NON DEAL ROADSHOW OCTOBER 2012

Hong Kong

8th - 9th October 2012

Prepared by Investor Relations

MACQUARIE CONNECTIONS

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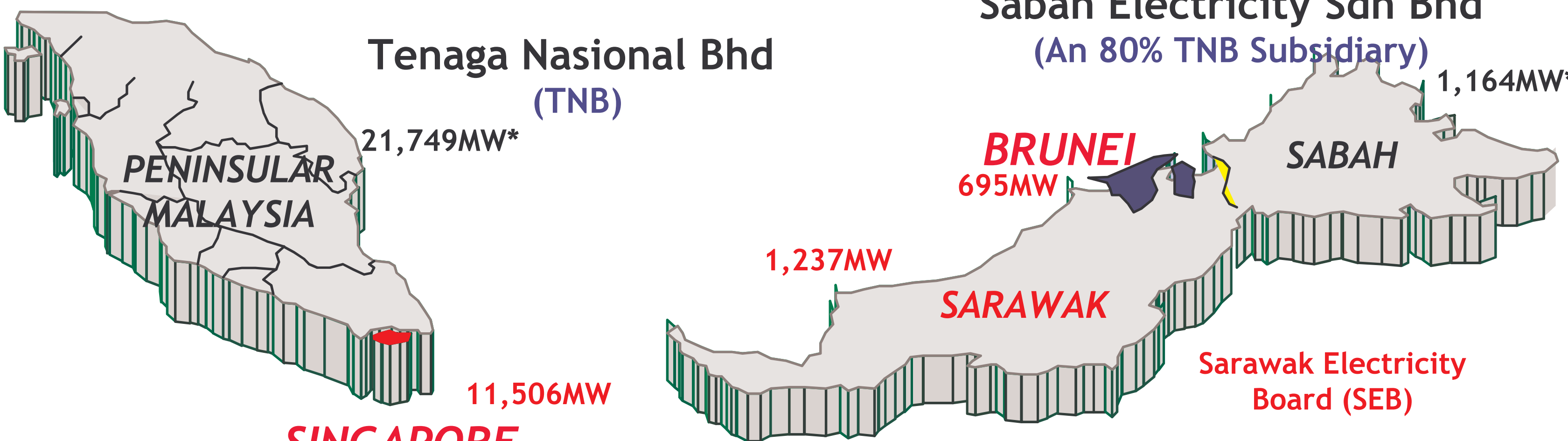
1	INTRODUCTION TO TENAGA
2	INTRODUCTION TO MESI TRANSFORMATION
3	BUSINESS STRATEGY & DIRECTION
4	3QFY2012 RESULTS
5	OUTLOOK – KEY TAKEAWAYS

TENAGA NASIONAL BERHAD

INTRODUCTION
Three Major Utilities in Malaysia



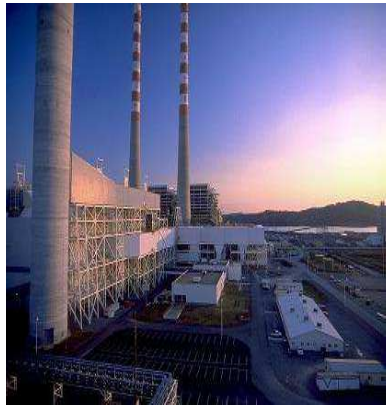
	FY'92	FY'99	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11
Group Installed Capacity (MW)	5,652	7,520	11,464	11,515	11,515	11,530	11,530	11,530
Total units sold (Gwh)	22,631	49,322	82,215	86,545	90,650	87,780	95,196.6	97,1887.8
Total customers (million)	3.32	5.09	6.81	7.07	7.33	7.59	7.87	8.11
Total employees	22,752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

* Includes IPPs

INTRODUCTION
Vertically Integrated Utility

Core Business – Peninsula

52.8%



Generation

100%

Transmission

100%

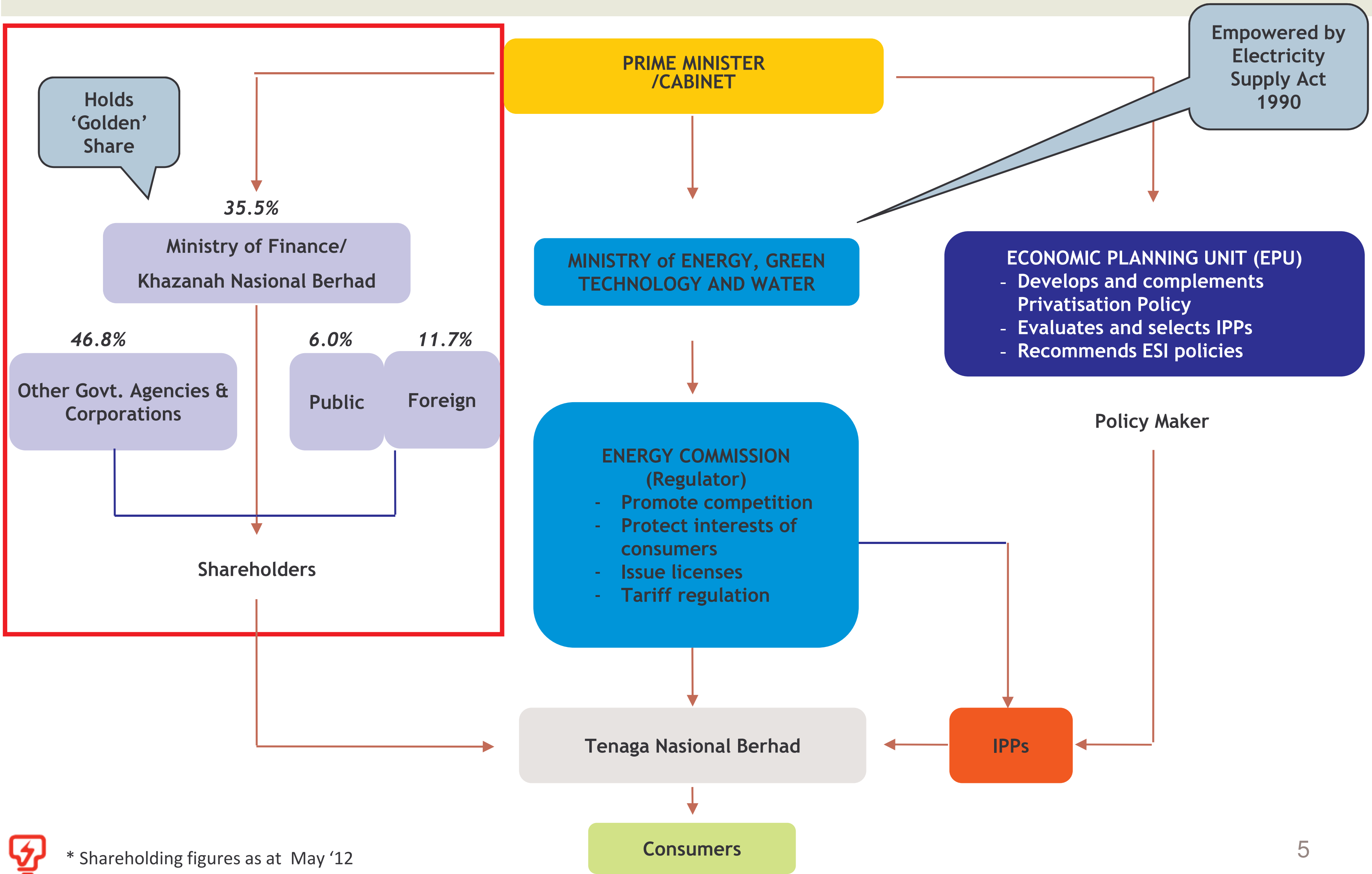
Distribution

As at May 2012:

Assets	RM 87.2 bn	(USD27.5bn)
Revenue	RM 26.5 bn	(USD8.3 bn)
Total Installed Capacity	21,749 MW	
Market Capitalisation (7th)	RM 36.7 bn	(USD11.6 bn)

