



# **INVEST MALAYSIA 2012**

Shangri-La, Kuala Lumpur

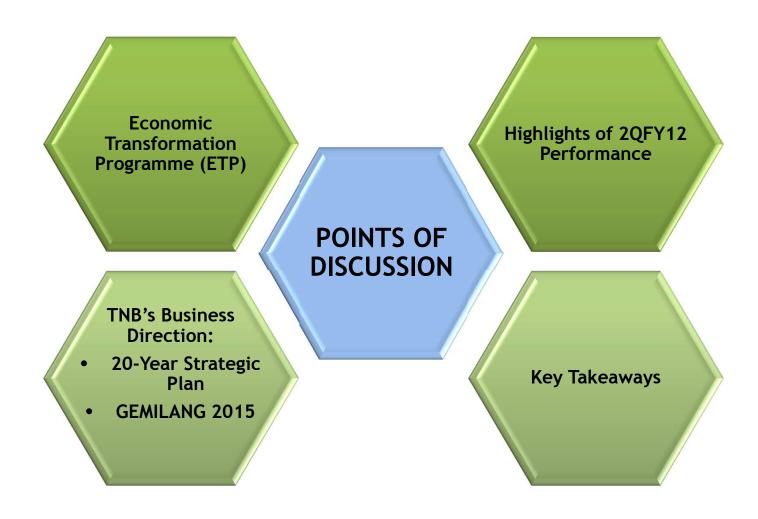
29th May 2012

**Prepared by Investor Relations** 













# POINTS OF DISCUSSION

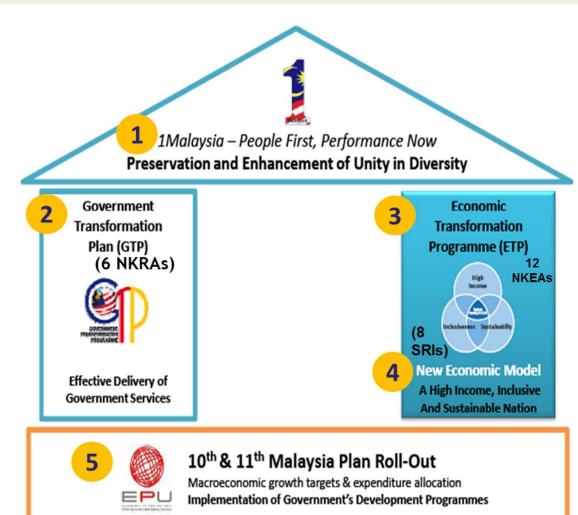
1	ECONOMIC TRANSFORMATION PROGRAMME
2	TNB'S BUSINESS DIRECTION
3	HIGHLIGHTS OF 2QFY12 PERFORMANCE
4	KEY TAKEAWAYS







The Honourable Prime Minister Has Launched 5 Key Initiatives to Drive Malaysia Towards Becoming a Developed Country by 2020





# NEM: Strategic reform initiatives (SRIs)



- S1 Re-energizing the private sector
- S2 Developing a quality workforce
- Creating a competitive domestic economy
- S4 Strengthening the public sector
- Transparent and market friendly affirmative action
- Building the knowledge base and infrastructure
- S7 Enhancing the sources of growth
- S8 Ensuring sustainability of growth

# GTP National Key Result Areas(NKRAs)



- N1 Crime
- N2 Education
- N3 Corruption
- NA Low Income Households
- N5 Urban Public Transport
- N6 Rural Basic Infrastructure





#### **Overview**

#### Propelling Malaysia Towards Becoming A High-Income Developed Nations

 The ETP is a comprehensive effort that will transform Malaysia into a highincome nation by 2020.

6%<sub>p.a</sub>

• It will lift Malaysia's gross national income (GNI) per capita from USD6,700 or RM23,700 in 2009 to more than USD15,000 or RM48,000 in 2020.

**GROWTH** 

- This GNI growth of 6% p.a. will allow us to achieve the targets set under Vision 2020.
- The ETP features <u>131 Entry Point Projects (EPPs)</u> worth USD138bn (RM430bn) and 60 business opportunities over 2011 2020.





**Entry Point Projects (EPPs)** 









113 projects to-date with a combined investment value of RM177.07bn













Entry Point Projects (EPPs) - Tenaga's Role

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



#### **ENSURING RELIABILITY OF ELECTRICITY SUPPLY**







Entry Point Projects (EPPs) - Tenaga's Direct Involvement



Tenaga Nasional - Infrastructure Investment (RM4 billion)

support our

continues to grow. Increased capacity is needed to provide energy to businesses & also growing population of our nation"

"Tenaga will be investing in several major projects in Chairman, Exxonmobil Subsidiaries (M'sia)

2011 with a total capital expenditure of RM4bn"

A new hydroelectric power plant in Ulu Jelai, Pahang (372MW).

• A new hydroelectric power plant in Hulu Terengganu (250MW).

• The Manjung Extension Development which involves the construction of a large coal power plant in Perak (TNB Janamanjung Unit 4 - 1,000MW).

• The reinforcement of power transmission infrastructure projects to ensure supply reliability throughout the nation including locations such as Salak South-Mahkota Cheras, South Pantai and Puchong Perdana-Olak Lampit.

#### **Expected Completion Date**

projects are vital to

economy

U1 (Jul 2016) U2 (Oct 2016)

U1 (Jul 2015) U2 (Oct 2015)

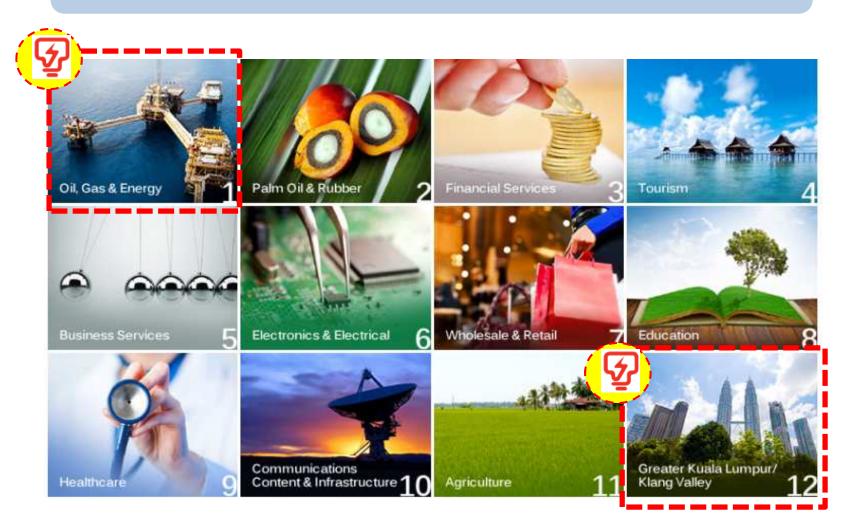
U4 (Mar 2015)





12 National Key Economic Areas (NKEAs)

A driver of Economic Activity that Has the Potential to Directly & Materially Contribute a Quantifiable Amount of Economic Growth to the Malaysian Economy







2 NKEAs that Directly Benefit Tenaga - Potential Customers from Commercial Category

#### GREATER KUALA LUMPUR/KLANG VALLEY

RM21bn GNI 20,000 JOBS

- 1 Building an Integrated Urban Mass Rapid Transit System
  - 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.

RM6.2bn GNI 28,700 JOBS

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





2 NKEAs that Directly Benefit Tenaga - Potential Customers from Commercial Category

#### 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 cosmopolitan and global city.
- These iconic places also generate higher economic activities through additional hotel stays, retail revenues from visitors and locals and additional employment.

