Unaudited Consolidated Result for the 2nd Quarter FY2019 Ended 30th June 2019





Presentation to Analyst

30th August 2019











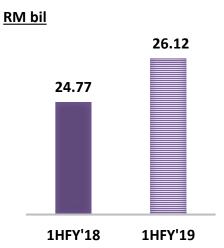
Steady Financial Results Continued into 1HFY'19



KEY HIGHLIGHTS

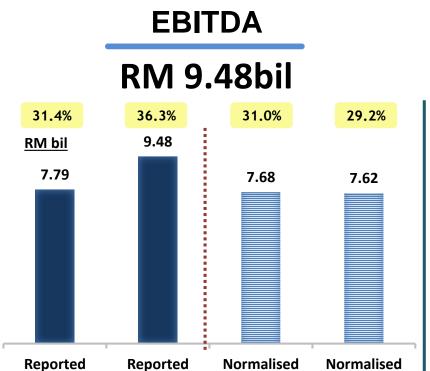
OVERVIEW

REVENUE RM 26.12bil



Higher revenue due to:

Increase in TNB Sales of Electricity on the back of 4.4% Demand Growth



1HFY'18

1HFY'19

Reported EBITDA for 1HFY'19 includes:

1HFY'18

MFRS 16 adjustment (Capacity Payment) of RM2,192,9mil

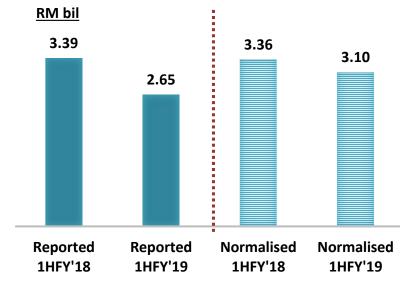
1HFY'19

- Impairment of GMR of RM198.3mil in 1QFY'19
- Impairment of financial guarantee for GAMA of RM135.7mil in 1QFY'19

(please refer Appendix 3 for details of Normalised EBITDA)

EBITDA Margin

PAT RM 2.65bil



Reported PAT in 1HFY'19 includes:

- Other Regulatory Adjustments of RM809.5mil
- Negative net MFRS 16 impact of RM112.2mil

(please refer next slide for details of Normalised PAT)

Earnings Remain Strong Supported by Higher Demand Growth



KEY HIGHLIGHTS

Normalised PAT

1H FY'18

Normalised PAT RM3.36bil

(0.32)	
0.08	
0.21	

Components	RM bil	
Normalised PAT	3.36	
Other Regulatory Adjustment	-0.32	
Forex translation loss	+0.08	
Impairment	+0.21	2
Reported PAT 1HFY'18	3.39	

3.39

1 1	FY'18 Other F RM0.64bil (re is equally divi	eflected	in full	in 4QFY'	
2 	Impairment RM206.5mil	made	for	GAMA	of

1H FY'19

Normalised PAT RM3.10bil

Components	RM bil	
Normalised PAT	3.10	1
Net impact of MFRS 16	+0.11	2
Forex translation loss	+0.01	
Impairments	+0.33	
Reported PAT 1HFY'19	2.65	

2.65

0.11

0.01

0.33

Lower mainly due to higher finance cost due to issuance of new funding (IMTN & MCMTN) in 2H FY'18

Please refer to MFRS16 slide

Sustaining High Dividend Payout, 30sen/share for 1HFY'19 Interim Dividend



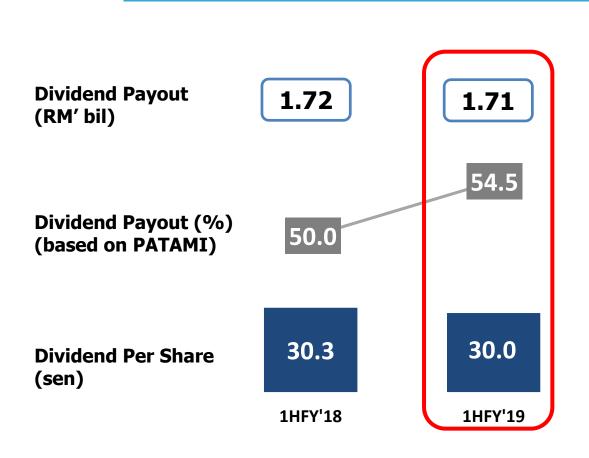
KEY HIGHLIGHTS

DIVIDEND

DIVIDEND POLICY

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

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



	Interim Dividend	Interim Dividend
Group Profit After Tax	3,385.2	2,651.3
Non-controlling Interests	(28.2)	21.7
Group PATAMI (Attributable to Owners of the Company (RM mil)	3,357.0	2,673.0
Total Adjustments	80.6	454.9
1) Impairments	-	334.0
2) Forex Translation Loss	80.6	8.7
3) MFRS 16	-	112.2
Adjusted / Normalised Group PATAMI (RM mil)	3,437.6	3,127.9
Distributable of Adjusted / Normalised Group PATAMI for Dividend (RM mil)	1,718.8	1,706.1
Dividend Payout Ratio (%)	50.0	54.5
Dividend per share (sen)	30.27	30.00