* Exchange rate of USD1 = RM3.175

INTRODUCTION
Industry Regulatory Framework



* Shareholding figures as at May '12

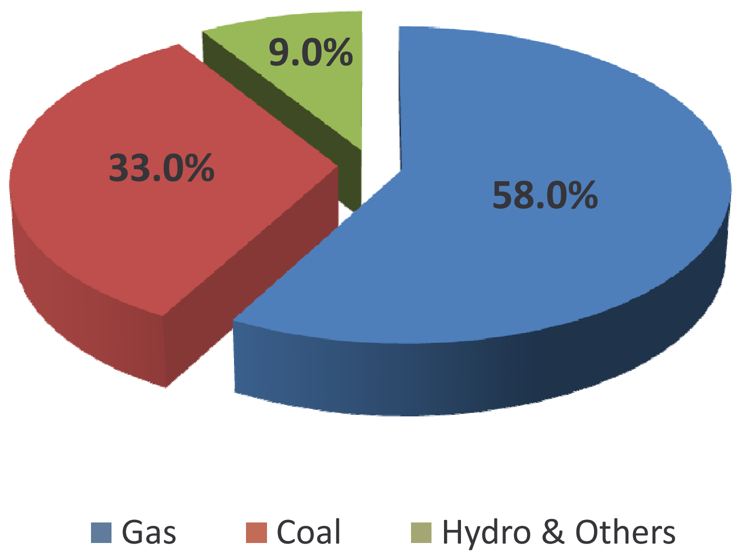
INTRODUCTION

Installed Capacity vs Generation Mix

Total Installed Capacity

Installed Capacity Market Share:

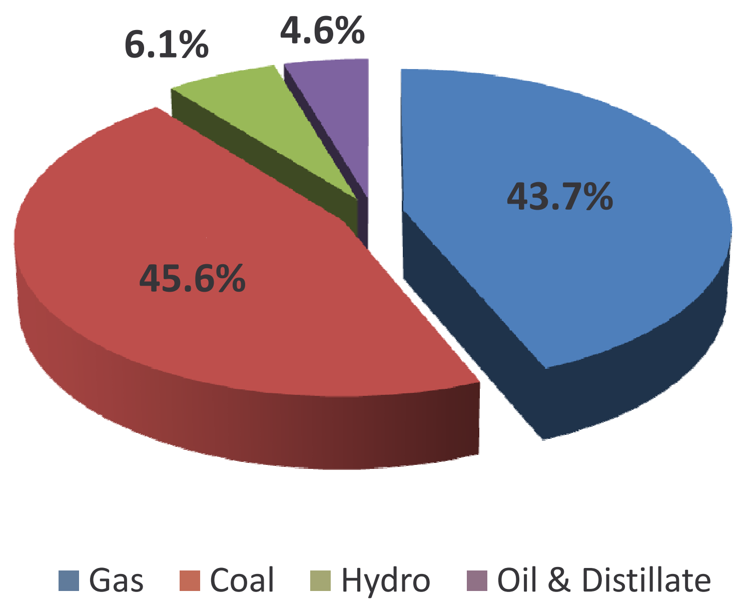
TNB	:	52.7%
IPP	:	47.3%



Generation Mix as at May 2012

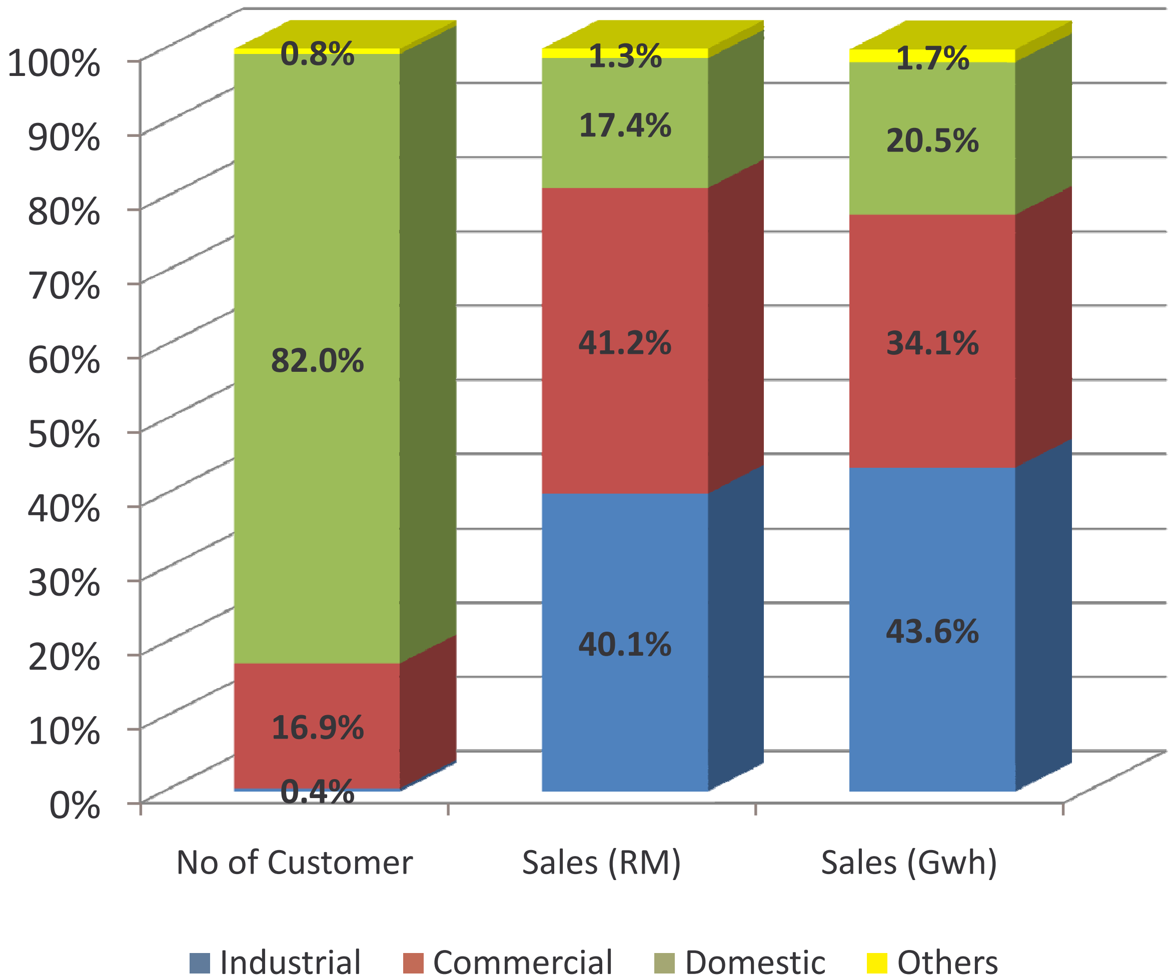
Generation Market Share :

TNB	:	48.6%
IPP	:	51.4%

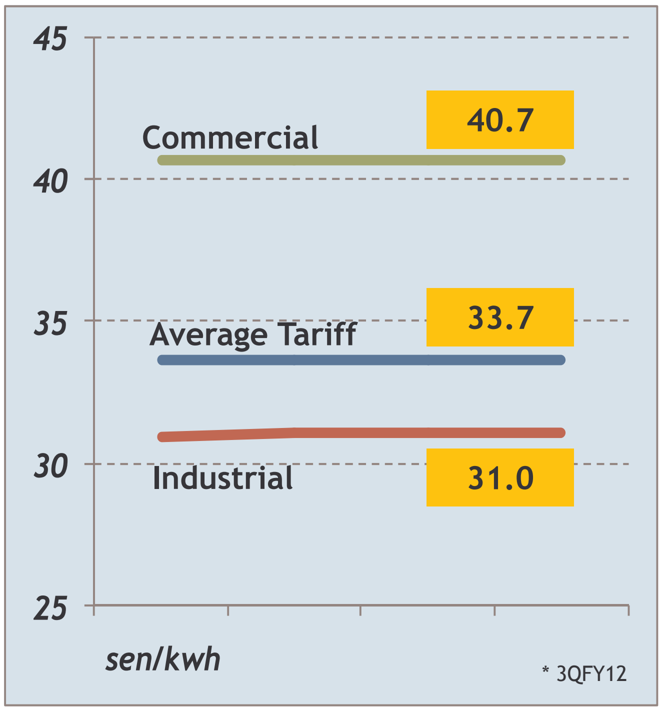


INTRODUCTION

No of Customer vs Sales Value vs Unit Sales



Average Tariff by Sector



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TENAGA NASIONAL BERHAD

MESI TRANSFORMATION PLAN
Background:

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KeTTHA Has Embarked on A Power Sector Transformation Programme

