

Presentation to Analyst

Unaudited Consolidated Result for the **3rd Quarter FY2018**

Ended 30th September 2018

27th November 2018

Financial Performance Overview for 9MFY'18

KEY HIGHLIGHTS

INTERNATIONAL INVESTMENTS

TS FINANCIAL DETAILS





Financial Performance Overview for 9MFY'18



KEY HIGHLIGHTS

INTERNATIONAL INVESTMENTS

FINANCIAL DETAILS

	9MFY'18 (RM bn) (Jan'18-Sept'18)	9MFY'17 (RM bn) (Sept'16-May'17)	ΥοΥ
Revenue	37.85	34.95	8.3%
EBITDA	10.89	11.58	(6.0%)
EBITDA Margin	28.8%	33.1%	(4.3 b.p.)
PAT	3.90	5.18	(24.7%)
Normalized PAT	4.00*	4.42*	(9.5%)

Note :

* Normalized PAT is after the adjustment of :

- Forex Translation

- Reinvestment allowance

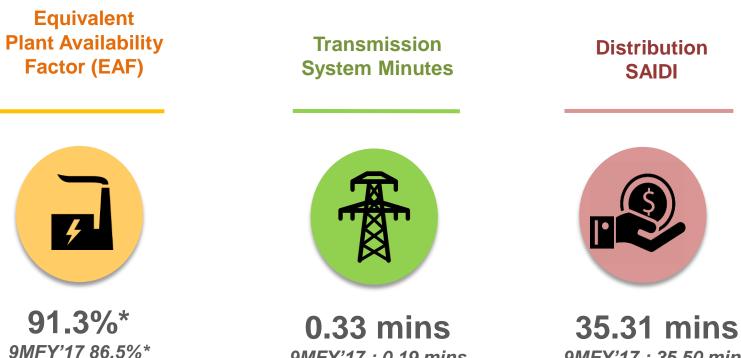
- Impairment

Technical Performances

KEY HIGHLIGHTS

INTERNATIONAL INVESTMENTS

FINANCIAL DETAILS



9MFY'17 : 0.19 mins

9MFY'17 : 35.50 mins

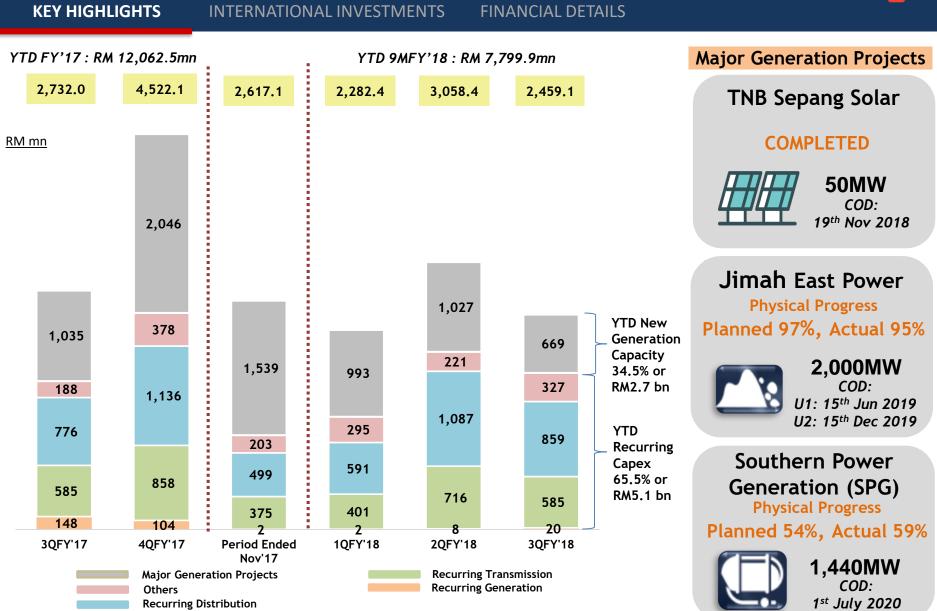
Note :

*The figure is for all TNB plants

Previously, the EAF figure disclosed only include SLA plants and JMJG : 91.4% as at 9MFY'18 / 89.1% as at 9MFY'17

