,410
	Growth (%)	3.6	7.7	3.4	3.2	0.9	(5.7)	8.5	0.8	0.7	4.8	3.7	0.8	(3.0)	6.3	0.2	0.4
Commercial	Gwh	2,687	2,856	2,470	2,677	2,678	2,662	2,612	2,809	2,778	2,895	2,832	2,873	2,765	2,724	2,922	2,669
	Growth (%)	2.9	16.0	(7.9)	11.6	5.6	7.1	11.5	1.2	2.8	4.9	3.5	5.3	2.9	(4.6)	18.3	(0.3)
Domestic	Gwh	1,779	1,522	1,577	1,517	1,623	1,610	1,605	1,654	1,706	1,814	1,724	1,744	1,802	1,614	1,760	1,645
	Growth (%)	6.3	2.9	(1.7)	4.3	9.2	13.2	10.4	4.0	3.3	8.4	4.8	9.0	1.3	6.0	11.6	8.4
Others	Gwh	163	166	69	134	141	131	132	139	137	145	137	136	150	136	147	145
	Growth (%)	40.5	35.0	(43.9)	8.1	11.9	9.2	16.8	9.4	10.5	9.8	13.2	9.7	(8.0)	(18.1)	113.0	8.2
TOTAL	Gwh	8,129	7,854	7,736	7,724	7,897	7,650	7,650	8,244	8,141	8,537	8,286	8,408	8,112	7,992	8,457	7,869
	Growth (%)	4.5	10.1	(2.2)	6.3	4.3	2.4	10.1	1.7	2.1	5.7	4.0	4.1	(0.2)	1.8	9.3	1.9

1<sup>st</sup> Qtr FY'12  
3.9%

2<sup>nd</sup> Qtr FY'12  
4.3%

3<sup>rd</sup> Qtr FY'12  
4.4%

4<sup>th</sup> Qtr FY'12  
4.6%

1<sup>st</sup> Qtr FY'13  
3.5%

FY2012  
4.3%

1st Qtr	YTD FY 2012	YTD FY 2013
Growth (%)	3.9	3.5

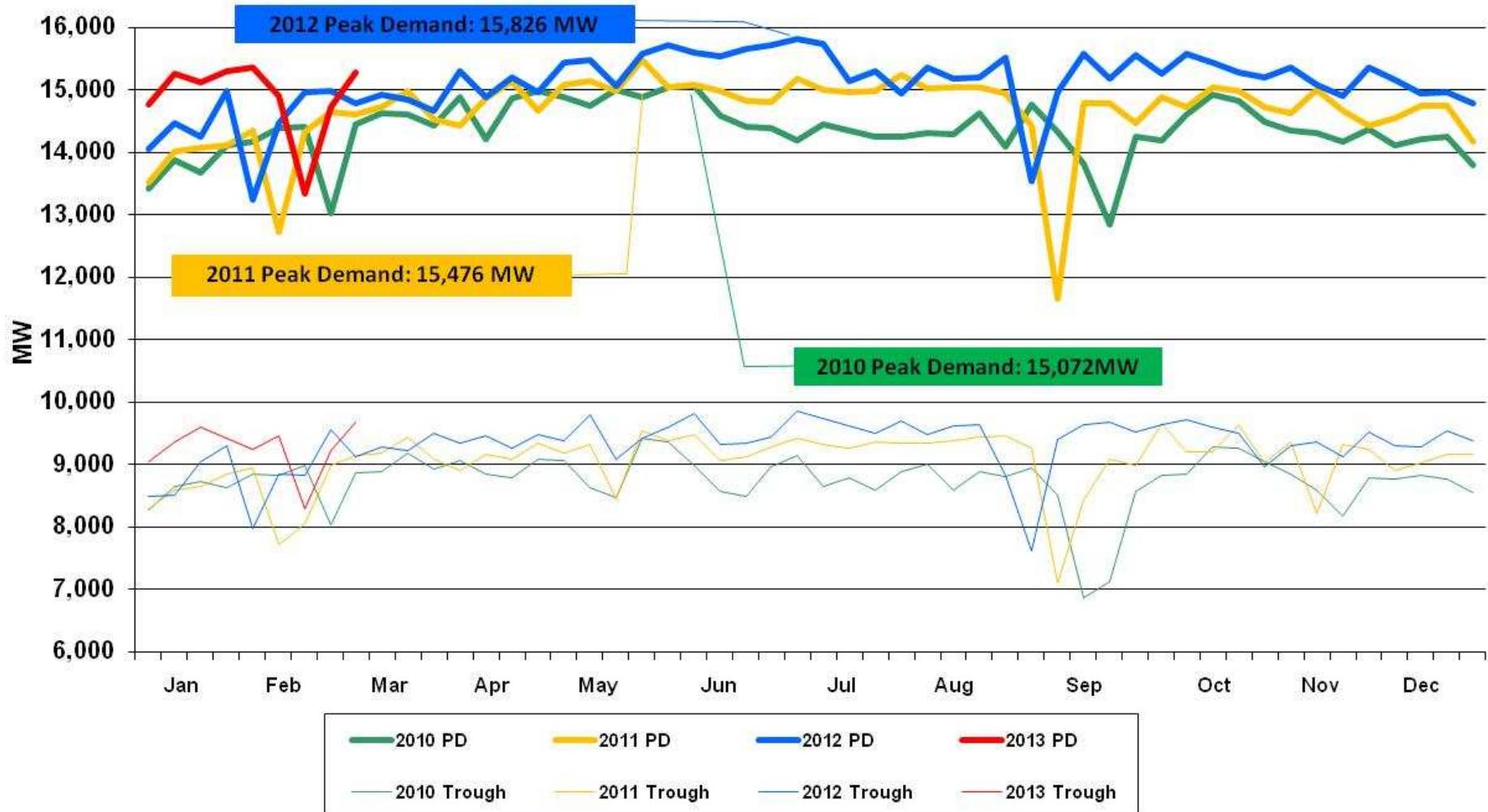


# 1QFY2013 RESULTS HIGHLIGHTS

System Weekly Peak Demand (Peninsula) for FY2009/10 to FY2013/14



Weekly Peak Demand & Trough (MW) - Week Ending 3<sup>rd</sup> March 2013



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