- **My POWER** 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
TENAGA NASIONAL BERHAD	• Incumbent utility • Single buyer of IPP generation • Full control over system dispatch • Access to end users	✓ Capacity required	✓	✓		✓	
EPU	• Formulates energy policy • Approves and develops recommendation on capacity expansion for cabinet approval • Formulates privatization policy	✔ PPA awards			✔ Gas subsidies	✔	
KeTTHA KEMENTERIAN TENAGA, TEKNOLOGI HIJAU DAN AIR	• Approves end user tariff • Coordinates implementation of energy policy • Minister KeTTHA chairs JPPPET	✓	✓	✔	✔ Policies	✓	
Suruhanjaya Tenaga Energy Commission	• Implement and enforce electricity supply law (e.g., Grid code) • Advisor to KeTTHA • Monitors TNB's performance	✓	✓	✓	✓	✓	
MOF	• Windfall taxes for IPPs • Bakun project	✔					✔
JPPPET	• Chaired by KeTTHA Minister, includes EPU, MoF, MITI, MIDA, ST, MTDCA, TNB, SESB, PETRONAS • Discusses tariff review, plant-up programme and service standards	✓		✔	✓ PETRONAS on gas supply		

**Source: MyPower*

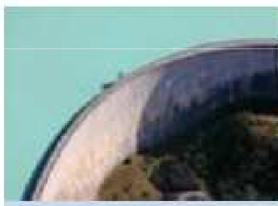
MESI TRANSFORMATION PLAN
MyPOWER programmes – manages the ESI Transformation Initiatives

Jun - Dec 2008
Khazanah's MESI Study

Jan - Dec 2009
KeTTHA-led syndication

4 Dec 2009
Cabinet endorsement to transform ESI

Transformation Programme

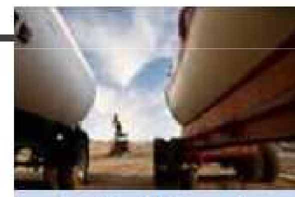


A. Governance

1. Agency Roles
2. Ring-fencing

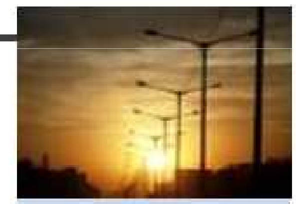
B. Market Structure

3. Competitive Bidding
4. PPA Renegotiation



C. Fuel Supply and Security

5. Fuel Supply and Security



D. Tariff

6. Value Chain Tariff
7. End User Tariff
8. Stabilization Fund
9. Accounts Unbundling

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

MESI TRANSFORMATION PLAN:
EC Transformation Plan

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2010	2011	2012	2013	2014	2015	2016 - 2020
• Competitive Bidding • Account Unbundling • Technical & Financial Benchmarking • Fuel Supply Security • Generation Development Plan • Tariff Analysis • Transparency in dispatching	• Development of Regulation Enhancement Plan • Industry Award Program • Energy Database • Performance Regulation • Activity-based licencing (G,T,D,R) • Fuel Pricing • Implementation of new ACP mechanism • Development of industry codes of Practice & Guidelines • Enforcement of Grid & Distribution Codes	• Effective service standard & regulatory monitoring • Issuance of RIGs • Ring-fenced functions of GSO & SB • Commence outsourcing of selected activities • Operationalisation of a more managed market • Implementation of new safety regime • Collaborative framework with other parties in regulatory activities	• Open access of gas network • Implementation of IBR (Gas)	• Implementation of competitive bidding & expansion plan by SB	• Implementation of IBR (Electricity)	• Enactment of Competition Regulations • Establishment of Electricity market Authority • Formulation of market rules • Operationalisation of liberalised market

**Source: EC*

MESI TRANSFORMATION PLAN:
Recent Government Initiatives

Initiatives by Government to Enhance MESI Development

New Generation Capacity Competitive Bidding	1st Gen IPP / Restricted Bidding	Subsidy Rationalisation Programme
FCPT Mechanism	LNG Importation	Nuclear Energy Capacity Building
National RE Policy & Action Plan	FIT & RE Fund	Legal & Regulatory Framework Enhancement

**Source: EC*

MESI TRANSFORMATION PLAN:
New Energy Policy

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

1 Energy Pricing
- Resource Allocation
- Economic Development Path
- EE & RE Uptake

2 Energy Supply
- Diversify Supply
- Alternative Sources
- New Entrants

3 Energy Efficiency
- Market Competitive
- Low-carbon Economy

4 Governance
- Integrated
- Regulatory Consistency
- Market Disciplines

5 Change Management
- Integrated
- Sequenced
- Gradual
- Social Assistance

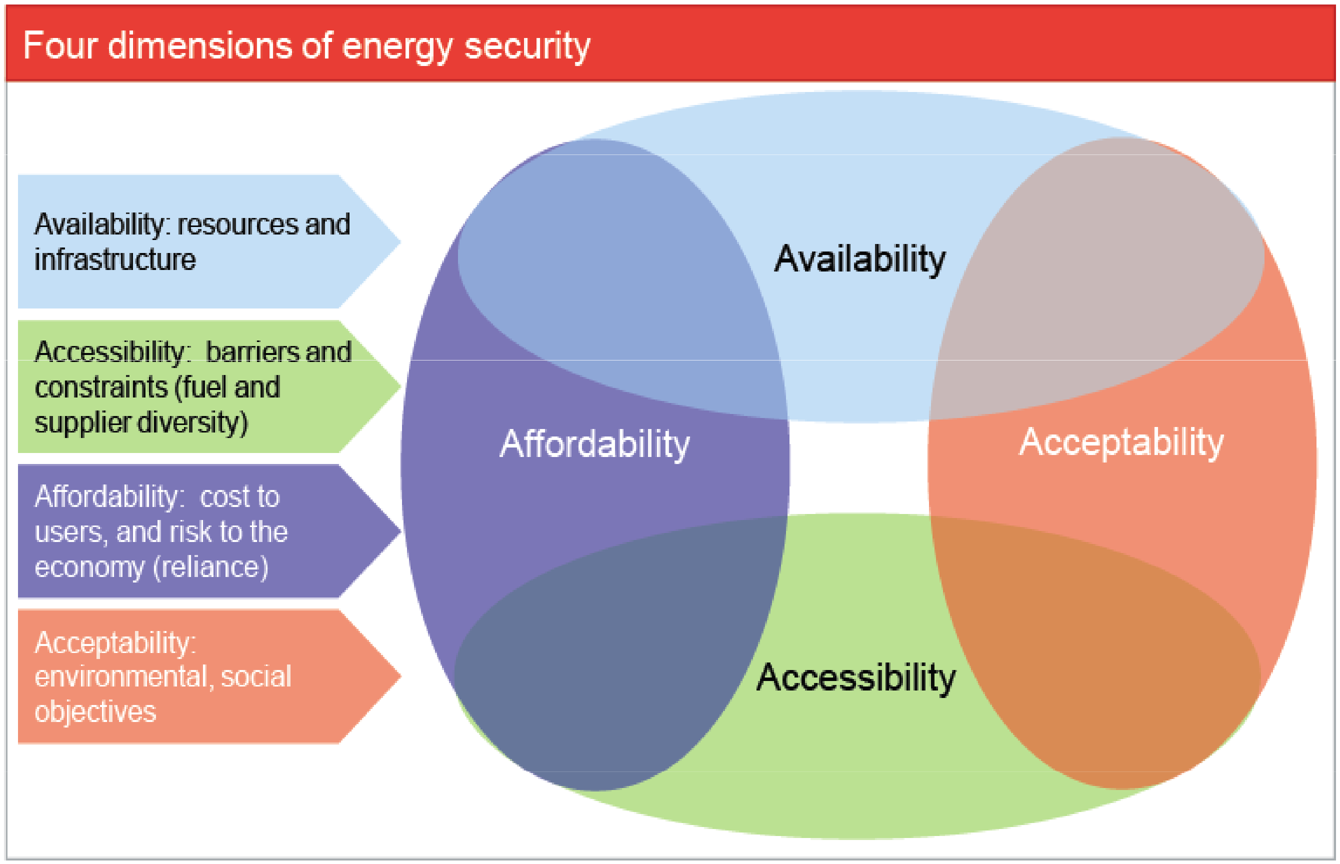
5 PILLARS

**Source: EC*

MESI TRANSFORMATION PLAN:
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

MESI TRANSFORMATION PLAN:
Expectation of Stakeholders Group

Efficiency
- Expect **higher efficiency**

Transparency
- **Load dispatch process**
- Currently managed by TNB

Tariff Setting Mechanism
- A **commonly agreed** tariff setting mechanism to be established