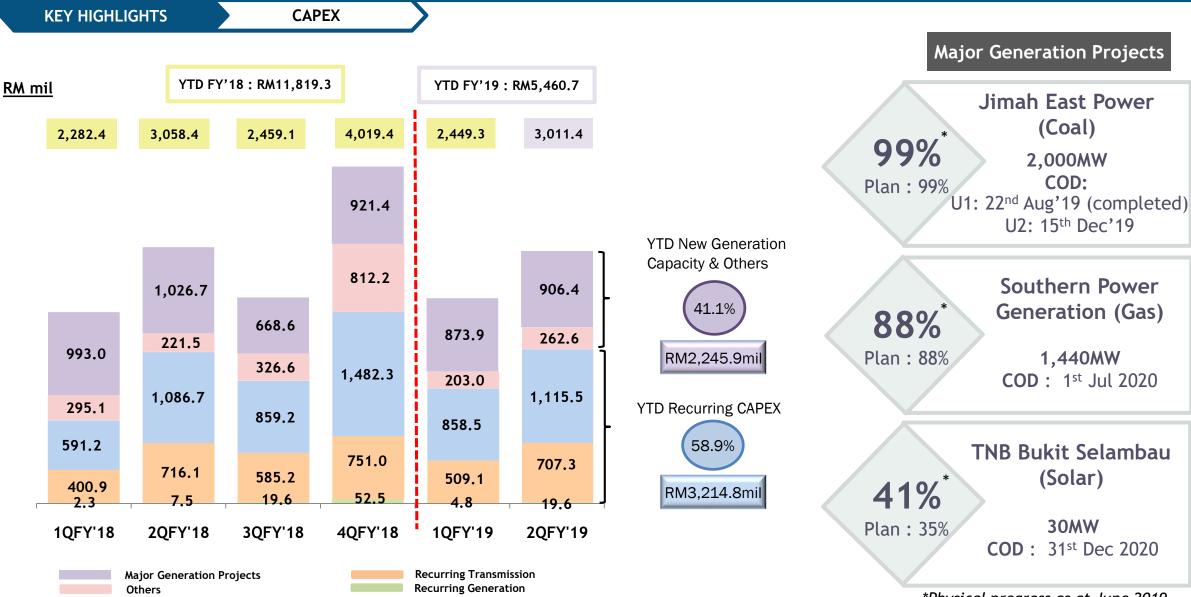
1HFY'18

1HFY'19

Well Managed CAPEX and Major Projects are on Track

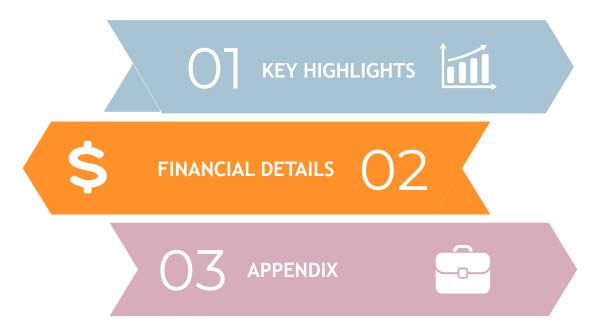
Recurring Distribution





^{*}Physical progress as at June 2019





Increase in Revenue Due to Higher Sales of Electricity



FINANCIAL DETAILS

REVENUE

	1QFY'1	9	2QFY'1	19	1HFY'1	19	1HFY'1	18	Varia (1HFY'19 v	
UNITS SOLD	GWh		GWh		GWh		GWh		GWh	%
- TNB	28,471.1		30,050.0		58,521.1		56,074.5		2,446.6	4.4
- EGAT (Export)	-		-		-		3.8		(3.8)	(100.0)
- SESB	1,354.5		1,449.4		2,803.9		2,633.7		170.2	6.5
- LPL	148.1		368.6		516.7		140.1		376.6	>100.0
- UK WIND (TNBI)	24.1		16.2		40.3		23.7		16.6	70.0
Total Units Sold (GWh)	29,997.8		31,884.2		61,882.0		58,875.8		3,006.2	5.1
REVENUE	RM mil	Sen/ KWh	(RM mil)	Sen/KWh						
Sales of Electricity										
- TNB *	11,331.3	39.8	11,990.2	39.9	23,321.5	39.9	22,243.5	39.7	1,078.00	4.8
- EGAT (Export)	0.1	-	-	-	0.1	-	1.7	44.7	(1.60)	(94.1)
- SESB	461.8	34.1	498.6	34.4	960.4	34.3	901.5	34.2	58.90	6.5
- LPL	88.3	59.6	157.6	42.8	245.9	47.6	95.7	68.3	150.20	>100.0
- UK WIND (TNBI)	31.3	129.9	20.9	129.0	52.2	129.5	30.5	128.7	21.70	71.1
Sales of Electricity	11,912.8	39.7	12,667.3	39.7	24,580.1	39.7	23,272.9	39.5	1,307.2	5.6
LPL Operating Lease (MFRS16)	9.3		(9.3)		-		18.6		(18.6)	(100.0)
Unbilled Revenue	117.0		(221.2)		(104.2)		(47.0)		(57.2)	>100.0
Imbalance Cost Pass-Through	1,369.1		425.8	4	.,,,,,,		879.3		915.6	>100.0
Other Regulatory Adjustment	(523.9)		(285.6)	5	(809.5)		-		(809.5)	
SESB Tariff Support Subsidy	125.3		91.5		216.8		231.0		(14.2)	(6.1)
Total Sales of Electricity	13,009.6		12,668.5		25,678.1		24,354.8		1,323.3	5.4
Goods & Services	170.5		145.8		301.0		261.8		39.2	15.0
Construction contracts	1.6		-		16.9		20.8		(3.9)	
Customers' Contribution	63.1		61.7		124.8		134.5		(9.7)	(7.2)
Total Revenue	13,244.8		12,876.0		26,120.8		24,771.9		1,348.9	5.4

Higher Sales of Electricity due to higher electricity demand in all sectors

Improved performance due to availability of gas supply

- i. Q-o-Q lower due to seasonal revenue cycle (summer months)
- ii. Y-o-Y higher due to as the unit sold reported in 1HFY'18 only for 4 months as the acquisition was in Mar'18
- i. Q-o-Q lower due to lower Coal & LNG price (Refer Appendix <u>Q-o-Q Fuel Cost</u> Table C)
 - ii. Y-o-Y higher due to higher unit generated and consumption from gas (Refer Table C on Y-o-Y Fuel Cost slide)
- Refer Appendix :
 Regulatory Adjustments Part 1 & 2

TNB Sepang Solar units sold as at Jun'19: 56.6 GWh

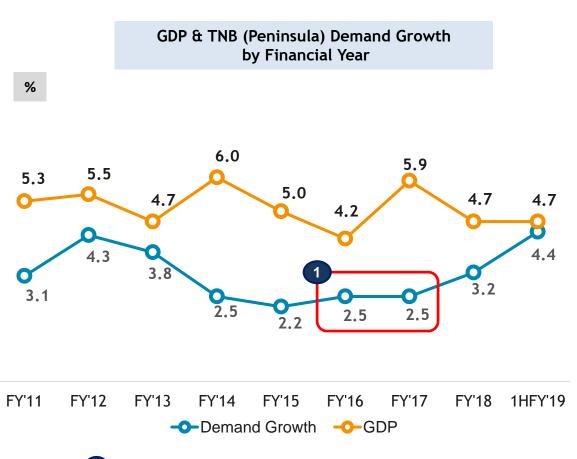
* Without ICPT

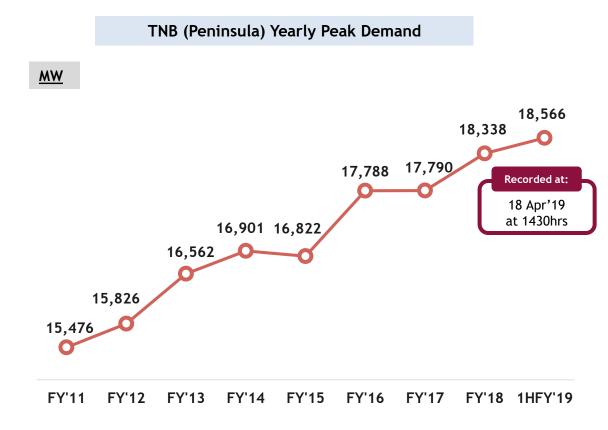
Strong Demand Growth Supported by New Peak Demand in 2QFY'19