Substantial Investment in Project Capex





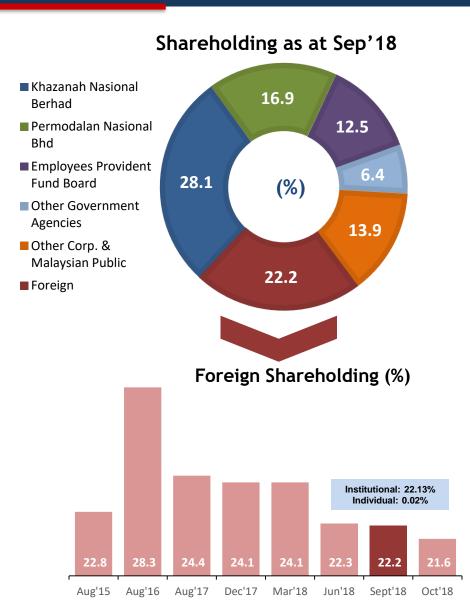
Stable Foreign Shareholding

KEY HIGHLIGHTS

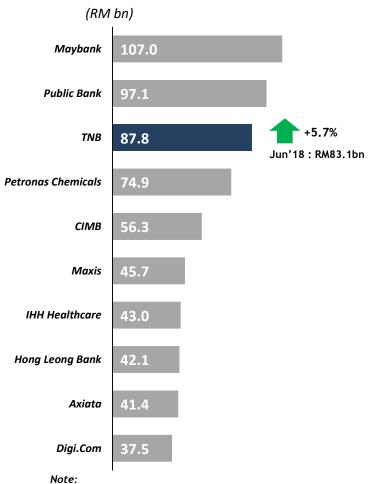
INTERNATIONAL INVESTMENTS

S FINANCIAL DETAILS





Top 10 KLCI Stocks by Market Capitalization as at Sep'18



1) TNB Latest Market Cap: RM85.2bn (3rd), as at 12th Nov 2018

Vortex Solar Investment SARL ("VSI")



KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS		FINANCIAL DETA	AILS		
General & Investm	ent Overview		Key Highlights		
Date of AcquisitionMay 2017Plant TypeSolar (365MW)		Key Issues/Challenges	Geo-Political Factors BREXIT negotiations are still influencing market uncertainty and outlook, but is not expected to		
Principal activities	United Kingdom con farms with a combin	Own and operate solar PV projects in the United Kingdom consisting of 24 solar farms with a combined net installed capacity of about 365MW.		 Merchant Market Dynamics Portfolio will not be much affected by the volatility of the wholesale price since c.95% of revenue is under Renewable Obligation Certificates (ROCs) 	
Shareholding50%Performance			scheme for 20 years. Currency Movement Minimal exposure to forex losses due to the fact it		
Technical Performance Financial Performance	erformance nancial • YTD EBITDA of RM78.56mn			has no exposure to foreign currency loan. Due to stable operating environment and industry- friendly government policies, VSI is expected to continue business as usual (BAU).	
(as at Jun To)				To minimize the forex loss, the income for this asset will be kept In the original currency for use in future international projects and transactions.	
Financial Performance Trending	EBITDA Positive for acquisition	two quarters since EBITDA (RM) 62.47mn 16.09mn 16.18mn	Outlook (Investment Horizon)	 The portfolio is projected to deliver steady and stable cash yield going forward. Performance is linked to the seasonal availability of solar irradiation in the UK. For the upcoming quarter, the revenue is expected to decrease as per budget due to seasonality effect as colder months are approaching. 	
Financial Impact to TNB's 2Q result		e to the season changes ner, VSI is considered S.		7	

Tenaga Wind Ventures UK Ltd ("TWV")