Customer Choice
- Desire for **options**

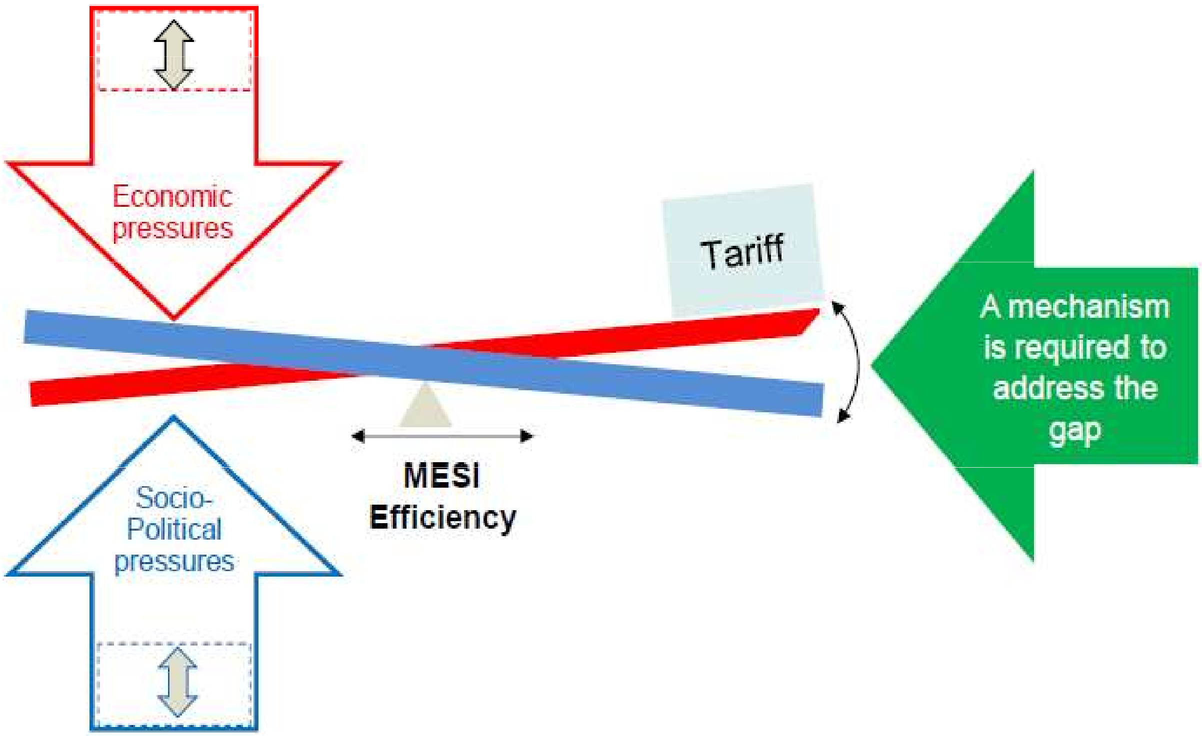
Fuel
- No **fuel cost pass-through**; thus higher fuel subsidies
- Need to address **long term fuel supply and security**

**Source: MyPower*

MESI TRANSFORMATION PLAN:
Balancing the Interests

Balancing the Nation's Conflicting, Dynamic Economic and Socio-Political Interests

- Nation's fiscal responsibility
- Global energy price increase
- MESI's sustainability



- High cost of living for less fortunate

Decision making has to be transparent and acceptable to ensure:

- Implementation certainty of government policy decisions
- Reducing risk premiums on MESI and economy as whole
- Better planning for industries and businesses
- Lifeline tariff for targeted segments can be continued

*Source: MyPower

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TENAGA NASIONAL BERHAD

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

T 7

SERVICE EXCELLENCE 2010

- Improve Core Operations under T7 Strategy
- Place TNB 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 TNB's knowledge and competencies in the energy business

OVERSEAS INVESTMENT 2020

- Improve financial position and human resource readiness of TNB
- 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
- TNB acknowledged as amongst the most admired companies globally

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BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

Growth Strategies to move TNB to the Next Level

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - GEMILANG 2015

Leveraging on 4 Core Success Thrust

- Building Trust and Relationship
- Building Capacity
- Building Performance
- Building Growth

VIBRANT WORKFORCE

PRODUCTIVITY REVOLUTION

BUSINESS STRATEGY & DIRECTION

TNB 20-Year Strategic Plan

Sustaining Growth by Going International

- Way forward:
    - Leverage on TNB's capabilities (in 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
    - New business area – in Renewable Energy
    - Deploy various avenues for human resource requirement
        - Hire expertise through contract scheme based on business requirement
        - Deploy attractive scheme for TNB experts
        - Alliance with strategic partners (local & international)
        - Establish knowledge management/repository for data and information sharing

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

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New Division Focusing on Non-Regulated Businesses

New Business & Major Project Division

Investment Management

1. Market / Industry Scanning
2. Country Intelligence
3. 'Deal Maker'
4. Portfolio Management: Nurture / Grow / Exit TNB's subsidiaries Excluding:- YTN, ILSAS, UNITEN, TNBR

Major Projects

1. Generation project development
2. Bidding for new generation project domestically

International Business

1. New business development (Power, O&M, Land Bank)
2. Services – O&M
3. Supplies – BuyCo
4. Manufacturing

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

New Division Focusing on Improvement in Communication and Stakeholders Engagement

Corporate Affair & Services Division

Corporate Affairs

1. Strategic communication
2. Corporate communication
3. Media relation
4. CSR

Regulatory & Stakeholder Management

Stakeholder Relationship

1. Identify and manage key stakeholders who have major influence in TNB's business
2. Establish rapport and build excellent relationship with stakeholders
3. Influence stakeholders to accept and endorse TNB's position on strategic matters
4. Utilise various means to further TNB's cause. Eg. NGOs, community leaders, Politicians and media

Corporate Services

1. Security services and intelligence
2. Land wayleave management
3. Property services
4. Logistics services

BUSINESS STRATEGY & DIRECTION

2nd Phase of TNB 20-Year Strategic Plan - Geographical Expansion

New Division Focusing on Performance Management

Chief Strategic Management & Performance

Performance Monitoring

1. Monitoring and reporting KPIs
2. Monitoring breakthrough strategies

Performance Management & Deliverable

1. Organise labs to identify blockers, cut red tape
2. Drive deliverables and high performance
3. Facilitate implementation o f decisions made at Labs
4. Scan issues highlighted by public/media/customer/staff
5. Identify new strategies essential for Gemilang 2015
6. Research/Strategy Unit - Economic Analysis

BUSINESS STRATEGY & DIRECTION

Headline Key Performance Indicators: 2nd Phase - GEMILANG 2015 & As At 3QFY12

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	INITIATIVES	TARGET FY 2015	ACTUAL FY 2011	TARGET FY 2012	YTD FY 2012		
					1st Qtr	2nd Qtr	3rd Qtr
Financial Indicators	Return on Assets (ROA) (%)	6 - 7	2.1	2.0 - 3.0	2.1	3.2	4.1
	Company CPU (sen/kwh)	< 29.9	32.7	32.7 - 33.7	33.9	32.3	31.1
	Revenue from Non-Regulated Business (RM bn)	5.0	1.8	1.8 - 1.9	0.4	1.0	1.5
Technical Indicators	Unplanned Outage Rate (UOR)(%)	< 4.0	7.1	3.6 - 4.0	6.0	4.4	3.8
	T & D Losses (%)	6 - 7	9.0	8.7 - <9.0	8.5	8.7	8.4
	Transmission System Minutes (mins)	< 1.0	1.0	1.1 - 2.0	0.2	0.2	1.0
	Distribution SAIDI (mins)	< 50.0	78.9	>75.0 - 80.0	14.6	27.5	43.4

BUSINESS STRATEGY & DIRECTION

TNB 20-Year Strategic Plan – 2nd Phase – Geographical Expansion (GEMILANG 2015)

- Tenaga is currently in the 2nd phase of the 20-year Strategic Plan. In this phase we are looking at opportunities in expanding our business in the O&M services in energy related business. This initiative will be driven by REMACO, a 100% owned subsidiary.