#### EMPHASIS OF KLATTRACTIONS



#### GLOBAL CITY

- . Showcasing KL as a world-class developed city
- · Potential focuses include architecture. entertainment, shopping, etc.



#### HERITAGE CENTRE

- . Showing KL as a world heritage site that offers one-of-a-kind cultural experience
- · Potential focuses include historical landmarks, art, natural beauty, etc.

#### APPROACHES TO CREATE GLOBAL ATTRACTIONS



#### TRANSFORM EXISTING ATTRACTIONS

- Leverage existing attraction sites
- · Significantly improve quality, change focus or expand scope



#### BUILD GROUNDBREAKING **NEW ATTRACTIONS**

- · Identify areas of interest that are underutilised
- · Create new attractions with high global standards

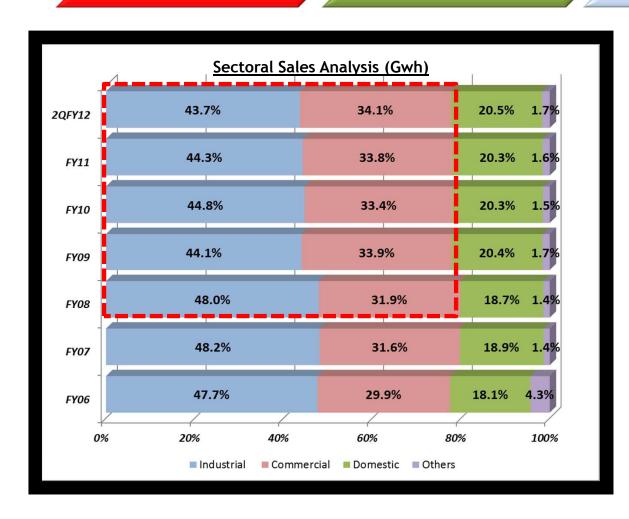


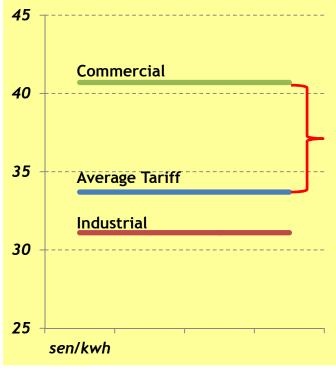


2 NKEAs that Directly Benefit Tenaga - Potential Customers from Commercial Category

Shift from Industrialbased to <u>Service-</u> <u>based economy</u> Increasing market share from Commercial sector

Commercial sector contributes the <u>highest</u> electricity sales <u>margin</u>







2 NKEAs that Directly Benefit Tenaga - Higher Gas Availability

#### OIL, GAS & ENERGY



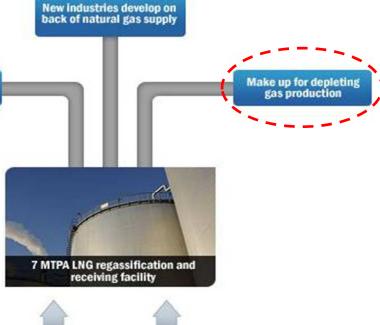
#### Unlocking Premium Gas Demand in Peninsular Malaysia

- 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.

Industries switching from diesel

- The facilities will have a maximum throughput capacity of 3.8mn tonnes per year or about 500mmscfd.
- Out of this total capacity, 200mmscfd will be allocated to the power industry.
- 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.

RM2.4bn GNI RM1.07bn INVESTMENT







# POINTS OF DISCUSSION

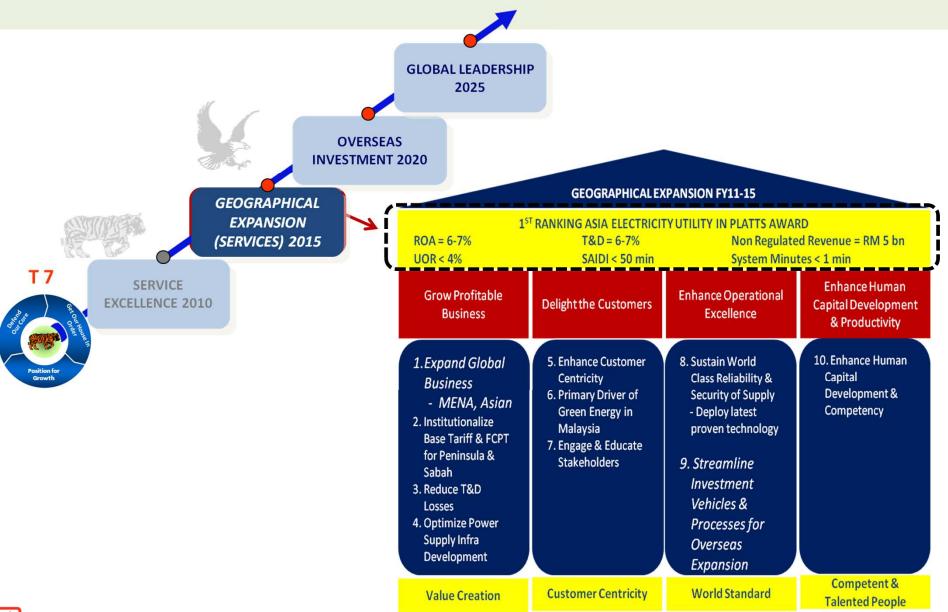
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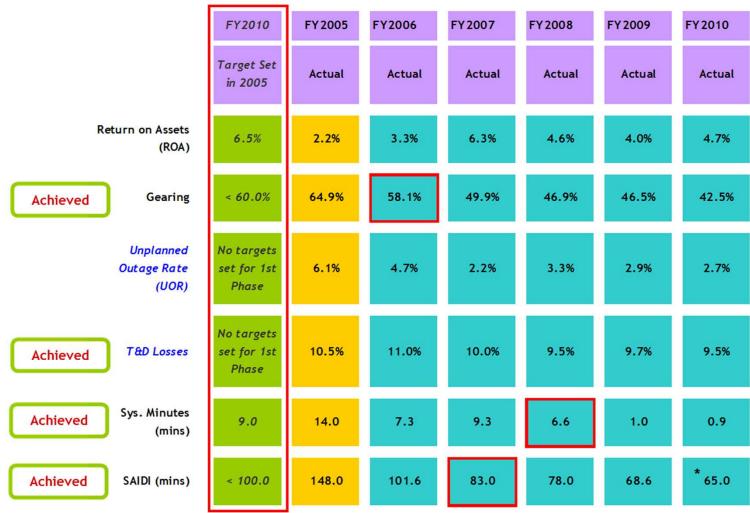
20-Year Strategic Plan





Achievements During 1st Phase: Service Excellence 10/10

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







Headline Key Performance Indicators: 2<sup>nd</sup> Phase - GEMILANG 2015 & As At 2QFY12

	TARGET	ACTUAL	TARGET	YTD F	Y 2012
INITIATIVES	FY 2015	FY 2011	FY 2012	1st Qtr	2 <sup>nd</sup> Qtr
Return on Assets (ROA) (%)	6 - 7	2.1	2.0 - 3.0	2.1	3.2
Company CPU (sen/kwh)	< 29.9	32.7	32.7 - 33.7	33.9	32.3
Revenue from Non-Regulated Business (RM bn)	5.0	1.8	1.8 - 1.9	0.4	1.0
Unplanned Outage Rate (UOR)(%)	< 4.0	7.1	3.6 - 4.0	6.0	4.4
T & D Losses (%)	6 - 7	9.0	8.7 - <9.3	8.5	8.7
Transmission System Minutes (mins)	< 1.0	1.0	1.1 - 2.5	0.2	0.2
Distribution SAIDI (mins)	< 50.0	78.9	>75.0 - 80.0	14.6	27.5