FINANCIAL DETAILS

DEMAND GROWTH





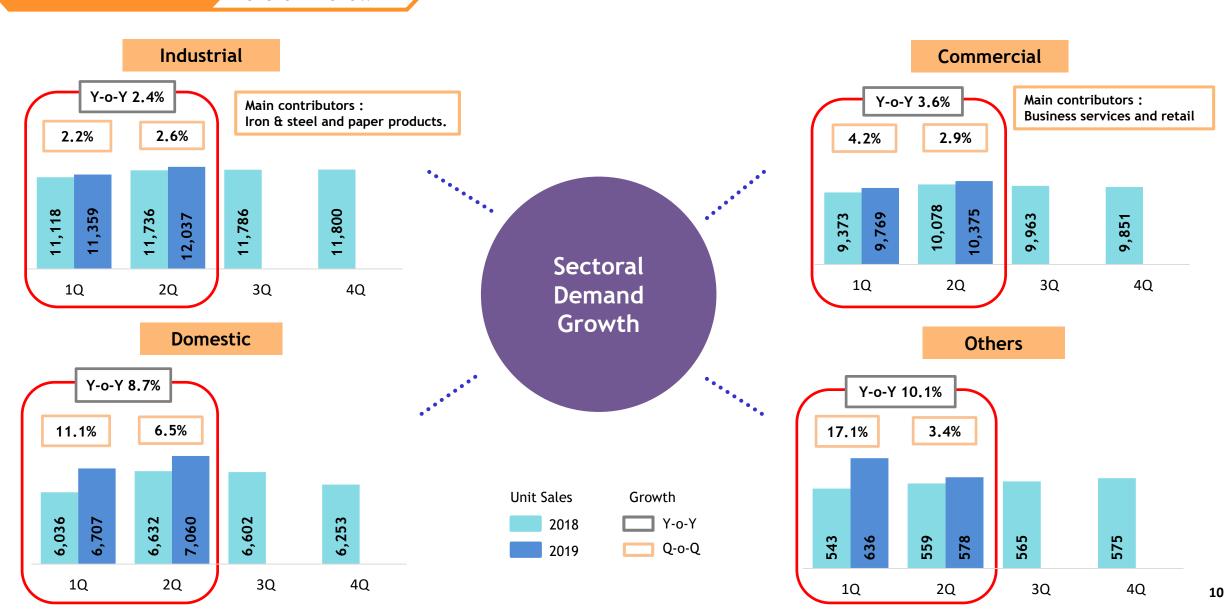
Average demand growth for FY2016 & FY2017. This is to eliminate the one-off El-Nino phenomenon during 3QFY'16

Positive Growth for All Sectors (GWh)



FINANCIAL DETAILS

SECTORAL GROWTH



Operating Expenses within Expectation



FINANCIAL DETAILS

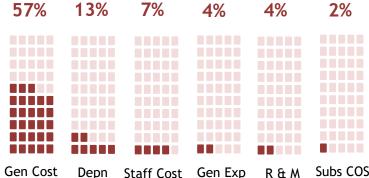
OPEX without MFRS 16

	1QFY'19 (RM mil)	2QFY'19 (RM mil)	1HFY'19	1HFY'18	Varia (1HFY'19 vs	
	Restated	(KM IIIII)	(RM mil)	(RM mil)	RM mil	%
Non-TNB IPPs Costs	4,835.5	4,496.5	9,332.0	7,554.2	1,777.8	23.5
Capacity Payment	1,313.9	1,329.9	2,643.8	2,045.9	597.9	29.2
Energy Payment	3,521.6	3,166.6	6,688.2	5,508.3	1,179.9	21.4
TNB Fuel Costs	2,511.3	3,092.4	5,603.7	5,218.5	385.2	7.4
Fuel Costs	3,164.7	3,232.1	6,396.8	5,512.9	883.9	16.0
Fuel Price Adjustment	(592.0)	(64.8)	(656.8)	(190.6)	(466.2)	>100.0
Fuel Subsidy - SESB	(61.4)	(74.9)	(136.3)	(103.8)	(32.5)	31.3
Total Cost of Generation	7,346.8	7,588.9	14,935.7	12,772.7	2,163.0	16.9
Staff Costs	729.2	1,014.0	1,743.2	1,814.8	(71.6)	(3.9)
Repair & Maintenance	460.7	489.4	950.1	899.4	50.7	5.6
TNB General Expenses	494.7	512.3	1,007.0	909.0	98.0	10.8
Subs. Cost of Sales & Opex	446.3	180.8	627.1	860.1	(233.0)	(27.1)
Total Non-Generation Costs	2,130.9	2,196.5	4,327.4	4,483.3	(155.9)	(3.5)
Total Operating Expenses	9,477.7	9,785.4	19,263.1	17,256.0	2,007.1	11.6
Depreciation & Amortisation	1,632.8	1,670.5	3,303.3	3,084.9	218.4	7.1

Restatement of 1QFY'19 previously reported as:

i. Capacity payment RM1,149.5mil

OPEX (without MFRS 16) against Revenue



Higher Unit Generated in line with Demand Growth



FINANCIAL DETAILS

Y-o-Y FUEL COST

Table A

TNB & IPP Fuel Costs for Peninsula (RM mil)									
Fuel	41157/40	4115/440	Varian	ce					
Type	1HFY'19	1HFY'18	RM mil	%					
Coal	5,627.2	5,360.0	267.2	5.0					
Gas	5,415.9	4,524.7	891.2	19.7					
LNG	183.7	36.6	147.1	>100					
Dist.	15.9	35.0	(19.1)	(54.6)					
Oil	12.3	14.2	(1.9)	(13.4)					
Solar	80.1	0.0	80.1	>100					
Total*	11,335.1	9,970.5	1,364.6	13.7					

^{*} Comprise TNB Fuel Costs & fuel payment to IPPs (part of Energy Payment)

Table B

TNB & IPP Unit Generated for Peninsula (Gwh)								
Fuel	1HFY'19	1HFY'18	Varian	ice				
Type	1111 1 19	1111 1 10	Gwh	%				
Coal	34,898.0	34,703.1	194.9	0.6				
Gas & LNG	26,466.4	24,796.7	1,669.7	6.7				
Dist.	20.7	26.3	(5.6)	(21.3)				
Oil	25.9	36.6	(10.7)	(29.2)				
Hydro	1,648.8	2,590.8	(942.0)	(36.4)				
Solar	303.1		303.1	>100				
Total	63,362.9	62,153.5	1,209.4	1.9				

Table C

	1HFY'19	1HFY'18
Daily Average Gas Volume (mmscfd)	1,016	936
Average LNG Price (RM/mmbtu)	36.16	30.51
Average Piped Gas Price (RM/mmbtu)	27.20	24.20
Average Coal Price Delivered (USD/MT)(CIF)	86.6	91.6
Average Coal Price Delivered (RM/MT)(CIF)	356.8	367.0
Coal Consumption (mil MT)	14.9	15.1
Generation cost per unit (sen/kWh)	17.9	16.0

Table D

Average Coal Price Delivered (USD/MT)								
	1HFY'19	1HFY'18	Variance					
			USD	%				
FOB	78.7	84.0	(5.3)	(6.3)				
Freight	7.4	7.0	0.4	5.7				
Others	0.5	0.6	(0.1)	(16.7)				
CIF	86.6	91.6	(5.0)	(5.5)				