INTERNATIONAL INVESTMENTS

KEY HIGHLIGHTS



General & Investr	nent Overview	Key Highlights	
Date of Acquisition Plant Type Principal activities Shareholding Performance	February 2018 Wind (26.1MW) Own and operate wind turbines projects in the United Kingdom consisting of 53 onshore wind turbines with a combined net installed capacity of about 26.1MW 80%	Key Issues/Challenges	Geo-Political Factors BREXIT negotiations are still influencing market uncertainty and outlook, but is not expected to impact TWV as there's no cross-border implication. Merchant Market Dynamics Portfolio will not be much affected by the volatility of the wholesale price since c.97% of revenue is under feed-in tariff (FiT) scheme for 20 years. Currency Movement
Technical Performance	Portfolio maintains a high YTD availability of 98%.		Minimal exposure to forex losses due to the fact it has no exposure to foreign currency loan.
Financial Performance (as at Sep'18)	YTD EBITDA of RM32.8mn. TWV stronger months are between October to March (winter season)	Mitigation Plan	Due to stable operating environment and industry- friendly government policies, TWV is expected to continue business as usual (BAU).
Financial Performance Trending	EBITDA positive since acquisition EBITDA (RM) 3QFY'18 12.05mn 2QFY'18 15.14mn	Outlook	The forex loss will be minimal due to income for this asset will be kept in the original currency.The portfolio is projected to deliver steady and
Financial Impact to TNB's 3Q result	Refinancing surplus of c.GBP25.6mn or c.RM140mn was repatriated back to TNB in Oct'18 in the form of repayment of shareholder loan, to be reflected in 4QFY'18 results.	(Investment Horizon)	stable cash yield going forward. • Performance is linked to the seasonal availability of wind in the UK.

FINANCIAL DETAILS

Malaysian Shoaiba Consortium Sdn. Bhd.



KEY HIGHLIGHT	S INTERNATIONAL INVESTMENTS	FINANCIAL DETAIL	S	
General & Investment Overview		Key Highlight		
Date of Incorporation Commercial Operation Date Plant type Principal activities Shareholdings	 26 August 2005 SWEC (2010) 97% SEPCO (2009) 3% Heavy fuel oil thermal plant (900MW) Water desalination (375.94mcm p.a.) Holding investment in power and water desalination assets in Kingdom of Saudi Arabia ("KSA"). 20% 	Key Issues/Challenges	 Geo-Political Factors KSA has several on-going geo-political issues that need to be monitored namely the role of the Crown Prince on KSA's domestic and international policies. Market Dynamics KSA changed its inflation factor and the new KSA Customer Price Index (CPI) is approximately 15% lower than the previous index, which has negatively affected Shoaiba's revenues since beginning of 2014 and has directly impacted the tariff. Currency Risks No foreseeable currency risk as SAR is pegged to USD. 	
Performance		Mitigation Plan	Market Dynamics	
Financial Performance (as at Sep'18) Financial Performance Trending	 92% availability since January 2018 Positive YTD EBITDA at Project Level i.e SWEC and SEPCO of c.RM0.9bn EBITDA Positive for last five quarters. So far, MSCSB has repatriated back to TNB a total of c.RM119.0mn in the form of dividends. Expected additional dividend for 1H2018 of RM3.5mn to be distributed before year end 	Outlook (Investment Horizon)	 Shuaibah Water Electricity Company (SWEC) to continue to follow up with Water and Electricity Company (WEC) on the decision of index adjustment mechanism The investment entity is forecasted to continue distributing stable dividends to its shareholders. Current EIRR is positive deviation from initial projection. Portfolio is expected to remain stable at current 	
Financial Impact to TNB's 2Q result	SWEC and SEPCO are considered earnings positive to TNB.		earnings.	

Gama Enerji Anonim Sirketi ("GEAS")



KEY HIGHLIGHTS

INTERNATIONAL INVESTMENTS

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General & Investment Overview		Key Highlights		
Date of Acquisition	April 2016		Key issues/Challenges	Geo-Political Factors
Plant Type		o (131.3MW) and Wind ater conveyance plant (100 n	, , , ,	Coup in Jul 16 and current US-Turkey political issues are driving foreign exchange volatility affecting all companies operating in Turkey; beyond TNB's control.
Principal activities	Project development, securing of project finance, construction, operation & maintenance, asset management of power plants and water supply and conveyance project in Turkey and abroad besides commercial sales of electricity			Merchant Market Dynamics New gas pricing regime by gas authority with a lagging positive effect in electricity market prices i.e natural gas price hike of 49.5% by Turkey's Petroleum Pipeline Corporation (BOTAS) in August 2018 is expected to result in electricity market price increase in coming months.
Shareholding	30%			
Performance			Currency Movement Given the current volatility in the Lira, the portfolio	
Technical Performance	Portfolio's plants availability was more than 95% in 2017. YTD availability maintains high at 97%			currently exposed to forex risk due to USD loan by an entity within the group.
Financial Performance (as at June'18)			Mitigation Plan	Merchant Market Dynamics In the short term, negotiation is on-going with private supplier for cheaper gas price. Moving forward, the higher electricity
	EBITDA Positive for	ast five rolling quarters.		market price is expected to be positive to GEAS.
Trending		EBITDA (USD)		Currency Movement
	2QFY'18	30.6mn		To carryout debt rescheduling and refinancing under the
	1QFY'18	29.5mn		restructuring options.
	4QFY'17	31.6mn		To plan for loan refinancing with longer tenure and mixed
	3QFY'17	39.1mn		currency denomination (USD and TRY) to reduce foreign
	2QFY'17	36.4mn		currency exchange exposure
Financial Impact to TNB's 3Q result	Additional impairment of RM291.5mn for accounting adjustment due to further weakening of Lira which led to higher forex translation loss.		Outlook (Investment Horizon)	 Electricity prices are expected to increase on the back of decreasing reserve margin, increasing gas prices and consumption growth outperforming new capacity additions.
				• The market outlook is expected to steadily improve with a positive impact on the Portfolio by 2021.