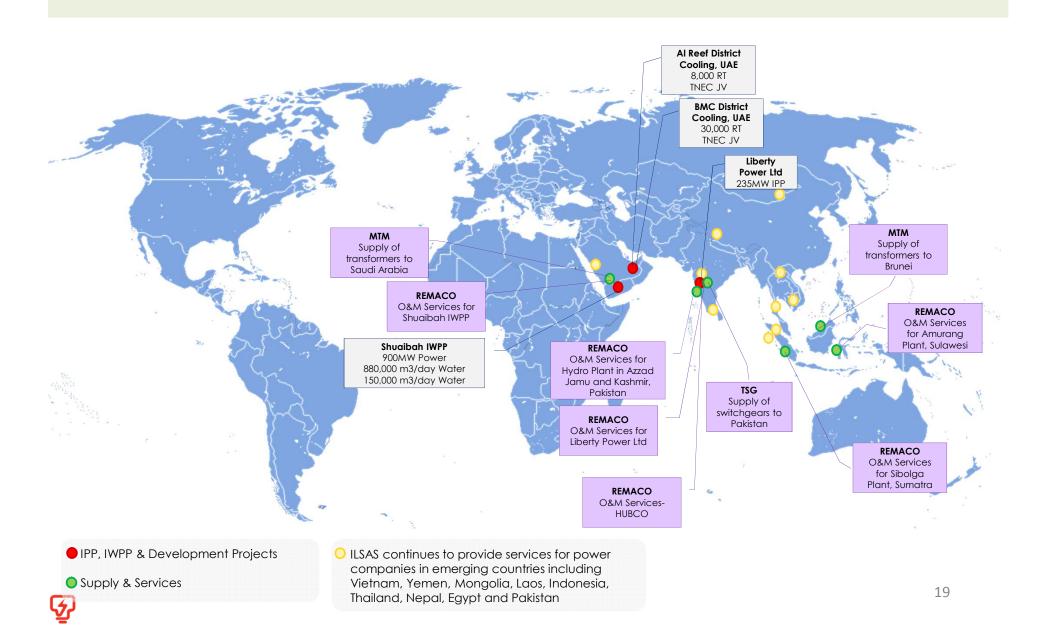
2<sup>nd</sup> Phase - Geographical Expansion (GEMILANG 2015)

- Tenaga is currently in the 2<sup>nd</sup> 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
  - HUBCO, 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.



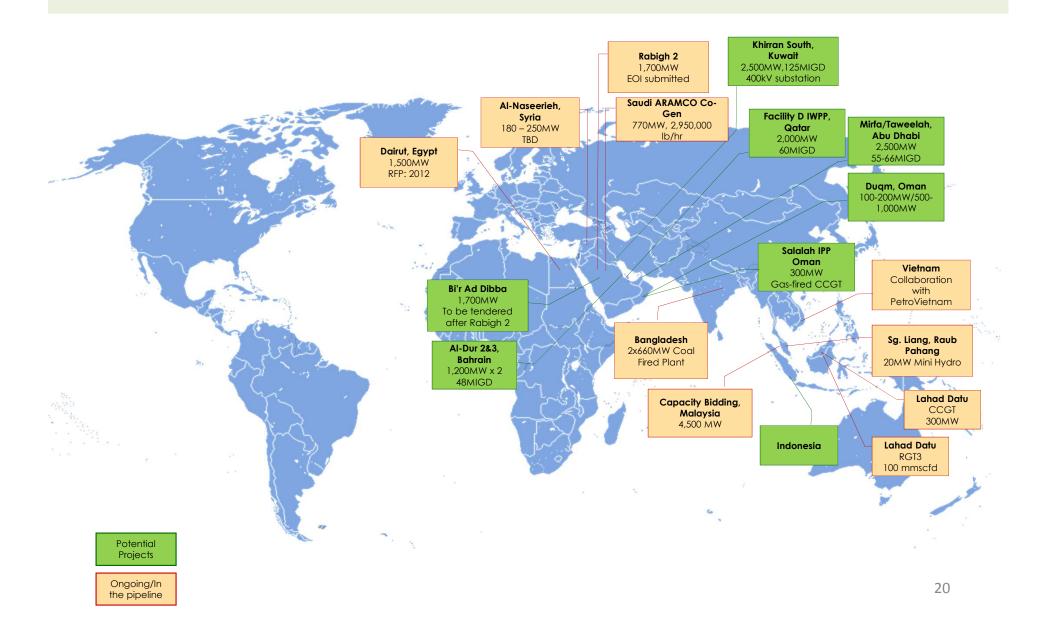
#### **Experience - Global Footprint**





# **Experience - Global Footprint**







# TNB's BUSINESS DIRECTION Successful Projects



#### TNB Liberty Power Ltd. ("LPL"), Pakistan

235 MW gas fired combined cycle power plant in Daharki, Province of Sindh, Pakistan

- Commercial operation date: 10 September 2001
- Total project cost: US\$272 million
- PPA terms: 25 years
- LPL is currently operating at full capacity



#### Shuaibah Phase 3 IWPP, Saudi Arabia

Shuaibah Phase 3 Independent Water and Power Project, the first IWPP in the Kingdom of Saudi Arabia

- Commercial operation date: 14 January 2010
- Total project cost: US\$2.5 billion
- PWPA terms: 20 years
- Power Island: 900 MW Crude-oil Fired Power Plant including 380kV sub-station, FGD installation and Special Electric & Fuel Facilities by Siemens AG)
- Water Island: Desalinated Water 880,000 m3/day (194 MIGD), 12 units of Multi Stage Flashing distillers (by Doosan)



#### Shuaibah Expansion, Saudi Arabia

Reverse Osmosis plant, an expansion of the Shuaibah's project in Kingdom of Saudi Arabia

- Commercial operation date: 17 November 2009
- Total project cost: US\$232 million
- PPA terms: 20 years
- RO Water 150,000 m3/day (33 MIGD) (by Doosan)



# POINTS OF DISCUSSION

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# HIGHLIGHTS OF 2QFY12 PERFORMANCE Key Highlights

#### 3 months ended 29th February FY2012 (2<sup>nd</sup> Quarter )

- Net profit of RM2,815.2 million
- Recognition of fuel cost compensation of RM2.023 billion
- 0.8% decline in Group Revenue as compared to 1st Quarter 2012 against 10.5% decline in Operating Expenses
- Average coal price of USD108.5/mt as compared to USD110.0/mt in the last quarter
- EBITDA margin at 49.0% as compared to 15.1% reported for the previous quarter

#### 6 months FY2012

- Net profit of RM2,590.5 million
- 14.7% increase in Group Revenue against a 20.5% increase in Operating Expenses
- Average coal price of USD109.3/mt as compared to USD100.0/mt in the 1st Half FY2011
- 4.1% Unit electricity demand growth in Peninsular Malaysia
- EBITDA margin at 32.0% as compared to 26.2% reported for the corresponding period in FY2011







#### **Unaudited Income Statement (Group)**

- 14.7% increase in Group Revenue against 20.5% increase in Operating Expenses
- 73.8% increase in Operating Profit Mainly Resulting From Fuel Cost Compensation Received
- Net Profit Attributable to the Owners of the Company of RM2.59bn