Continuous Effective ICPT Implementation



FINANCIAL DETAILS

ICPT

	1QFY'18 (RM mil)	2QFY'18 (RM mil)	1HFY'18 (RM mil)	1QFY'19 (RM mil)	2QFY'19 (RM mil)	1HFY'19 (RM mil)
Reported Total Cost of Generation (with MFRS16)	6,146.9	6,625.8	12,772.7	6,092.3	6,302.6	12,394.9
Adjustment not related to IBR:	293.7	58.5	352.2	1,671.6	1,107.7	2,779.3
Fuel Price Adjustment	212.6	(22.0)	190.6	592.0	64.8	656.8
MFRS117/16 (Capacity payment)	262.8	315.3	578.1	1,254.5	1,286.3	2,540.8
SESB Net Generation Cost	(181.5)	(159.5)	(341.0)	(122.8)	(118.8)	(241.6)
LPL Fuel Cost	(0.2)	(75.3)	(75.5)	(52.1)	(124.6)	(176.7)
TNB Capacity and VOR: SLA & SPV	1,458.5	1,406.2	2,864.7	1,306.1	1,143.5	2,449.6
Total Generation Costs (Related to IBR)	7,899.1	8,090.5	15,989.6	9,070.0	8,553.8	17,623.8
	1QFY'18 (RM mil)	2QFY'18 (RM mil)	1HFY'18 (RM mil)	1QFY'19 (RM mil)	2QFY'19 (RM mil)	1HFY'19 (RM mil)
Single Buyer Actual Generation Costs: (A)	7,899.1	8,090.5	15,989.6	9,070.0	8,553.8	17,623.8
Actual Sales (Gwh)	27,069.5	29,001.1	56,070.6	28,471.1	30,050.0	58,521.1
Single Buyer Tariff (RM/kwh)	0.2705	0.2705	0.2705	0.2705	0.2705	0.2705
Actual Gen Cost Recovered (RM mn) (B)	7,322.3	7,844.8	15,167.1	7,701.4	8,127.4	15,828.9
ICPT Surcharge (C) (C = A - B)	576.8	245.7	822.5	1,368.6	426.3	1,794.9
(+) Prior Year Accounting Adjustment	57.3	(0.5)	56.8	0.5	(0.5)	(0.0)
ICPT	634.1	245.2	879.3	1,369.1	425.8	1,794.9

1	Coal	price	& Ap	plicable	Coal Price	(ACP	com)	<u>parison</u>
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 1QFY19
 2QFY19

 Average Coal Price Delivered (RM/MT)
 375.3
 340.5

 Average Coal Price Delivered (RM/mmBtu)*
 17.16
 15.56

 ACP (RM/mmBtu) **
 20.99
 16.55

* Based on internal conversion

**Source : Energy Commission Website

In 2QFY'19, the base ACP (RM16.55/mmBtu) used for billing the generators is slightly higher than the coal price paid to supplier (RM15.56/mmBtu). Hence, TNB Fuel over-recovered the differential amount from the generators. Any movement in FPA will be reconciled in the following quarters.

Higher due to MFRS 16 implementation effective 1st January 2019

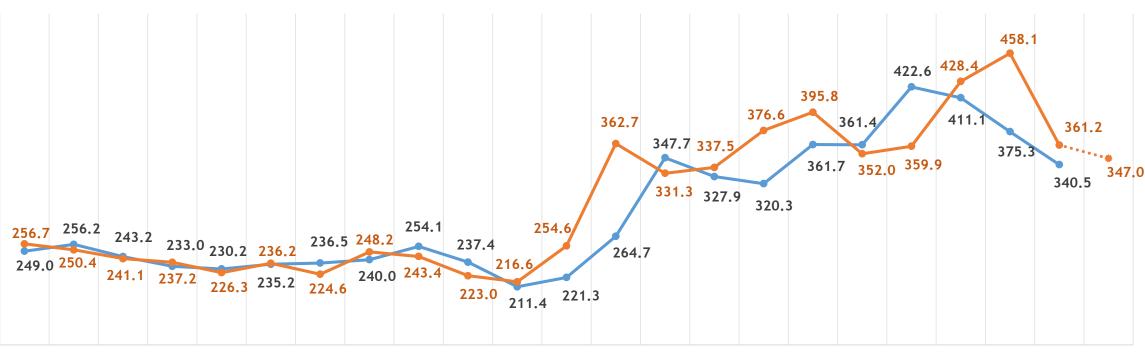
Downward Trending of Coal Price will Relieve Pressure on Future ICPT



FINANCIAL DETAILS

ICPT

Coal Price Trending



1QFY'14 2QFY'14 3QFY'14 4QFY'14 1QFY'15 2QFY'15 3QFY'15 4QFY'15 1QFY'16 2QFY'16 3QFY'16 4QFY'16 1QFY'17 2QFY'17 3QFY'17 4QFY'17 1QFY'18 2QFY'18 3QFY'18 4QFY'18 1QFY'19 2QFY'19 3QFY'19

→ Average Coal Price Delivered (RM/MT)(CIF)

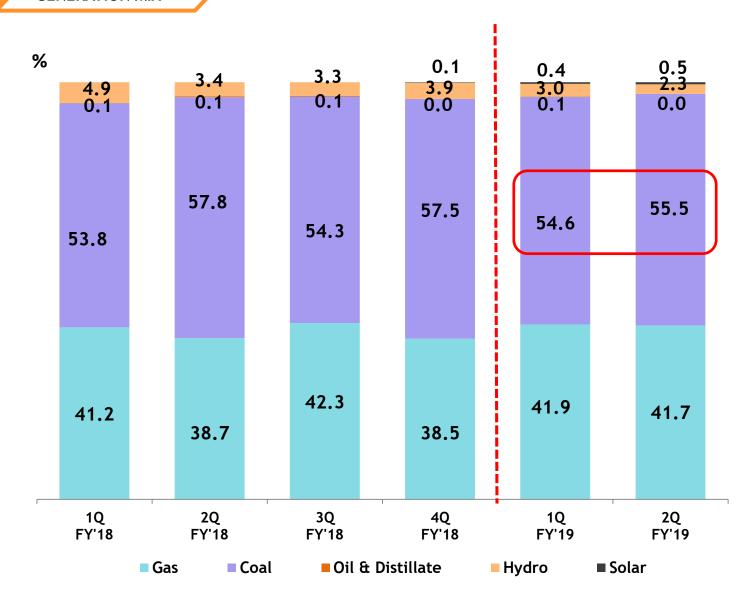
Applicable Coal Price (ACP) (RM/MT)

Higher Unit Generated from Coal in 2QFY'19 in line with Higher Demand



FINANCIAL DETAILS

GENERATION MIX

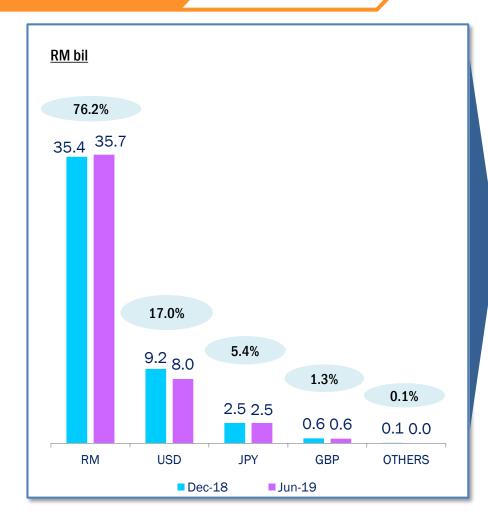


Lower Gearing Level due to Repayment of Mizuho Loan



FINANCIAL DETAILS

GEARING





Statistics	30 th Jun'19	31 st Dec'18
Total Debt (RM' bil)	1 46.8	47.8
Net Debt (RM' bil)*	31.0	29.6
Gearing (%)	43.9	44.8
Net Gearing (%)	29.1	27.7
Fixed : Floating	98:2	95:5
Final Exposure	98:2	95:5
Weighted Average Cost of Borrowing	2 5.03	4.98
Final Exposure **	5.04	4.99

^{*} Net Debt excludes deposits, bank and cash balances & investment in UTF

^{**} Inclusive of interest rate swap

Closing FOREX	30 th Jun'19	31st Dec'18
USD/RM	4.14	4.14
100YEN/RM	3.84	3.75
GBP/RM	5.24	5.27
USD/YEN	107.62	110.28