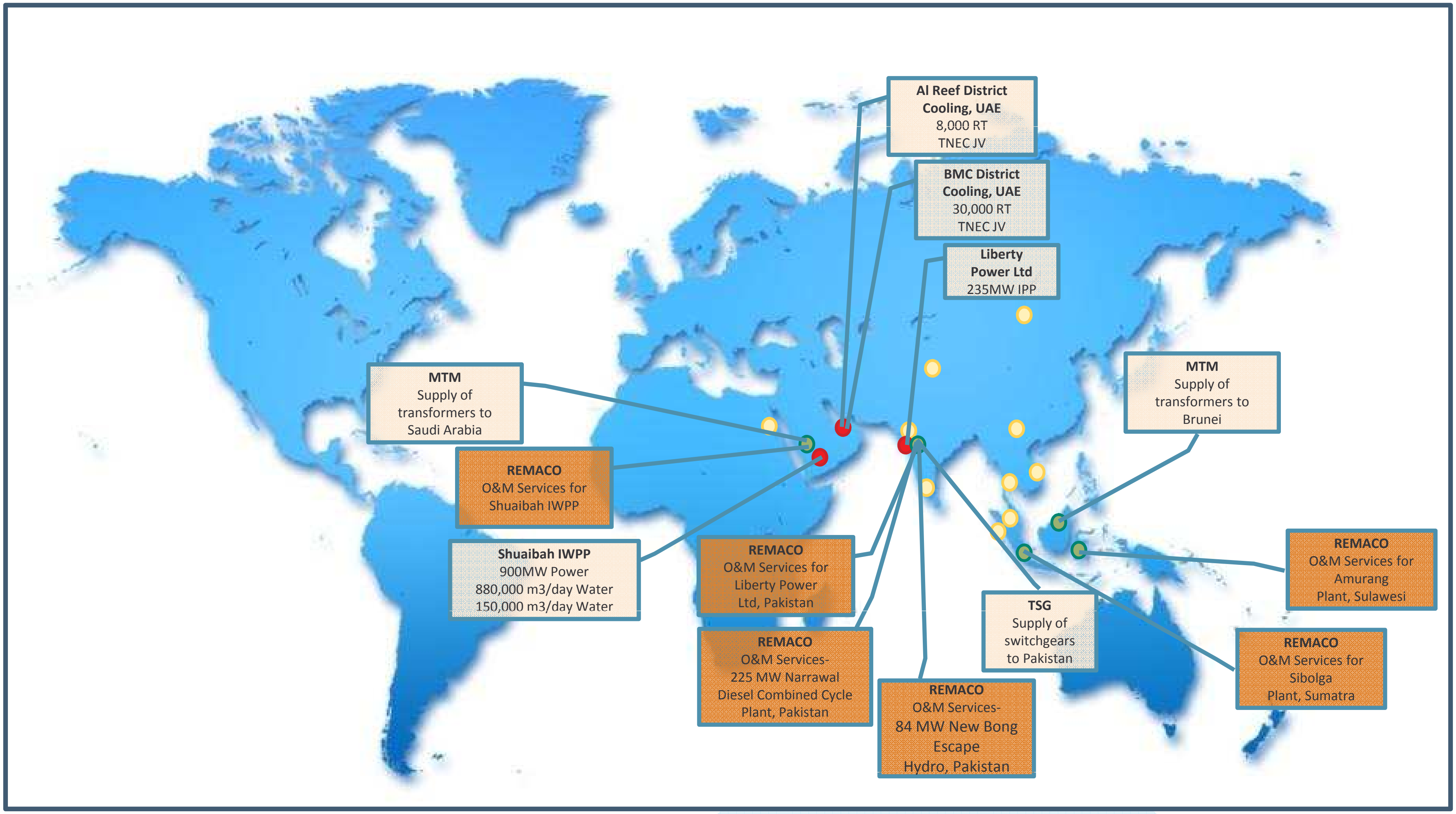
- Currently REMACO has contracts in O&M services at:
  - Shuaibah IWPP project
  - LPL
  - Hydro plant in Azad Jammu and Kashmir, Pakistan
  - Narrawal Diesel Combined Cycle Plant, Pakistan
  - Amurang Plant, Sulawesi
  - Sibolga Plant, Sumatera

- Tenaga is focusing on the MENA (Middle East and North Africa) region, as well as South East Asia region.

- However, due to the unrest situation in MENA, we remain cautious in venturing business in the area. Meantime, we are looking at opportunities in South East Asia such as Vietnam and Indonesia.

2nd PHASE OF 20-YEAR STRATEGIC PLAN

Geographical Expansion : 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, Thaila nd, Nepal, Egypt and Pakistan

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KEY HIGHLIGHTS

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3 months ended 31st May FY2012 (3rd Quarter)

- Net profit of RM619.1 million
- Recognition of fuel cost compensation of RM777.8 million from Nov'11 - May'12
- 6.5% increase in Group Revenue as compared to 2nd Quarter FY2012 against 5.9% decrease in Operating Expenses
- Average coal price of USD104.3/mt as compared to USD108.5/mt in the previous quarter
- EBITDA margin at 29.4% as compared to 47.0% reported for the previous quarter

9 months FY2012

- Net profit of RM3,189.7 million
- 14.8% increase in Group Revenue against a 8.2% increase in Operating Expenses
- Average coal price of USD107.5/mt as compared to USD103.0/mt in the YTD 3rd Quarter FY2011
- 4.2% Unit electricity demand growth in Peninsular Malaysia
- EBITDA margin at 31.1% as compared to 21.1% reported for the corresponding period in FY2011

FINANCIAL RESULTS

Unaudited Income Statement (Group)

- 14.8% Increase in Group Revenue Against 8.2% Increase in Operating Expenses
- >100% Increase in Operating Profit mainly Attributed to Fuel Cost Compensation
- Net Profit Attributable to the Owners of the Company of RM 3.2bn

RM'mn	YTD FY2011 Restated	YTD FY2012	Variance %
Continuing Operations:			
Revenue	23,086.7	26,513.6	14.8
Operating expenses	(21,621.1)	(23,399.0)	(8.2)
Operating income	406.4	1,989.7	>100.0
Operating profit	1,872.0	5,104.3	>100.0
Forex			
- Transaction Gain / (Loss)	(5.8)	(10.3)	77.6
- Translation Gain / (Loss)	107.6	(323.8)	>(100.0)
Share of results of jointly controlled entities and associates (net of tax)	71.1	13.1	(81.6)
Profit before finance cost	2,044.9	4,783.3	>100.0
Finance income	277.1	101.7	(63.3)
Finance cost	(668.1)	(633.3)	5.2
Profit before taxation	1,653.9	4,251.7	>100.0
Taxation and Zakat			
- Company and subsidiaries	(218.5)	(756.4)	>(100.0)
- Deferred taxation	(148.4)	(303.2)	>(100.0)
Profit from continuing operations	1,287.0	3,192.1	>100.0
Discontinued Operations:			
Profit/ (Loss) from discontinued operations (net of tax)	-	-	-
Profit for the financial period	1,287.0	3,192.1	>100.0
Attributable to:			
- Owners of the Company	1,304.0	3,189.7	>100.0
- Non-controlling interests	(17.0)	2.4	>100.0
	1,287.0	3,192.1	>100.0

FINANCIAL RESULTS
Executive Summary (Restated Fuel Cost Compensation)

Net Profit Attributable to the Owners of the Company of RM1.9bn

	YTD		
	3QFY11	3QFY12	Variance
Net Profit Attributable to the Owners of the Company	**1,304.0**	**3,189.7**	**> 100%**
Adjustments			
Prior Year Fuel Cost Compensation		(1,678.6)	
Current Year Fuel Cost Compensation	916.0		
Tax	(229.0)	419.9	
Adjusted Net Profit	**1,991.0**	**1,931.0**	**-3.0%**
Forex Translation Gain/(Loss)	107.6	(323.8)	> (100%)
Adjusted Net Profit Before Forex Translation Gain/(Loss)	**1,883.4**	**2,254.8**	**19.7%**

FINANCIAL HIGHLIGHTS

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

EBITDA Margin Reflects Consistent Performance

RM mn	YTD 3Q FY2011 [Restated]	YTD 3Q FY2012
Total Units Sold (GWh)	72,266.8	75,360.8
Revenue	23,086.7	26,513.6
Operating Expenses (before depreciation)	17,715.9	20,262.4
Operating Income	406.4	311.1
EBITDA	**5,777.2**	**6,562.3**
EBITDA Margin (%)	**25.0%**	**24.8%**
Depreciation and Amortisation	2,989.2	3,136.6
EBIT	**2,788.0**	**3,425.7**
EBIT Margin (%)	**12.1%**	**12.9%**
Finance Cost	668.1	633.3
Profit Before Tax & Forex Translation	**2,462.3**	**2,896.9**
Net Profit Before Forex Translation	1,883.4	2,254.8
Translation Gain / (Loss)	107.6	(323.8)
Net Profit attributable to : Equity Holders	**1,991.0**	**1,931.0**
Non-controlling Interest	(17.0)	2.4

9 Months (Sept-May)	FY'11	FY'12	Var (%)
Average Coal Price Consumed (USD/MT) *			
FOB	88.0	97.3	10.6%
Freight	14.6	9.7	-33.6%
Others	0.4	0.5	25.0%
CIF	103.0	107.5	4.4%
Average Coal Price Consumed (RM/MT) (CIF)	316.0	332.3	5.2%
Coal Consumption (mn MT)	13.9	15.5	11.5%