RM'mn	YTD FY 2011	YTD FY 2012	Variance %
Continuing Operations:			76
Revenue	15,102.5	17,322.6	14.7
Operating expenses	(13,351.6)	(16,090.8)	(20.5)
Operating income	252.7	2,250.3	>100.0
Operating profit	2,003.6	3,482.1	73.8
Forex			
- Transaction Gain / (Loss)	34.9	(3.2)	>100.0
- Translation Gain / (Loss)	47.6	209.3	>(100.0)
Share of results of jointly controlled			
entities and associates (net of tax)	24.9	(10.7)	>(100.0)
Profit before finance cost	2,111.0	3,677.5	74.2
Finance income	192.8	102.3	(46.9)
Finance cost	(416.3)	(410.1)	1.5
Profit before taxation	1,887.5	3,369.7	78.5
Taxation and Zakat			
- Company and subsidiaries	(373.8)	(626.6)	(67.6)
- Deferred taxation	(40.0)	(155.3)	>(100.0)
Profit from continuing operations	1,473.7	2,587.8	75.6
Discontinued Operations:			
Profit/ (Loss) from discontinued operations (net of tax)	-	-	-
Profit for the financial period	1,473.7	2,587.8	75.6
Attributable to:			
- Owners of the Company	1,470.5	2,590.5	76.2
- Non-controlling interests	3.2	(2.7)	>(100.0)
	1,473.7	2,587.8	75.6





# ANALYSIS OF FINANCIAL RESULTS BEFORE FUEL COST COMPENSATION





#### Unaudited Income Statement (Group) Excluding Fuel Cost Compensation

- 27.2% decrease in Operating Profit Resulting from Higher Fuel Cost
- Estimated Reimbursement for Cost Sharing of RM0.25bn
- Net Profit Attributable to the Owners of the Company of RM1.3bn (including the estimated reimbursement for Cost Sharing)

RM'mn	YTD	FY 2011	YTD FY 2012	Variance %
Continuing Operations:				
Revenue		15,102.5	17,322.6	14.7
Operating expenses		(13,351.6)	(16,090.8)	(20.5)
Operating income		252.7	227.3	(10.1)
Operating profit		2,003.6	1,459.1	(27.2)
Forex				
- Transaction Gain / (Loss)		34.9	(3.2)	>(100.0)
- Translation Gain / (Loss)		47.6	209.3	>100.0
Share of results of jointly controlled				
entities and associates (net of tax)		24.9	(10.7)	>(100.0)
Profit before finance cost		2,111.0	1,654.5	(21.6)
Finance income		192.8	102.3	(46.9)
Finance cost		(416.3)	(410.1)	1.5
Profit before taxation	·	1,887.5	1,346.7	(28.7)
Taxation and Zakat				
- Company and subsidiaries		(373.8)	(120.6)	67.7
- Deferred taxation		(40.0)	(155.3)	>(100.0)
Profit from continuing operations		1,473.7	1,070.8	(27.3)
Estimated reimbursement for Cost Sharing				
(net of tax)		-	250.0	> 100.0
Profit for the financial period		1,473.7	1,320.8	(10.4)
Attributable to:				
- Owners of the Company		1,470.5	1,323.5	(10.0)
- Non-controlling interests		3.2	(2.7)	>100.0
		1,473.7	1,320.8	(10.4)







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

The Lower Profit and EBITDA Margin in the 1HFY2012 Mainly from Higher Generation Cost Due to Higher Coal Price & Consumption & Increased Usage of Oil and Distillate

RM mn	YTD	2Q
	FY2011	FY2012
Total Units Sold (GWh)	48,006.6	49,914.5
Revenue	15,102.5	17,322.6
Operating Expenses (before depreciation)	11,403.0	14,028.6
Operating Income	252.7	227.3
EBITDA	3,952.2	3,521.3
EBITDA Margin (%)	26.2%	20.3%
Depreciation and Amortisation	1,948.6	2,062.2
EBIT	2,003.6	1,459.1
EBIT Margin (%)	13.3%	8.4%
Finance Cost	416.3	410.1
Profit Before Tax & Forex Translation	1,839.9	1,387.4
Net Profit Before Forex Translation	1,422.9	1,114.2
Translation Gain / (Loss)	47.6	209.3
Net Profit attributable to:		
Equity Holders	1,470.5	1,323.5
Non-controlling Interest	3.2	(2.7)

	6 Months (Sept'11-Feb'12)			
	FY'11	FY'12	Var (%)	
Average Coal Price Consumed (USD/MT) *				
FOB	83.1	99.6	19.9%	
Freight	16.3	9.2	-43.6%	
Others	0.6	0.5	-16.7%	
CIF	100.0	109.3	9.3%	
Average Coal Price Consumed (RM/MT) (CIF)	309.8	339.6	9.6%	
Coal Consumption (mn MT)	9.1	10.0	9.9%	





Operating Expenses - Year-on-Year Analysis

20.5% Increase in Operating Expenses Mainly from Higher Generation Costs

RM'mn
Total IPP Purchases/Cost
Fuel Costs
Repair & Maintenance
Staff Costs
TNB General Expenses
Subs Gen Exp, Cost of Sales & Provision
Depreciation & Amortisation

YTD	YTD	Variance	Variance
1HFY2011	1HFY2012	RM mn	%
6,030.2	6,949.0	918.8	15.2
2,717.7	4,134.7	1,417.0	52.1
584.5	713.8	129.3	22.1
1,463.0	1,373.7	(89.3)	(6.1)
358.9	543.2	184.3	51.4
248.7	314.2	65.5	26.3
1,948.6	2,062.2	113.6	5.8
13,351.6	16,090.8	2,739.2	20.5





Fuel Analysis - Year-on-Year Generation Mix

Y-o-Y Analysis Shows Higher Generation Cost from Higher Coal Price & Consumption & Increased Usage of Oil and Distillate

Fuel Cost (RM mn)					
Fuel	6 Months		Variance		
Туре	YTD FY'11	YTD FY'12	RM mn	%	
Gas	2,381.7	2,893.2	511.5	21.5	
Coal	2,977.9	3,536.2	558.3	18.7	
Dist.	41.1	552.6	511.5	>100.0	
Oil	173.6	783.9	610.3	>100.0	
Hydro	0.0	0.0	-	0.0	
Total	5,574.3	7,765.9	2,191.6	39.3	

	Units Generated (Gwh)					
Fuel	6 Months		Varia	ance		
Туре	YTD FY'11	YTD FY'12	Gwh	%		
Gas	24,441.8	22,953.6	(1,488.2)	(6.1)		
Coal	21,533.3	23,534.6	2,001.3	9.3		
Dist.	76.8	974.4	897.6	>100.0		
Oil	439.8	1,480.9	1,041.1	>100.0		
Hydro	3,069.5	3,040.4	(29.1)	(0.9)		
Total	49,561.2	51,983.9	2,422.7	4.9		

6 Months (Sept-Feb)

Consumption	1HFY2011	1HFY2012	Variance
Oil (MT)	110,501	351,622	241,121
Distillate (mn litres)	28	224	196

	FY'11	FY'12	Var (%)
Average Coal Price			
Consumed (USD/MT) *			
FOB	83.1	99.6	19.9%
Freight	16.3	9.2	-43.6%
Others	0.6	0.5	-16.7%
CIF	100.0	109.3	9.3%
Average Coal Price Consumed (RM/MT) (CIF)	309.8	339.6	9.6%
Coal Consumption (mn MT)	9.1	10.0	9.9%





Quarter-On-Quarter Analysis (Excluding Fuel Cost Compensation)

The Higher Profit in the 2QFY2012 is Due To Lower Usage of Alternative Fuels and the Stronger Ringgit

RM mn	FY20	012
	1Q	2Q
Total Units Sold (GWh)	25,225.0	24,689.5
Revenue	8,694.4	8,628.2
Operating Expenses (before	7,475.7	6,552.9
depreciation)	7,473.7	0,332.7
Operating Income	94.9	132.4
EBITDA	1,313.6	2,207.7
EBITDA Margin (%)	15.1%	25.6%
Depreciation and Amortisation	1,016.1	1,046.1
EBIT	297.5	1,161.6
EBIT Margin (%)	3.4%	13.5%
Finance Cost	181.9	228.2
Profit Before Tax & Forex Translation	203.7	933.7
Net Profit Before Forex Translation	194.4	669.8
Translation Gain / (Loss)	(419.1)	628.4
Net Profit attributable to :		
Equity Holders	(224.7)	1,298.2
Non-controlling Interest	1.7	(4.4)