- Lower mainly due to repayment of Mizuho Loan (USD300mil) amounting of RM1.2bil
- Increase due to repayment of Mizuho Loan with lower interest rate

Net MFRS16 Impact of RM112.2 million to The PAT



FINANCIAL DETAILS

MFRS16

As of 1HFY19, the net impact of MFRS 16 is negative to the PAT by RM112.2mil

Profit & Loss Items (1HFY'19)					
RM mil	With MFRS 16	Without MFRS 16	Variance		
Revenue	26,120.8	26,120.8	0.0		
Capacity Payment	(103.0)	(2,295.9)	2,192.9		
EBITDA	9,477.3	7,284.4	2,192.9		
Depreciation	(4,898.9)	(3,303.3)	(1,595.6)		
Finance Cost	(1,644.6)	(935.1)	(709.5)		
Profit After Tax	2,651.3	2,763.5	(112.2)		

Overall International Investment Performance



FINANCIAL DETAILS

OVERSEAS ASSETS

Vortex

EM: 86%

Higher EBITDA in 1HFY'19 due to higher generation driven by better performance ratio and increased electricity price. GBP 1.35mil cash distribution to TNB has been approved by Vortex Solar Investments' Board in April 2019.

EBITDA	1HFY'18	1HFY'19
GBP mil	16.44	20.46
USD mil	20.06	24.95

14%

Wind Ventures

EM: 74%

Higher EBITDA in 1HFY'19 as compared to 1HFY'18 due to the acquisition was completed on 28 February 2018, hence only 4 months performance for 1HFY'18.

EB	ITDA	1HFY'18	1HFY'19
GE	BP mil	4.25	7.15
US	D mil	5.61	9.25

GAMA

EM: 32%

Lower EBITDA in 1HFY'18 due to high maintenance cost and lower electricity market price.

EBITDA*	1HFY'18	1HFY'19
TRY mil	231.57	330.63
USD mil	61.10	61.97

GMR

EM: 32%

Lower EBITDA in 1HFY'19 due to delay in recognition of revenue relating to regulatory coal pass-through and higher fuel cost.

EBITDA*	1HFY'18	1HFY'19
INR mil	4,584.64	3,512.35
USD mil	66.30	50.63

Shoaibah

EM: 84%

The performance is expected to remain positive with a steady dividend distribution to shareholders.

EBITDA	1HFY'18	1HFY'19
SAR mil	515.33	503.68
USD mil	137.42	134.31

Note:

EM: YTD EBITDA Margin (effective in 1HFY19 we standardized al assets to reflect EBITDA at 100% shareholdings

* Reported 3 months lagging





Year-on-Year (Y-o-Y) Analysis



APPENDIX 1

PROFIT & LOSS

DA4 mil	1HFY'19	41157/14.0	Variance		
RM mil	101119	1HFY'18	RM mn	%	
Revenue	26,120.8	24,771.9	1,348.9	5.4	
Operating expenses (without depreciation)	(16,722.3)	(17,256.0)	533.7	(3.1)	
Net loss on impairment of financial instruments	(369.6)	(109.3)	(260.3)	>100.0	
Other operating income	448.4	382.4	66.0	17.3	
EBITDA	9,477.3	7,789.0	1,688.3	21.7	
EBITDA Margin (%)	36.3%	31.4%			
Depreciation	(4,898.9)	(3,084.9)	(1,814.0)	58.8	
EBIT	4,578.4	4,704.1	(125.7)	(2.7)	
Foreign exchange:					
- Transaction gain / (loss)	(62.7)	(5.2)	(57.5)	>100.0	
- Translation gain / (loss)	(8.7)	(80.6)	71.9	(89.2)	
Share of results of joint ventures	12.1	13.8	(1.7)	(12.3)	
Share of results of associates	70.0	(92.9)	162.9	>100.0	
Profit before finance cost	4,589.1	4,539.2	49.9	1.1	
Fair value of financial instrument	(49.9)	(37.1)	(12.8)	34.5	
Finance income	261.8	209.0	52.8	25.3	
Finance cost	(1,644.6)	(771.8)	(872.8)	>100.0	
Profit from ordinary activities before taxation	3,156.4	3,939.3	(782.9)	(19.9)	
Taxation and Zakat:					
- Company and subsidiaries	(630.6)	(601.6)	(29.0)	4.8	
- Deferred taxation	125.5	47.5	78.0	>100.0	
Profit for the period	2,651.3	3,385.2	(733.9)	(21.7)	
Attributable to:					
- Owners of the Company	2,673.0	3,357.0	(684.0)	(20.4)	
- Non-controlling interests	(21.7)	28.2	(49.9)	>100.0	
Profit for the period	2,651.3	3,385.2	(733.9)	(21.7)	

Notes:

- > 1HFY'19 results includes:
 - Impairment of GMR of RM198.3mil in 1QFY'19
 - Impairment of Financial Guarantee for GAMA of RM135.7mil in 1QFY'19
 - Negative net MFRS 16 impact to the PAT of RM112.2mil

Quarter-on-Quarter (Q-o-Q) Analysis



APPENDIX 2

PROFIT & LOSS

DA4 well	0057/40	4.05)//4.0	Variance		
RM mil	2QFY'19	1QFY'19	RM mn	%	
Revenue	12,876.0	13,244.8	(368.8)	(2.8)	
Operating expenses (without depreciation)	(8,499.1)	(8,223.2)	(275.9)	3.4	
Net loss on impairment of financial instruments	(89.9)	(279.7)	189.8	(67.9)	
Other operating income	226.9	221.5	5.4	2.4	
EBITDA	4,513.9	4,963.4	(449.5)	(9.1)	
EBITDA Margin (%)	35.1%	37.5%			
Depreciation	(2,441.4)	(2,457.5)	16.1	(0.7)	
EBIT	2,072.5	2,505.9	(433.4)	(17.3)	
Foreign exchange:					
- Transaction gain / (loss)	(6.7)	(56.0)	49.3	(88.0)	
- Translation gain / (loss)	(272.2)	263.5	(535.7)	>100.0	
Share of results of joint ventures	6.3	5.8	0.5	8.6	
Share of results of associates	81.9	(11.9)	93.8	>100.0	
Profit before finance cost	1,881.8	2,707.3	(825.5)	(30.5)	
Fair value of financial instrument	7.6	(57.5)	65.1	>(100.0)	
Finance income	133.5	128.3	5.2	4.1	
Finance cost	(940.1)	(704.5)	(235.6)	33.4	
Profit from ordinary activities before taxation	1,082.8	2,073.6	(990.8)	(47.8)	
Taxation and Zakat:					
- Company and subsidiaries	(116.8)	(513.8)	397.0	(77.3)	
- Deferred taxation	164.1	(38.6)	202.7	>(100.0)	
Profit for the period	1,130.1	1,521.2	(391.1)	(25.7)	
Attributable to:					
- Owners of the Company	1,116.2	1,556.8	(440.6)	(28.3)	
- Non-controlling interests	13.9	(35.6)	49.5	>100.0	
Profit for the period	1,130.1	1,521.2	(391.1)	(25.7)	

Normalised EBITDA After MFRS 16 & Impairments Adjustments



APPENDIX 3

Normalised EBITDA

1H FY'18

Normalised EBITDA RM7.68bil

(0.32) 0.21

Components	RM bil		
Normalised EBITDA	7.68		
Other Regulatory Adjustment	-0.32	0	
Impairment	+0.21	2	
Reported EBITDA 1HFY'18	7.79		

7.79

FY'18 Other Regulatory Adjustments of RM0.64bil is equally divided quarterly

Impairment made for GAMA of RM206.5mil

1H FY'19

Normalised EBITDA RM7.62bil

(2.19)

0.33

Components	RM bil	
Normalised EBITDA	7.62	4
MFRS 16 – Capacity Payment	-2.19	1
Impairments	+0.33	2
Reported EBITDA 1HFY'19	9.48	

9.48

Please refer to MFRS 16 slide

Breakdown of the impairments in 1QFY'19:

- Impairment for GMR RM198.3mil
- Impairment of Financial Guarantee for I GAMA RM135.7mil

Other Regulatory Adjustment (Part 1)



APPENDIX 4

REGULATORY ADJ.