FINANCIAL HIGHLIGHTS

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

EBITDA Margin Reflects Consistent Performance

RM mn	FY2012		
	1Q [Restated]	2Q [Restated]	3Q
Total Units Sold (GWh)	25,225.0	24,689.5	25,466.3
Revenue	8,694.4	8,628.2	9,191.0
Operating Expenses (before depreciation)	6,769.5	6,558.2	6,934.7
Operating Income	94.9	132.4	83.8
EBITDA	**2,019.8**	**2,202.4**	**2,340.1**
EBITDA Margin (%)	**23.2%**	**25.5%**	**25.5%**
Depreciation and Amortisation	1,031.7	1,032.1	1,072.8
EBIT	**988.1**	**1,170.3**	**1,267.3**
EBIT Margin (%)	**11.4%**	**13.6%**	**13.8%**
Finance Cost	211.9	222.4	199.0
Profit Before Tax & Forex Translation	**864.3**	**948.2**	**1,084.4**
Net Profit Before Forex Translation	688.9	682.2	883.7
Translation Gain / (Loss)	(419.1)	628.4	(533.1)
Net Profit attributable to :			
Equity Holders	**269.8**	**1,310.6**	**350.6**
Non-controlling Interest	(2.3)	(7.8)	12.5

COAL REQUIREMENT

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Coal Procurement Estimate for FY2012 at 21.0 mn MT

	FY'04	FY'05	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11	3QFY'12
Average Coal Price (CIF) (USD/metric tonne)	34.0	49.8	52.8	45.3	76.4	90.2	88.2	106.9	107.6

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OUTLOOK - KEY TAKEAWAYS

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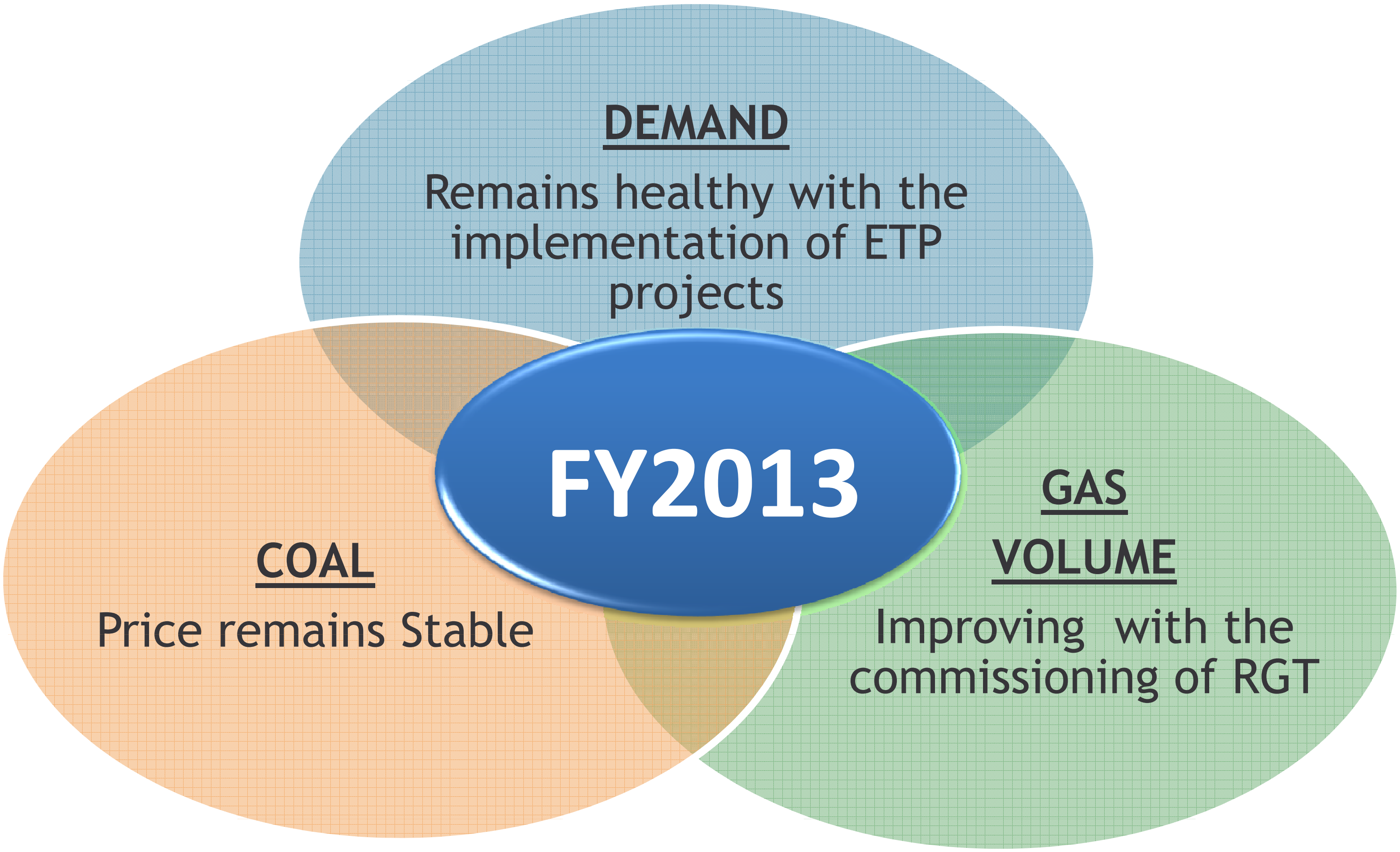
POSITIVE OUTLOOK FOR FY2013

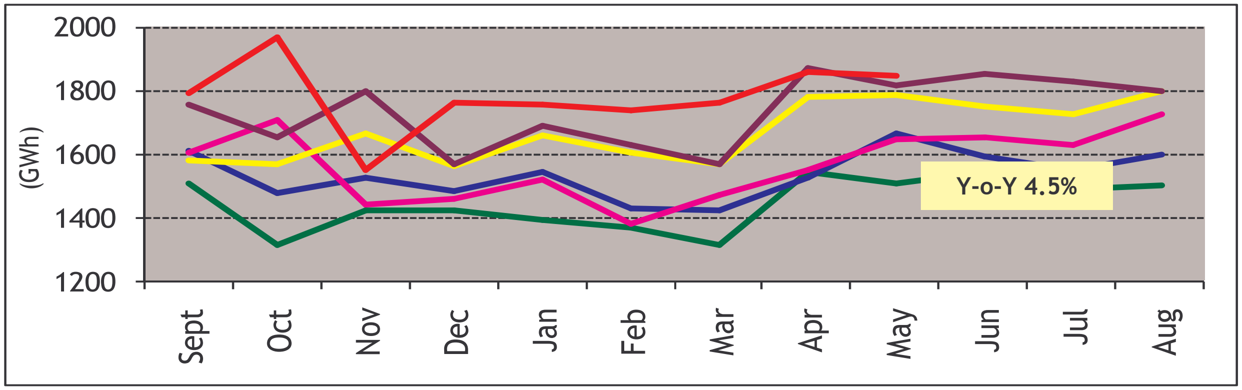


OUTLOOK - KEY TAKEAWAYS

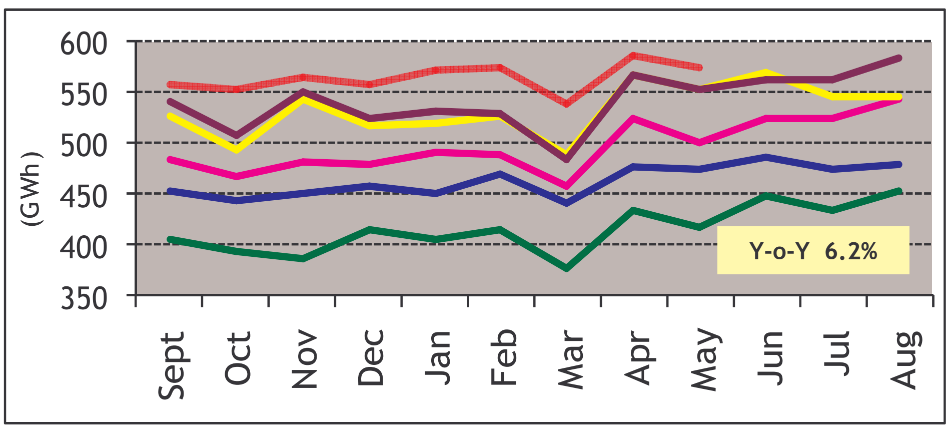
1 Demand Growth Driven by Commercial Sector