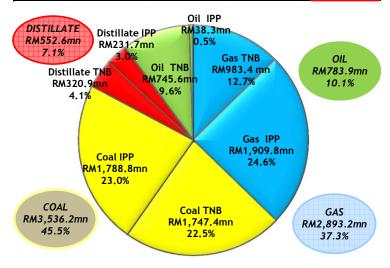




Industry Generation in Peninsula (TNB & IPPs): Y-o-Y Analysis

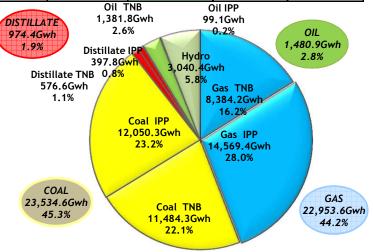
- Coal Represents 45.3% of the Industry Generation Mix
- 6.1% Decline in Gas Generation Mainly Attributed By Gas Curtailment
- 39.3% Increase in Fuel Cost from Higher Gas & Coal Price and Higher Utilisation of Oil and Distillate

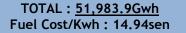
Fuel Cost (RM mn)										
Fuel	6 Mo	nths	V arianc e							
Туре	YTD FY'11	YTD FY'12	RM mn	%						
Gas	2,381.7	2,893.2	511.5	21.5						
Coal	2,977.9	3,536.2	558.3	18.7						
Dist.	41.1	552.6	511.5	>100						
Oil	173.6	783.9	610.3	>100						
Hydro	0.0	0.0	-	0.0						
Total	5,574.3	7,765.9	2,191.6	39.3						



TOTAL: RM7,765.9mn

Units Generated (Gwh)										
Fuel	6 Mc	onths	Variance							
Туре	YTD FY'11	YTD FY'12	Gwh	%						
Gas	24,441.8	22,953.6	(1,488.2)	(6.1)						
Coal	21,533.3	23,534.6	2,001.3	9.3						
Dist.	76.8	974.4	897.6	>100						
Oil	439.8	1,480.9	1,041.1	>100						
Hydro	3,069.5	3,040.4	(29.1)	(0.9)						
Total	49,561.2	51,983.9	2,422.7	4.9						









Fuel Analysis - Half-Yearly Generation Mix

H-o-H Analysis Shows Lower Generation Costs from Lower Usage of Oil & Distillate

	Fuel Cost (RM mn)												
Fuel		6 Months		Variance									
Туре	1H FY'11	2H FY'11	1H FY'12	RM mn	%								
Gas	2,381.7	2,592.7	2,893.2	300.5	10.4								
Coal	2,977.9	3,568.5	3,536.2	(32.3)	(0.9)								
Dist.	41.1	1,351.0	552.6	(798.4)	>(100.0)								
Oil	173.6	1,393.8	783.9	(609.9)	(77.8)								
Hydro	0.0	0.0	0.0	0.0	0.0								
Total	5,574.3	8,906.0	7,765.9	(1,140.1)	(12.8)								

Units Generated (Gwh)											
Fuel		6 Months	V ariance								
Type	1H FY'11	2H FY'11	1H FY'12	Gwh	%						
Gas	24,441.8	21,942.0	22,953.6	1,011.6	4.4						
Coal	21,533.3	23,614.3	23,534.6	(79.7)	(0.3)						
Dist.	76.8	2,345.1	974.4	(1,370.7)	>(100.0)						
Oil	439.8	2,242.9	1,480.9	(762.0)	(51.5)						
Hydro	3,069.5	2,913.6	3,040.4	126.8	4.2						
Total	49,561.2	53,057.9	51,983.9	(1,074.0)	(2.0)						

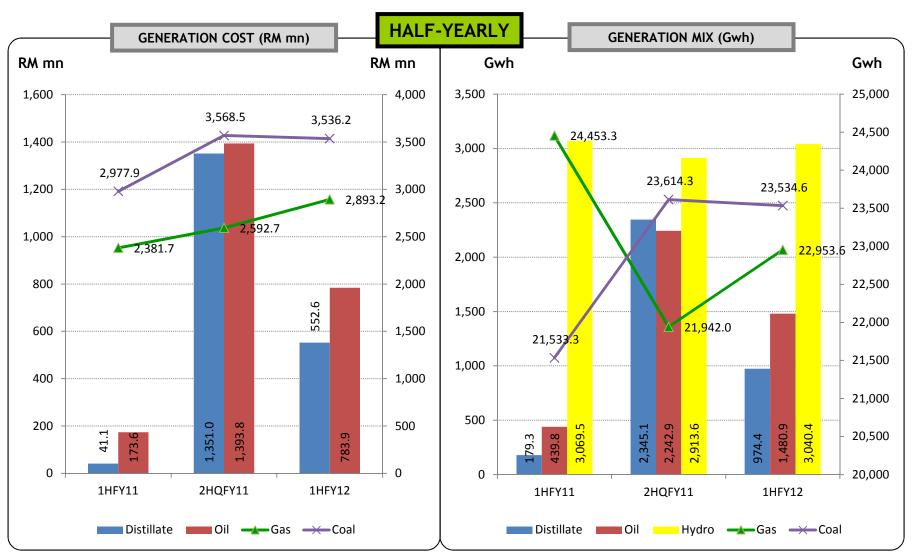
Consumption	1HFY'11	2HFY'11	1HFY'12	Variance	Variance (%)
Oil (MT)	110,501	546,630	351,622	(195,008)	(35.7)
Distillate (mn litres)	28	552	224	(328)	(59.4)





Fuel - Half-Yearly Generation Mix

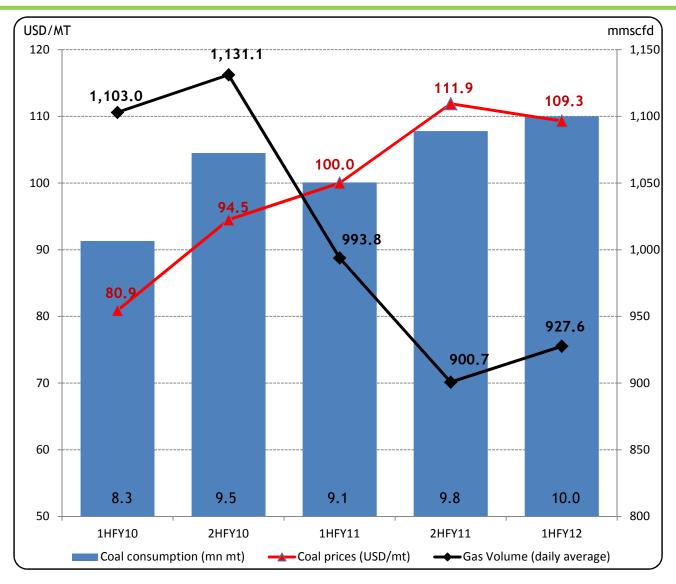
H-o-H Analysis Shows Lower Generation Costs from Lower Usage of Oil & Distillate





Fuel Analysis- Half-Yearly Coal Prices & Coal Consumption

Coal Consumption On the Rising Trend As the Gas Volume Declines
 Coal Prices Continue to be On Upward Trend





#### Fuel Cost Sharing Mechanism

#### Fuel Cost Sharing Mechanism in the Absence of Tariff Adjustment

- The Government has agreed on the implementation of the Fuel Cost Sharing Mechanism, whereby the additional fuel costs incurred will be equally shared by Tenaga, Petronas and Government.
- This cost sharing mechanism is to address the current increased cost borne by Tenaga due to gas shortage.
- The differential cost incurred by Tenaga from 1st Jan 2010 until 31st Oct 2011 amounting to approximately RM3.069 billion.