Components of Other Regulatory Adjustment	1QFY'19 (RM mil)	2QFY'19 (RM mil)	YTD 1HFY'19 (RM mil)
Excess Revenue for Revenue Cap & Price Cap	218.7	223.9	442.6
Refund of Excess Single Buyer Working Capital	15.9	15.9	31.8
Refund of Interests on Customer Deposits	15.5	15.5	31.0
Refund of Other Income Related to Regulated Business	93.5	30.3	123.8
CAPEX ECS (Efficiency Carryover Scheme)	2 51.1	0.0	51.1
OPEX ECS (Efficiency Carryover Scheme)	129.2	0.0	129.2
	523.9	285.6	809.5

- Refund of Other Income Related to Regulated Business for 1QFY'19 (Jan-Mar'19) is RM93.5mil, which includes the actual amount of Oct'18 Dec'18 of RM74.2mil.
 - The major components of the Refund of Other Income Related to Regulated Business are sales of scrap and Minimum Monthly Charge. Minimum Monthly Charge is referred to the minimum amount charged to consumers with zero consumption. The amount collected however formed part of Other Regulatory Adjustment as the regulated entities already earned from the regulated asset base derived from the CAPEX spent on building up the electricity infrastructure regardless of consumption.
- The CAPEX Efficiency Carry-Over Scheme (ECS) adjustment shares the savings where actual CAPEX are lower than the approved levels included in Annual Revenue Requirements between the regulated business entities (RBE) and electricity customers. The balance of the one-off financing benefits to be returned from the unspent CAPEX in RP1 was recorded in this guarter at RM51.1mil.
 - b) The **OPEX Efficiency Carry-Over Scheme (ECS)** adjustment is intended to ensure that each RBE retains the same benefit or incurs the same cost of outperforming or underperforming, respectively, against forecast operating expenditures in any given year of the Regulatory Period. This ensures that the RBE is indifferent as to the timing of making improvements in the efficiency of operating expenditures. The **one-off** net penalty for RP1 to be returned is RM129.2mil

Other Regulatory Adjustment (Part 2)



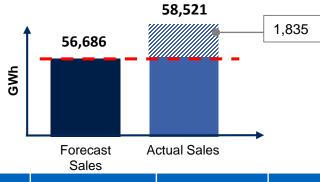
APPENDIX 5

REGULATORY ADJ.

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

- Revenue cap entities are not allowed to earn a revenue higher than their allowed annual revenue. Any excess must be passed-through to the customers via cost and revenue adjustment mechanism
- For 1HFY'19, higher actual sales leads to higher revenue earned by the revenue cap entities

1HFY'19 Variations in Sales (in GWh)



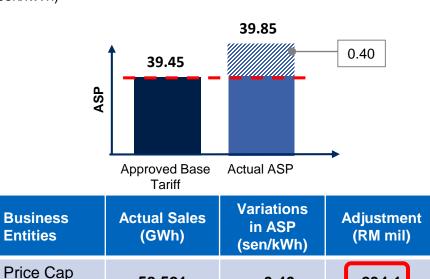
Business	Allowed Tariff	Variations in	Adjustment	
Entities	(sen/kWh)	Sales (GWh)	(RM mil)	
Revenue Cap Entities	11.36	+ 1,835	208.5	

Price Cap (Customer Service/Retail)

- Any excess revenue earned due to higher Average Selling Price (ASP) compared to Base Tariff must be passedthrough to the customers via cost and revenue adjustment mechanism
- For 1HFY'19, the ASP is recorded to be higher than the Base Tariff

1HFY'19 Variations in ASP (sen/kWh)

Entity



+ 0.40

58,521

234.1

Operating Expenses



APPENDIX 6	OPEX											
	1QFY'19 (RM mn)	2QFY'19 (RM mn)	1HFY'19 (RM mn)	1HFY'18 (RM mn)	Varia (1HFY'19 vs		MFRS 16 adjustments: 1. Exclusion of capacity payment RM1,1		— — —			
	(IOW IIII)	(IOW IIII)	(IWI IIII)	(ION IIII)	RM mn	%	2.		n of depreci			1.011111
Non-TNB IPPs Costs	3,581.0	3,210.2	6,791.2	7,554.2	(763.0)	(10.1)						. — —
Capacity Payment	59.4	1 43.6	103.0	2,045.9	(1,942.9)	(95.0)	2 - De	tails of F	PA can be re	ferred to	<u>ICPT</u> slide	
Energy Payment	3,521.6	3,166.6	6,688.2	5,508.3	1,179.9	21.4	3 -					. – –
TNB Fuel Costs	2,511.3	3,092.4	5,603.7	5,218.5	385.2	7.4	Lov		(FY'19 due t	o reversal	of LTIP	1
Fuel Costs	3,164.7	3,232.1	6,396.8	5,512.9	883.9	16.0	- pro	ovision				· – –'
Fuel Price Adjustment	2 (592.0)	(64.8)	(656.8)	(190.6)	(466.2)	>100.0	Higher in 1QFY'19 due to impairment for GMR of			MR of		
Fuel Subsidy - SESB	(61.4)	(74.9)	(136.3)	(103.8)	(32.5)	31.3	RM198.3mil			'		
Total Cost of Generation	6,092.3	6,302.6	12,394.9	12,772.7	(377.8)	(3.0)						
Staff Costs	3 729.2	1,014.0	1,743.2	1,814.8	(71.6)	(3.9)		OP	EX agains	t Revenu	ıe	
Repair & Maintenance	460.7	489.4	950.1	899.4	50.7	5.6	47%	19%	7 %	4%	4%	2%
TNB General Expenses	494.7	512.3	1,007.0	909.0	98.0	10.8						
Subs. Cost of Sales & Opex	4 446.3	180.8	627.1	860.1	(233.0)	(27.1)						
Total Non-Generation Costs	2,130.9	2,196.5	4,327.4	4,483.3	(155.9)	(3.5)						
Total Operating Expenses	8,223.2	8,499.1	16,722.3	17,256.0	(533.7)	(3.1)]					
Depreciation & Amortisation	2,457.5	2,441.4	4,898.9	3,084.9	1,814.0	58.8	Gen Cost	Depn	Staff Cost	Gen Evn	R & M	Subs CO
Total Operating Expenses	10,680.7	10,940.5	21,621.2	20,340.9	1,280.3	6.3		ьерп	Starr Cost	Gen Exp	кам	& OPEX