Commercial sectors recorded positive growth Y-o-Y of 5.3%

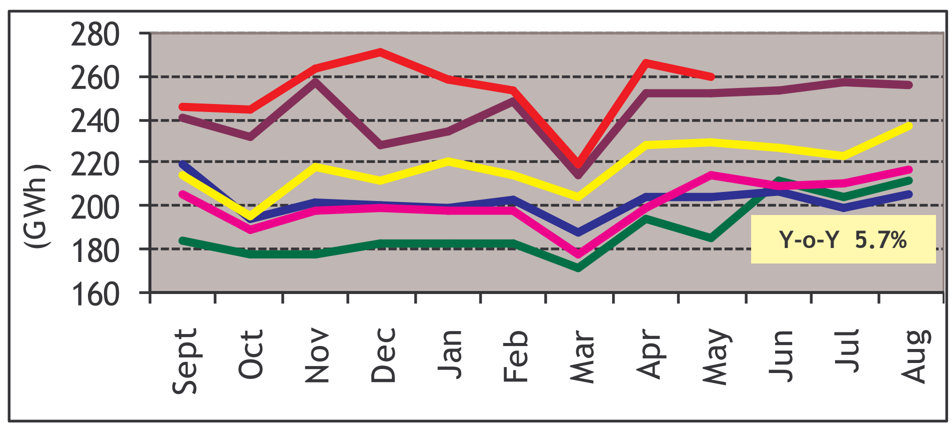
Low Voltage
Shop Lots & Retail Business



Medium Voltage
Shopping Malls, 3 Star Hotels, Office Buildings



Medium Voltage (Peak / Off-Peak)
Mega Shopping Malls, 4-5 Star Hotels, Hospitals, Airports, Ports



FY2007 FY2008 FY2009 FY2010 FY2011 FY2012

SWITCH ON thefuture

OUTLOOK - KEY TAKEAWAYS

1 Demand Growth Driven by Commercial Sector

To-date Total ETP 120 Projects; with Combined Investment Value of RM182.7bn

SWITCH ON the**future**

KEY TAKEAWAYS

1 Demand Growth Driven by Commercial Sector: Tenaga's Role in ETP2

The Infrastructure Investment Creates a Solid Foundation in Supporting the Implementation of ETP

ENSURING RELIABILITY OF ELECTRICITY SUPPLY

KEY TAKEAWAYS

1 Demand Growth Driven by Commercial Sector: 2 NKEAs that Directly Benefit Tenaga

SWITCH ON thefuture

GREATER KUALA LUMPUR/KLANG VALLEY

1 Building an Integrated Urban Mass Rapid Transit System

RM21bn GNI
20,000 JOBS

- The proposed MRT system for Greater KL/KV will span 141 kilometres with three major routes serving a radius of 20 kilometres of the city centre.
- The system is estimated to be able to carry up to 2 million riders by 2020, serving 11% of total trips within Greater KL/KV and 64% of travel in and out of the KL city centre.

2 Connecting to Singapore via a High Speed Rail (HSR) System

RM6.2bn GNI
28,700 JOBS

- The proposed deployment of an HSR system connecting Greater KL/KV and Singapore will connect Southeast Asia's two largest economic agglomerations and **unlock economic growth** in intermediate Malaysia cities.
- The HSR service will essentially transform travel on the Greater KL/KV – Singapore route by making daily travel a viable alternative.
- Door-to-door travel time will take just 1.5-2hours. This represents a savings of over two hours over air travel, the fastest available mode today.

POTENTIAL CUSTOMERS FROM COMMERCIAL CATEGORY

KEY TAKEAWAYS

1 Demand Growth Driven by <u>Commercial</u> Sector: 2 NKEAs that Directly Benefit Tenaga

GREATER KUALA LUMPUR/KLANG VALLEY

RM464.4mn GNI
13,481 JOBS

3 Creating Iconic Places and Attractions

- Greater KL/KV has immense potential to further leverage existing heritage sites that can be preserved and redeveloped in a manner that both celebrates the history and heritage of Greater KL/KV, but also embraces a future as a **<u>cosmopolitan and global city</u>**.
- These iconic places also generate higher economic activities through **<u>additional hotel stays, retail revenues</u>** from visitors and locals and additional employment.

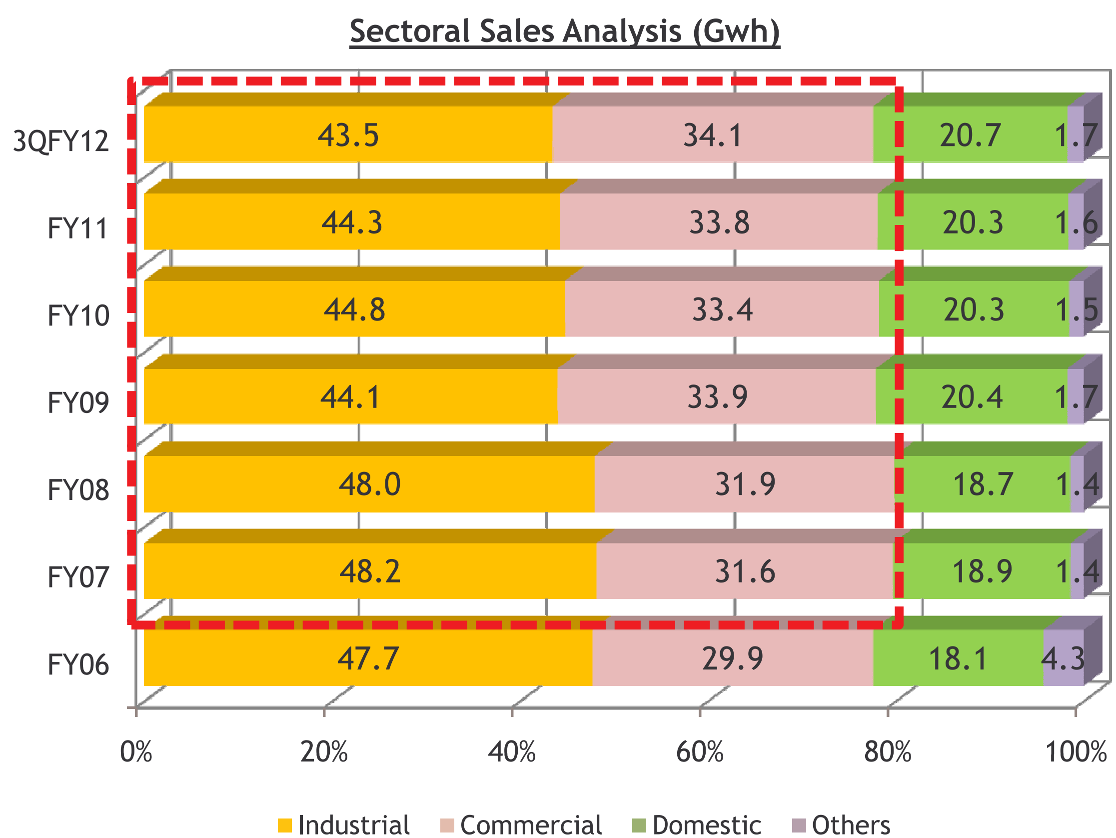
KEY TAKEAWAYS

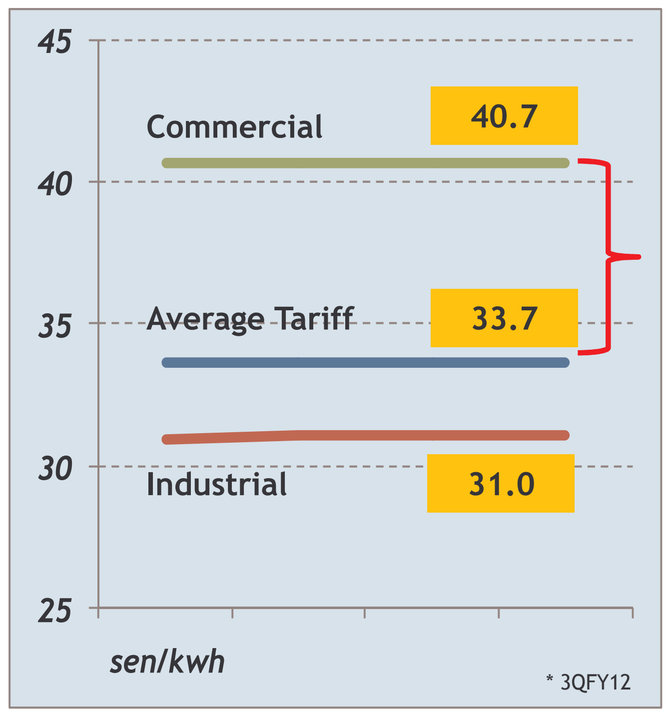
1 Demand Growth Driven by Commercial Sector: 2 NKEAs that Directly Benefit Tenaga