#### Status of the Fuel Cost Compensation Claims of RM465 million

• We have been submitting fuel cost compensation claim on monthly basis. To-date, we have submitted claim until March 2012 totaling approximately RM0.5 billion. The verification process by Petronas is currently on-going and we hope to get the payment by end of June 2012.

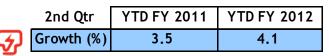




#### Analysis of Electricity Growth M-o-M in Peninsula

#### For 1HFY2012, Peninsula Reported 4.1% Growth Y-o-Y

			FY 2011														FY 2012	2		
<u>UNI</u>	UNITS SALES Sept Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug								Aug	Sept	Sept Oct Nov Dec Jan Feb Ma				Mar					
nial	Gwh	3,377	3,072	3,502	3,290	3,423	3,445	3,041	3,614	3,497	3,513	3,464	3,627	3,500	3,310	3,620	3,396	3,455	3,247	3,301
Industrial	Growth (%)	1.4	(0.6)	2.1	0.4	2.1	1.3	2.5	3.2	2.5	(0.6)	3.8	5.5	3.6	7.7	3.4	3.2	0.9	(5.7)	8.5
īdi <b>Bi</b>	Gwh	2,612	2,462	2,682	2,398	2,536	2,486	2,342	2,776	2,703	2,759	2,735	2,729	2,687	2,856	2,470	2,677	2,678	2,662	2,612
Commercial	Growth (%)	9.5	6.0	7.5	1.9	2.9	3.1	0.7	4.8	2.5	5.5	6.8	2.8	2.9	16.0	(7.9)	11.6	5.6	7.1	11.5
Ë	Gwh	1,674	1,479	1,604	1,455	1,486	1,422	1,454	1,590	1,652	1,674	1,645	1,600	1,779	1,522	1,577	1,517	1,623	1,610	1,605
Danestic	Growth (%)	8.6	7.7	10.5	6.2	(0.1)	0.9	(6.7)	(4.2)	1.3	1.9	7.4	2.6	6.3	2.9	(1.7)	4.3	9.2	13.2	10.4
ν.	Gwh	116	123	123	124	126	120	113	127	124	132	121	124	163	166	69	134	141	131	132
Others	Growth (%)	9.4	16.0	10.8	8.8	0.8	11.1	(3.4)	6.7	6.9	17.9	(4.7)	9.7	40.5	35.0	(43.9)	8.1	11.9	9.2	16.8
TOTAL	Gwh	7,779	7,136	7,911	7,267	7,571	7,473	6,950	8,107	7,976	8,078	7,965	8,080	8,129	7,854	7,736	7,724	7,897	7,650	7,650
Δ	Growth (%)	5.7	3.5	5.7	2.2	1.9	1.9	(0.2)	2.2	2.3	2.2	5.4	4.1	4.5	10.1	(2.2)	6.3	4.3	2.4	10.1
		15	t Qtr FY 5.0%	"11	<b>2</b> r	od Qtr F\ 2.0%	<b>('11</b>	<b>3</b> r	d Qtr FY 1.5%	"11	4 <sup>t</sup>	Otr FY	'11	1	st Qtr F 3.9%		2	nd Qtr F 4.3%		



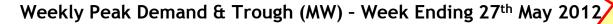
12 Months FY'11 3.1% 7 Months FY'12 4.9%

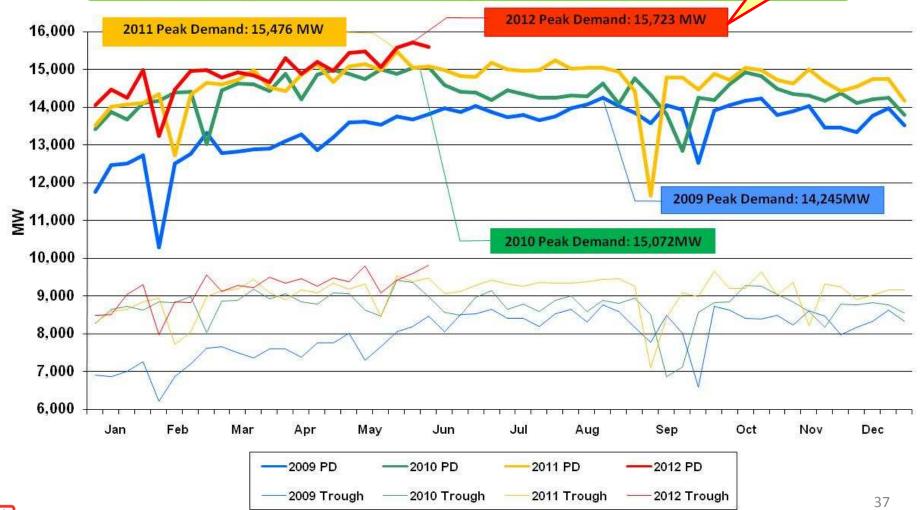
# **ELECTRICITY DEMAND GROWTH IN PENINSULA**