Higher Generation Cost Per Unit for Peninsula in 2QFY'19 due to Higher Gas Volume



APPENDIX 7

Q-o-Q FUEL COST

<u>Table A</u>

TNB & IPP Fuel Costs for Peninsula (RM mil)							
Fuel	005/40	405/40	Varian	ce			
Type	2QFY'19	1QFY'19	RM mil	%			
Coal	2,841.1	2,786.1	55.0	2.0			
Gas	2,727.7	2,688.2	39.5	1.5			
LNG	139.6	44.1	95.5	>100.0			
Dist.	1.9	14.0	(12.1)	(86.4)			
Oil	3.0	9.3	(6.3)	(67.7)			
Solar	42.2	37.9	4.3	11.3			
Total*	5,755.5	5,579.6	175.9	3.2			

^{*} Comprise TNB Fuel Costs & fuel payment to IPPs (part of Energy Payment)

Table B

TNB & IPP Unit Generated for Peninsula (Gwh)						
Fuel	2QFY'19	2QFY'19 1QFY'19		nce		
Type	2Q1119	TOLLTS	Gwh	%		
Coal	17,721.2	17,176.8	544.4	3.2		
Gas & LNG	13,298.7	13,167.7	131.0	1.0		
Dist.	-	20.7	(20.7)	(100.0)		
Oil	2.0	23.9	(21.9)	(91.6)		
Hydro	734.1	914.7	(180.6)	(19.7)		
Solar	162.8	140.3	22.5	16.0		
Total	31,918.8	31,444.1	474.7	1.5		

Table C

	2QFY'19	1QFY'19
Daily Average Gas Volume (mmscfd)	1,059	973
Average LNG Price (RM/mmbtu)	35.73	36.59
Average Piped Gas Price (RM/mmbtu)	27.20	27.20
Average Coal Price Delivered (USD/MT)(CIF)	82.1	91.8
Average Coal Price Delivered (RM/MT)(CIF)	340.5	375.3
Coal Consumption (mil MT)	7.6	7.3
Generation cost per unit (sen/kWh)	18.0	17.7

Table D

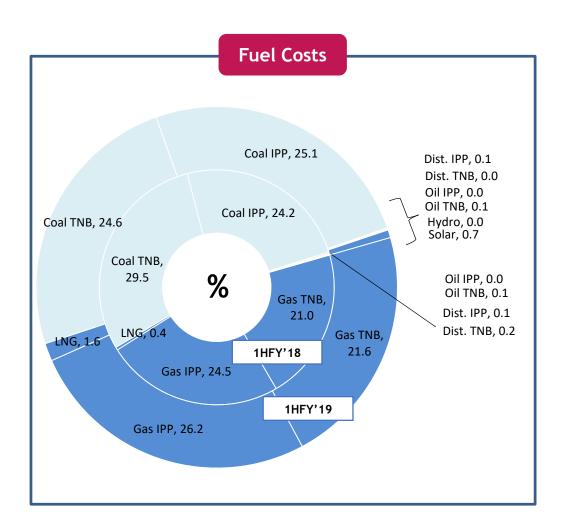
Average Coal Price Delivered (USD/MT)						
	2QFY'19	1QFY'19	Variance			
			USD	%		
FOB	74.5	83.7	(9.2)	(11.0)		
Freight	7.2	7.6	(0.4)	(5.5)		
Others	0.4	0.5	(0.1)	(13.0)		
CIF	82.1	91.8	(9.7)	(10.6)		

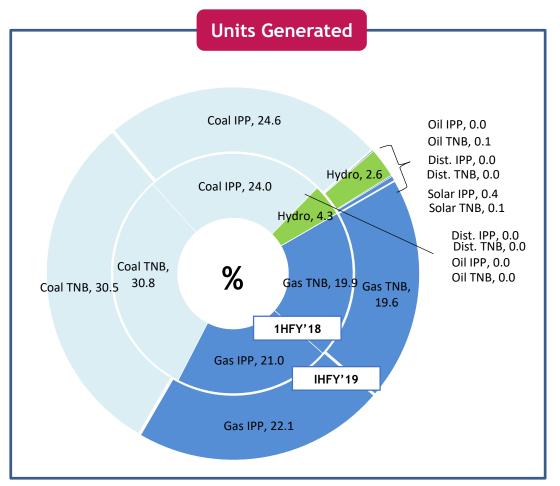
Fuel Costs (TNB & IPPs - Peninsula)



APPENDIX 8

GENERATION MIX





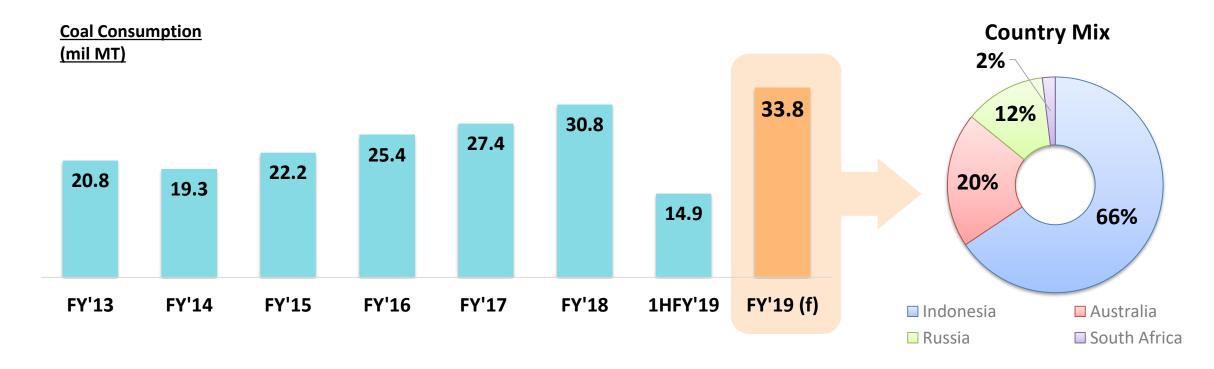
Higher Coal Requirement Expected for 2019 due to Commissioning of JEP



APPENDIX 9

COAL FORECAST

Average Coal Price (CIF)	FY'13	FY'14	FY'15	FY'16	FY'17	FY'18	1HFY'19
USD/metric tonne (MT)	83.6	75.4	66.0	55.7	72.7	95.9	86.6
RM/metric tonne (MT)	259.5	244.6	236.0	231.1	314.7	388.1	356.8