Shift from Industrial-based to **Service-based economy**

Increasing market share from **Commercial** sector

Commercial sector contributes the **highest** electricity sales **margin**





KEY TAKEAWAYS

2 Improving Gas Volume: 2 NKEAs that Directly Benefit Tenaga

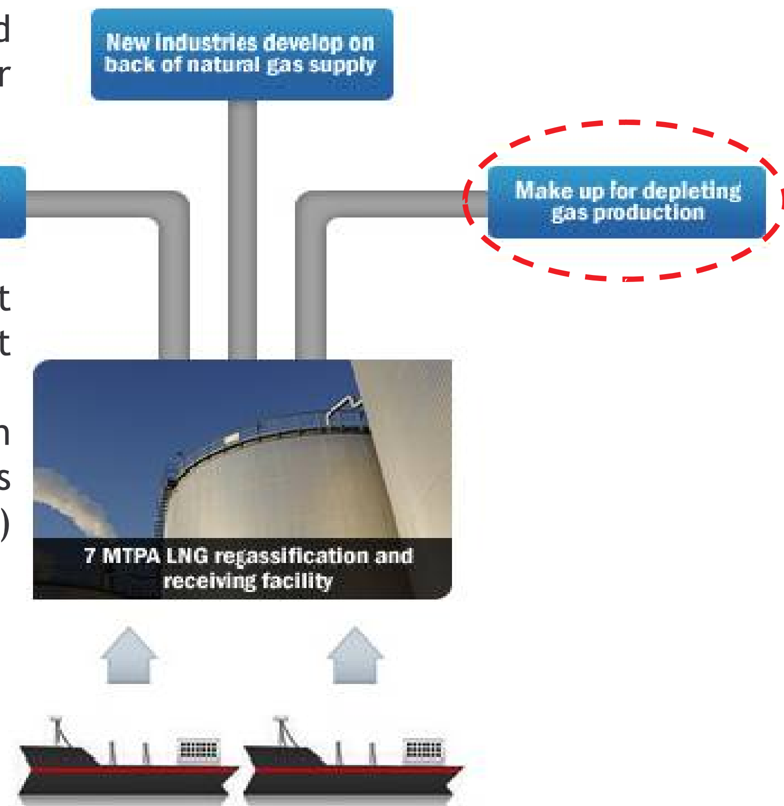
OIL, GAS & ENERGY

RM2.4bn GNI
RM1.07bn
INVESTMENT

Unlocking Premium Gas Demand in Peninsular Malaysia

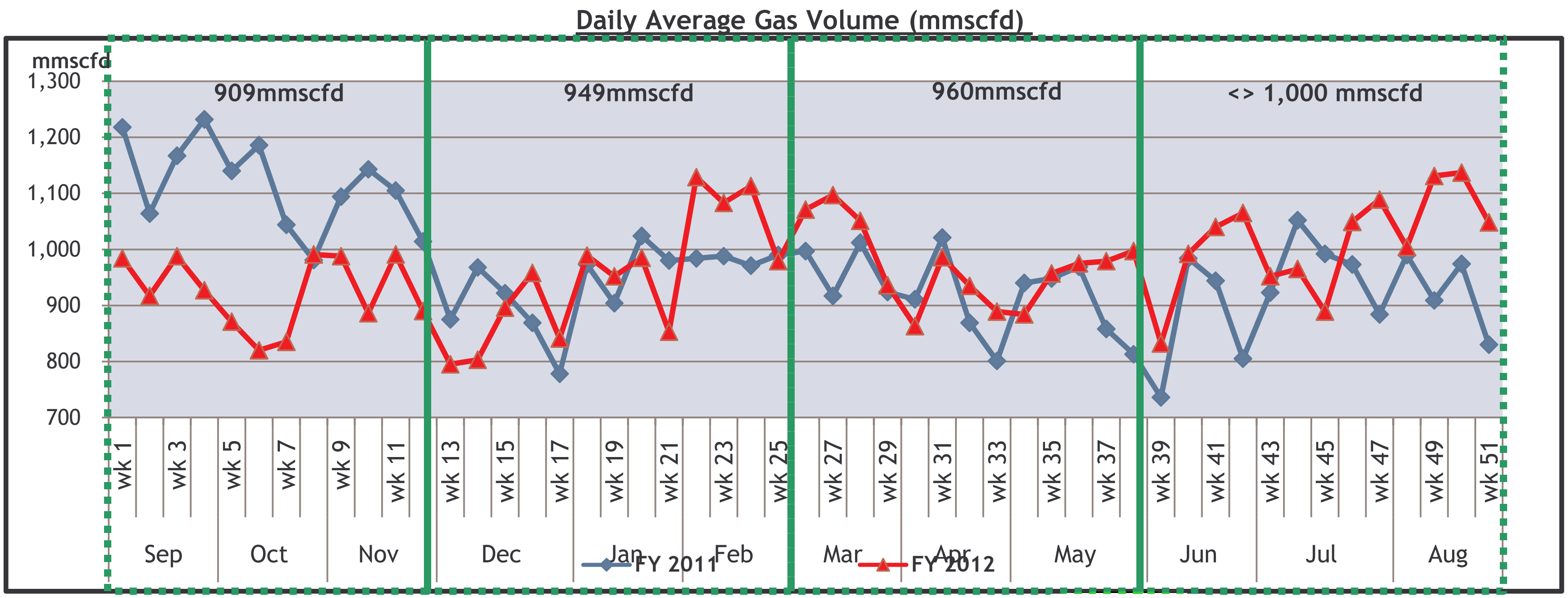
- Unlocking gas demand will have an estimated GNI impact for Malaysia of approximately USD0.81bn by 2020.
- Switching from diesel to natural gas will yield approximately USD0.6bn in annual savings for Malaysian industries.
- The facilities will have a maximum throughput capacity of 3.8mn tonnes per year or about 530mmscfd.
- Gas would be imported in LNG tankers/vessels in liquid form and regasified at the facility before it is transported into the Peninsular Gas Utilisation (PGU) pipeline network.

HIGHER GAS AVAILABILITY



KEY TAKEAWAYS

2 Improving Gas Volume: Better Outlook when LNG Terminal is Commissioned



Construction of the plant in Sungai Udang port in Melaka by consortium of Muhibbah and Perunding Ranhill Worley has commenced in April 2011

KEY TAKEAWAYS

3 Stable Coal Price in FY2013

API 4 ($/t)			
Mid points	Aug 24th	Aug 31st	+/-
Q4 2012	89.80	90.10	0.30
Q1 2013	92.80	93.00	0.20
Q2 2013	95.30	95.30	0.00
Q3 2013	98.00	97.90	-0.10
Cal 2013	96.70	96.65	-0.05
Cal 2014	104.73	104.85	0.12

Source: IHS McCloskey

Coal swaps expected to remain fairly steady in FY2013; below USD100/mt

McCloskey SWAP China CFR (5,500kc NAR) ($/t)			
Mid points	Aug 24th	Aug 31st	+/-
Aug-12	60.10	60.50	0.40
Sep-12	62.50	61.40	-1.10
Oct-12	63.05	62.85	-0.20
Q4 12	63.50	63.15	-0.35
Q1 13	66.75	66.65	-0.10
Q2 13	67.50	67.40	-0.10
Q3 13	69.25	69.15	-0.10
Cal 2013	68.40	68.30	-0.10

Source: Tullet Prebon, Ginga, Marex Spectron

globalCOAL Swap Newc ($/t)			
Mid points	Aug 24th	Aug 31st	+/-
Aug'12	91.55	91.25	-0.30
Sep'12	90.45	90.80	0.35
Oct'12	91.55	91.70	0.15
Q4'12	92.45	92.50	0.05
Q1'13	95.65	95.45	-0.20
Q2'13	97.45	97.15	-0.30
Q3'13	99.90	99.70	-0.20
Cal 2013	96.85	96.60	-0.25

Source: globalCOAL

McCloskey Swap Indonesian Sub-Bit ($/t)			
Mid points	Aug 24th	Aug 31st	+/-
Aug-12	61.05	60.70	-0.35
Sep-12	61.75	61.60	-0.15
Oct-12	63.20	63.00	-0.20
Q4 12	63.85	63.55	-0.30
Q1 13	66.33	66.18	-0.15
Q2 13	68.20	67.95	-0.25
Q3 13	69.80	69.65	-0.15
Cal 2013	66.95	66.80	-0.15

Source: Tullet Prebon, Ginga, Marex Spectron

Australia and Indonesia -> Newcastle Index
South Africa -> Richards Bay API4

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SWITCH ON

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THANK YOU

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