System Weekly Peak Demand For FY2009/10 to FY2012/13

New Peak
Demand
recorded on
16th May 2012



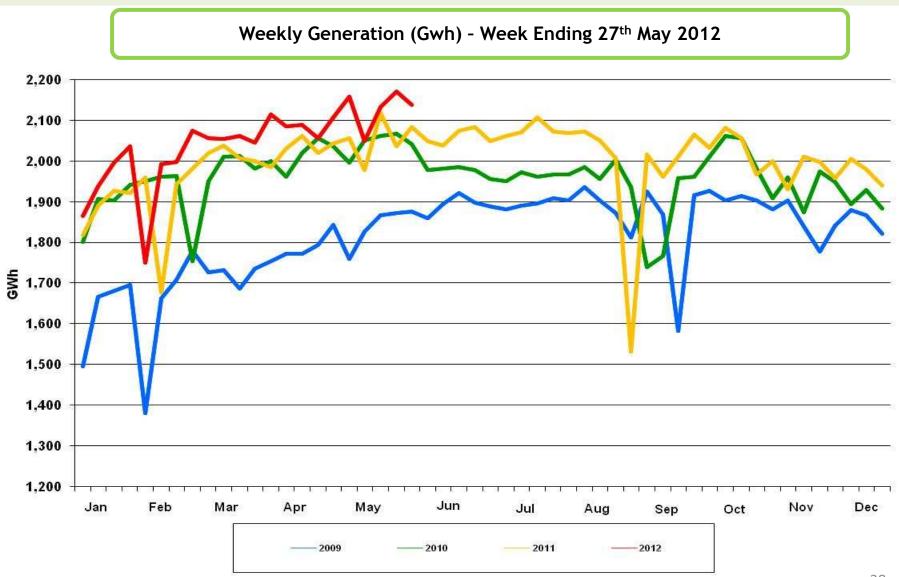






## **ELECTRICITY DEMAND GROWTH IN PENINSULA**

Weekly Electricity Demand Growth For FY2009/10 to FY2012/13





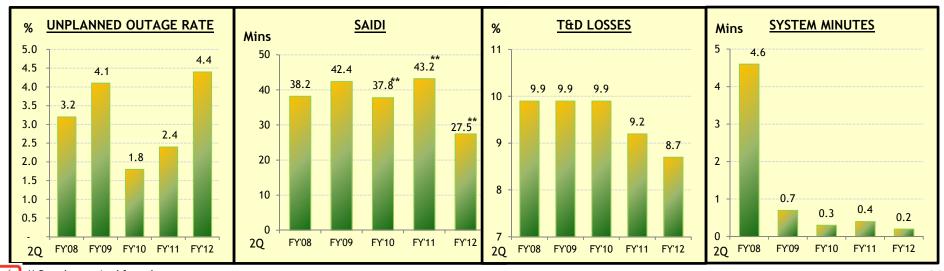


#### Financial & Technical 5-Year Performance

#### **FINANCIAL RATIOS**



#### **TECHNICAL PERFORMANCE**



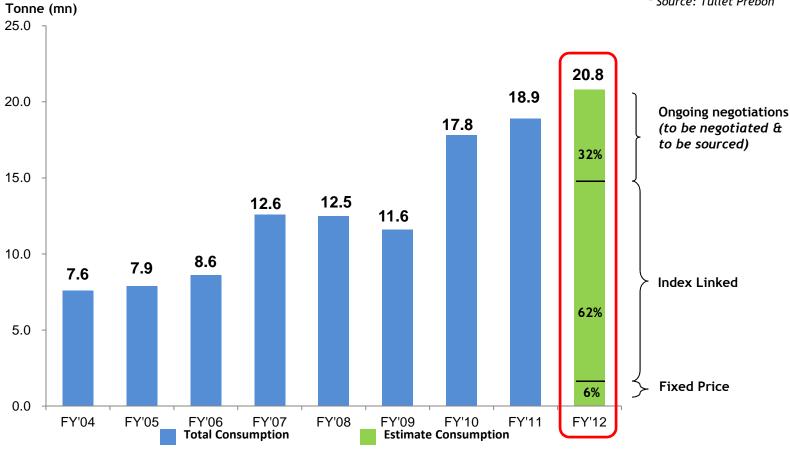


## **Coal Requirement**

#### Coal Procurement Estimate for FY2012 at 20.8 mn MT

	FY'04	FY'05	FY'06	FY'07	FY'08	FY'09	FY'10	FY'11	1HFY'12	FY'12f*	CY'13f*
Average Coal Price (CIF) (USD/metric tonne)	34.0	49.8	52.8	45.3	76.4	90.2	88.2	106.9	109.3	110.0	110.5

\* Source: Tullet Prebon



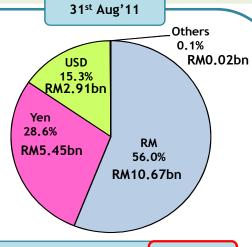




**Debt Exposure & Forex** 

### Increase in Ringgit Loan Mainly Due To New Sukuk by TNBJ of RM4.9bn

DM bo



* Total Debt	RM19.1bn		
Net Debt	RM15.1bn		
Gearing (%)	38.6		
Net Gearing (%)	30.6		

Fixed:Floating 96.8%: 3.2%
[Based on final exposure, Fixed:Floating 100.0%: 0.0%]

Weighted Average Cost of Debt 4.94% [Based on final exposure, 5.09%]

USD/RM : 2.98

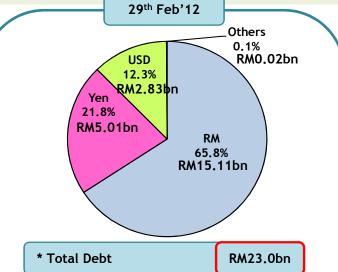
100YEN/RM : 3.88

USD/YEN : 76.80

	KM DN
Total Debt 31/08/11	19.1
- Debt Repayment	(1.0)
+ Drawdowns	5.0
- Others *	(0.1)
Total Debt 29/02/12	23.0

<sup>\*</sup> Others include Forex Translation Loss & Accrual

	Exchange Rate			
	USD:RM	100 YEN:RM		
31/8/2011	2.977	3.880		
30/9/2011	3.188	4.155		
31/10/2011	3.064	3.887		
30/11/2011	3.177	4.073		
31/12/2011	3.177	4.095		
31/1/2012	3.050	3.999		
29/2/2012	2.995	3.721		



 Gearing (%)
 39.5

 Net Gearing (%)
 24.0

**Net Debt** 

RM13.9bn

Fixed:Floating 97.7%: 2.3%
Based on final exposure, Fixed:Floating 100.0%: 0.0% ]

Weighted Average Cost of Debt 4.82% [Based on final exposure, 4.93%]

USD/RM : 2.99

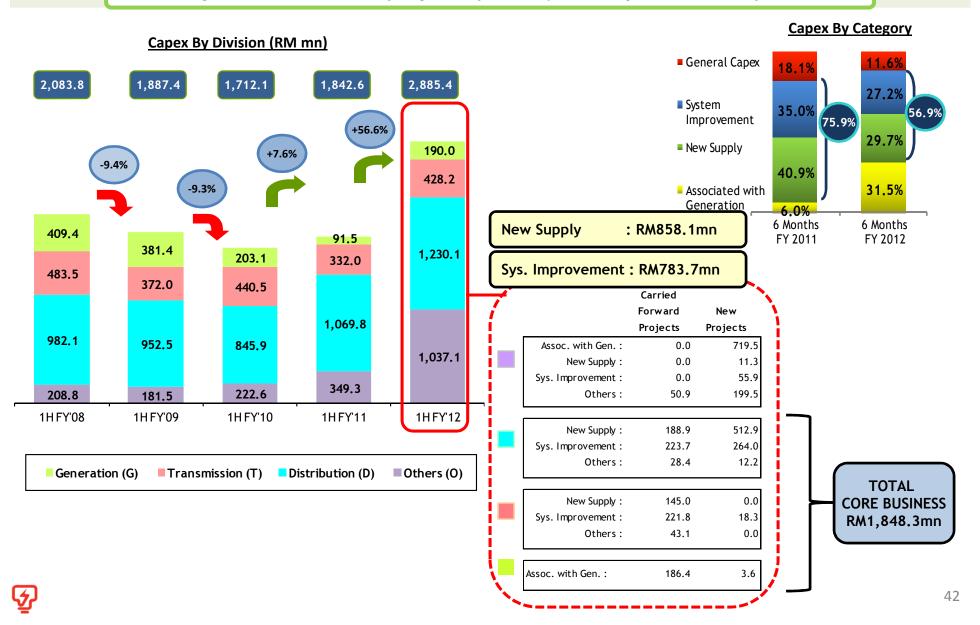
100YEN/RM : 3.72

USD/YEN : 80.38



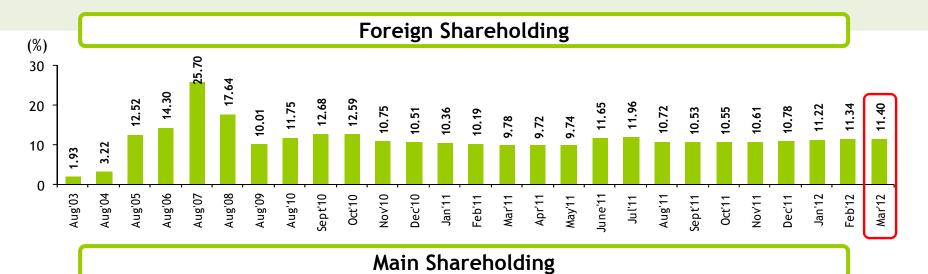
Capital Expenditure

### Higher CAPEX from Manjung 4 Project & System Improvement Projects





## **Shareholding**



	Aug'09	Aug'10	Aug'11	Nov11	Feb'12	Variance (Feb'12 & Aug'11)
Name	%	%	%	%	%	%
Khazanah Nasional Berhad	37.78	35.65	35.55	35.55	35.54	(0.03)
Employees Provident Fund Board	13.99	12.48	13.17	13.56	13.35	1.37
Skim Amanah Saham Bumiputera	9.60	9.59	9.90	9.93	11.24	13.54
Kumpulan Wang Persaraan	3.15	2.88	3.75	3.75	3.92	4.53
Other Corporations & Govt. Agencie	19.51	24.92	20.13	20.07	18.41	(8.54)
Subtotal	84.03	85.52	82.50	82.86	82.46	(0.05)
Foreign	10.01	11.75	10.72	10.61	11.34	5.78
Malaysian Public	5.96	2.73	6.78	6.53	6.20	(8.55)
Total	100.00	100.00	100.00	100.00	100.00	
Paid Up Capital (mn shares)	4,337.00	4,352.70	5,456.60	5,456.70	5,457.50	