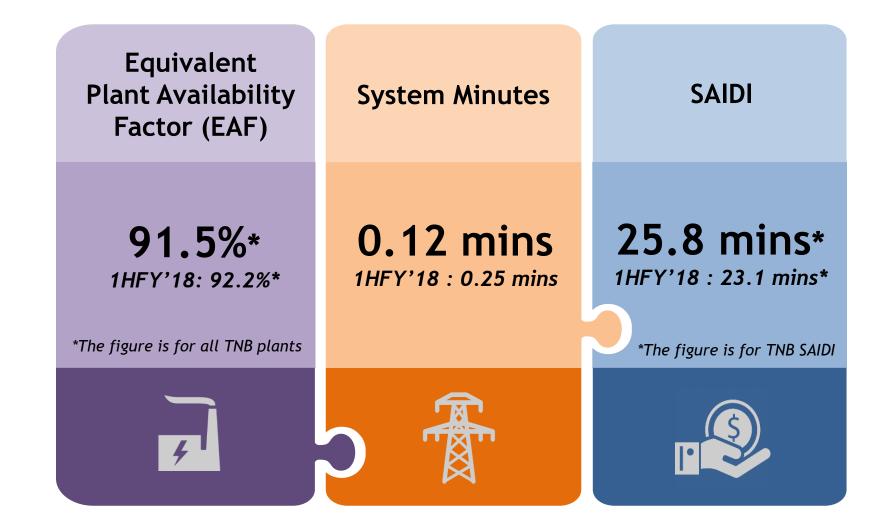


Consistent Technical Performances



APPENDIX 10

TECHNICAL RESULTS

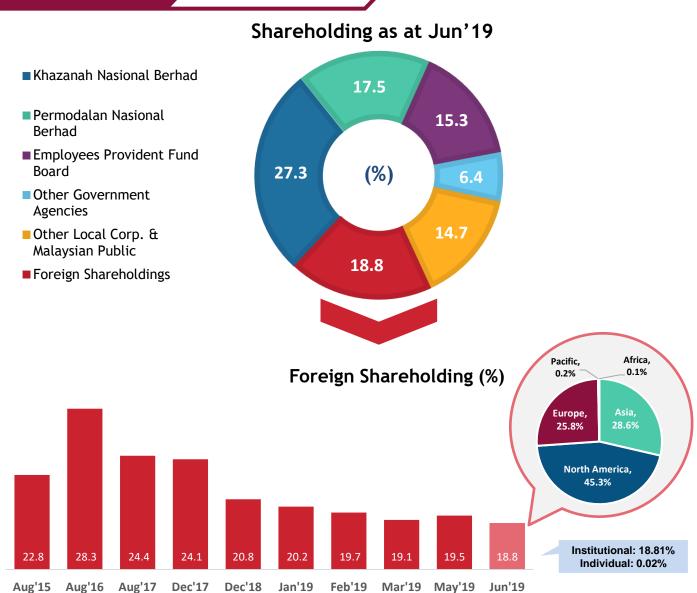


TNB Shareholding

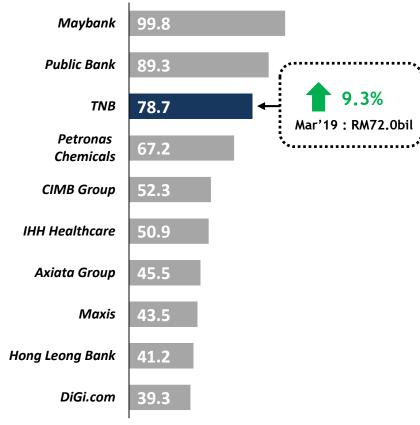


APPENDIX 11

SHAREHOLDING



Top 10 KLCI Stocks by Market Capitalization as at Jun'19



Note:

TNB Latest Market Cap: RM78.1bil (3rd), as at 28th Aug 2019

Year-on-Year (Y-o-Y) Analysis without MFRS 16



APPENDIX 12

PROFIT & LOSS

RM mn	1HFY'19	1HFY'18	Variance	
RW IIII	101119	TUL 1 10	RM mn	%
Revenue	26,120.8	24,771.9	1,348.9	5.4
Operating expenses (without depreciation)	(18,915.2)	(17,256.0)	(1,659.2)	9.6
Net loss on impairment of financial instruments	(369.6)	(109.3)	(260.3)	>100.0
Other operating income	448.4	382.4	66.0	17.3
EBITDA	7,284.4	7,789.0	(504.6)	(6.5)
EBITDA Margin (%)	27.9%	31.4%		
Depreciation	(3,303.3)	(3,084.9)	(218.4)	7.1
EBIT	3,981.1	4,704.1	(723.0)	(15.4)
Foreign exchange:				
- Transaction gain / (loss)	(62.7)	(5.2)	(57.5)	>100.0
- Translation gain / (loss)	(8.7)	(80.6)	71.9	(89.2)
Share of results of joint ventures	12.1	13.8	(1.7)	(12.3)
Share of results of associates	70.0	(92.9)	162.9	>100.0
Profit before finance cost	3,991.8	4,539.2	(547.4)	(12.1)
Fair value of financial instrument	(49.9)	(37.1)	(12.8)	34.5
Finance income	261.8	209.0	52.8	25.3
Finance cost	(935.1)	(771.8)	(163.3)	>100.0
Profit from ordinary activities before taxation	3,268.6	3,939.3	(670.7)	(17.0)
Taxation and Zakat:				
- Company and subsidiaries	(630.6)	(601.6)	(29.0)	4.8
- Deferred taxation	125.5	47.5	78.0	>100.0
Profit for the period	2,763.5	3,385.2	(621.7)	(18.4)
Attributable to:				
- Owners of the Company	2,785.2	3,357.0	(571.8)	(17.0)
- Non-controlling interests	(21.7)	28.2	(49.9)	>100.0
Profit for the period	2,763.5	3,385.2	(621.7)	(18.4)

Quarter-on-Quarter (Q-o-Q) Analysis without MFRS 16



APPENDIX 13

PROFIT & LOSS

DM	0057/140	4057/140	Variance		
RM mn	2QFY'19	1QFY'19	RM mn	%	
Revenue	12,876.0	13,244.8	(368.8)	(2.8)	
Operating expenses (without depreciation)	(9,601.9)	(9,313.3)	(288.6)	3.1	
Net loss on impairment of financial instruments	(89.9)	2 (279.7)	189.8	(67.9)	
Other operating income	226.9	221.5	5.4	2.4	
EBITDA	3,411.1	3,873.3	(462.2)	(11.9)	
EBITDA Margin (%)	26.5%	29.2%			
Depreciation	(1,670.5)	(1,632.8)	(37.7)	2.3	
EBIT	1,740.6	2,240.5	(499.9)	(22.3)	
Foreign exchange:					
- Transaction gain / (loss)	(6.7)	(56.0)	49.3	(88.0)	
- Translation gain / (loss)	(272.2)	263.5	(535.7)	>100.0	
Share of results of joint ventures	6.3	5.8	0.5	8.6	
Share of results of associates	81.9	(11.9)	93.8	>100.0	
Profit before finance cost	1,549.9	2,441.9	(892.0)	(36.5)	
Fair value of financial instrument	7.6	(57.5)	65.1	>(100.0)	
Finance income	133.5	128.3	5.2	4.1	
Finance cost	(473.2)	(461.9)	(11.3)	2.4	
Profit from ordinary activities before taxation	1,217.8	2,050.8	(833.0)	(40.6)	
Taxation and Zakat:					
- Company and subsidiaries	3 (116.8)	(513.8)	397.0	(77.3)	
- Deferred taxation	164.1	(38.6)	202.7	>(100.0)	
Profit for the period	1,265.1	1,498.4	(233.3)	(15.6)	
Attributable to:					
- Owners of the Company	1,251.2	1,534.0	(282.8)	(18.4)	
- Non-controlling interests	13.9	(35.6)	49.5	>100.0	
Profit for the period	1,265.1	1,498.4	(233.3)	(15.6)	

Notes:

I Q-o-Q Analysis includes:

- 1. Decrease in revenue mainly due to reduction in unbilled revenue
- 2. Impairment of Financial Guarantee for GAMA of RM135.7mil in 1QFY'19
- Lower tax due to reversal of tax provision

THANK YOU

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