# POINTS OF DISCUSSION

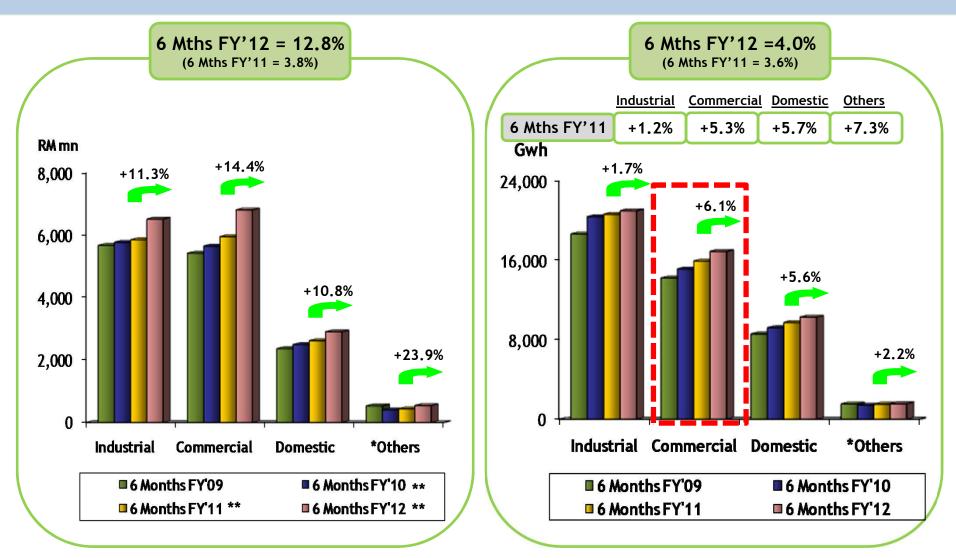
1	ECONOMIC TRANSFORMATION PROGRAMME
2	TNB'S BUSINESS DIRECTION
3	HIGHLIGHTS OF 2QFY12 PERFORMANCE
4	KEY TAKEAWAYS







# Demand Growth Driven by Commercial Sector



<sup>\*</sup> Includes Specific Agriculture, Mining, Public Lighting, LPL & EGAT



<sup>\*\*</sup> Revenue For FY2010, FY2011 & FY2012 exclude accrued revenue

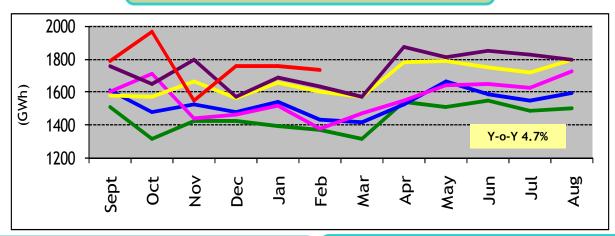
(-) Indicates Negative Growth



# **Demand Growth Driven by Commercial Sector**

Commercial Sectors\* Recorded Positive Growth Y-o-Y of 5.6%



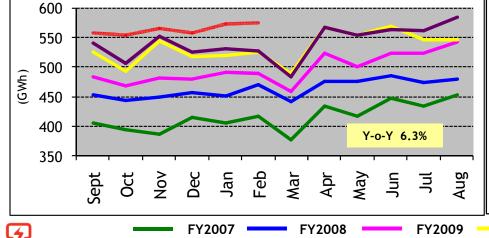


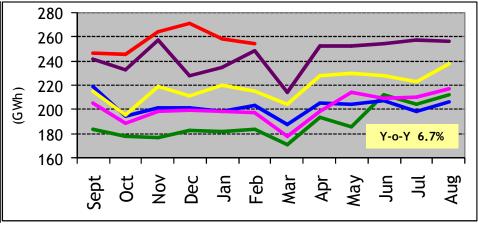
FY2010

\* Peninsula

#### **Medium Voltage** Shopping Malls, 3 Star Hotels, Office Buildings

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





FY2012

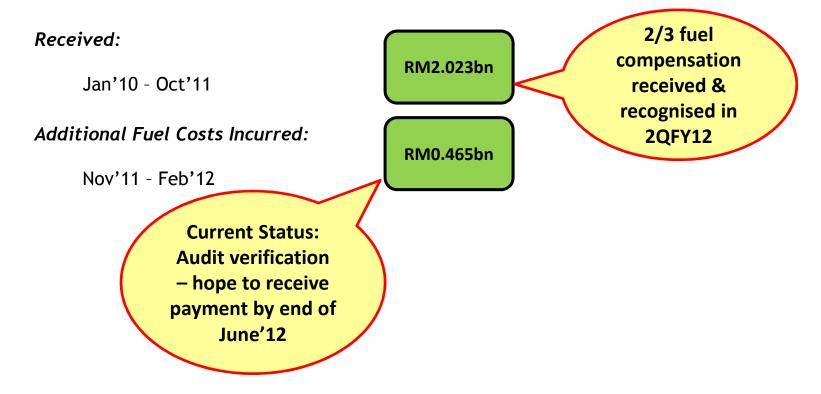
FY2011



2

# Strong Government Support - Fuel Cost Sharing Mechanism

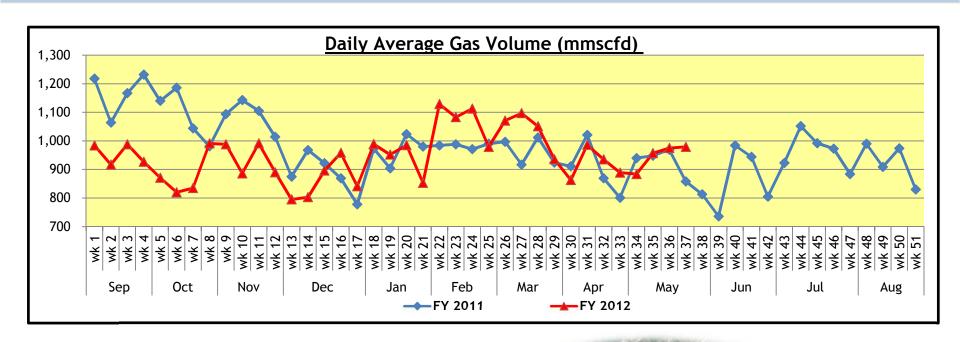
Additional fuel costs (alternative fuel: distillate and oil) incurred resulting from gas shortages will be <u>equally borne</u> by three parties; Tenaga, Petronas and Government





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Improving Gas Volume and Better Outlook for Gas Supply by Sept'12 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





Base Tariff Revision in June 2011 has Cushioned the Impact of Rising Generation Costs

"Base case tariff review set relief for Tenaga and came sooner-thanexpected"

Analysts' Report published in June 2011

Average 2.0% increase in base tariff was granted to partly recover for the increase of electricity cost of supply since June 2006.







# 5 Tenaga's Credit Ratings Reaffirmed



Stable Outlook

Credit Analysis Report, April 2012



"Baa1"

Stable Outlook

Special Comment, February 2012



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