GMR Energy Limited ("GEL")



KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS

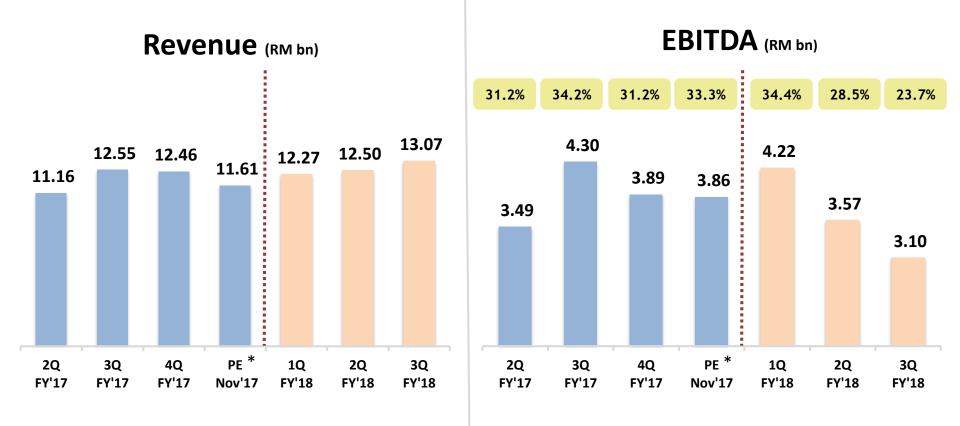
FINANCIAL DETAILS

General & Investment Overview		Key Highlights				
Date of Acquisition Plant Type			Key Issues/Challenges	Geo-Political Factors India is not expected to experience any contagion or spillover effect over the US-Turkey geo-political issue. Merchant Market Dynamics		
Principal activities Shareholding	Generates electricity f power assets. 30%	rates electricity from its six operational er assets.		Ongoing constraints in coal and gas supply is still affecting all energy players in India despite short term policy measures for temporary relief. Currency Movement Minimal exposure to forex losses due to the fact it has no		
Performance		Mitigation Plan	exposure to foreign currency loan. Merchant Market Dynamics			
Technical Performance		of coal plants are 86%. ce is largely inline with		a) GMR has been given approval from Ministry of Petroleum & Natural Gas of India for short term diversion of 0.6 Million Metric Standard Cubic Meter		
Financial Performance (as at June'18)	YTD EBITDA of RM343.1	mn		Per Day ("MMSCMD") of Administrative Price Mechanism ("APM").		
Financial Performance Trending	EBITDA Positive for p acquisition.	ast five quarters since EBITDA (USD)		b) Procured e-auction coal to supplement shortfalls, if any.		
	2QFY'18 1QFY'18 4QFY'17 3QFY'17 2QFY'17	25.4mn 61.7mn 4.7mn 17.7mn 17.6mn	Outlook (Investment Horizon)	 India's energy sector continues to be a market with favorable long-term prospects and opportunities. Our original rationale for entering India still hold true a key emerging economy, a large and growing population, proven energy demand and growth and a gateway to the energy markets of South Asia. The portfolio operating profit expected to improve in FY2019 due to the full effect of new coal linkage and favorable court order for coal and cost pass through. The market outlook is expected to steadily improve with a positive impact on the Portfolio by 2021. 		

Resilient Group Revenue







As per reported in FY2017

As per reported in FY2018 (Calendar year)

*Period Sept-Nov 2017

Resilient Group Revenue



KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS FINANCIAL DETAILS

		_					
	3QFY'18		2QFY'18		1QFY'18		Variance
							3Q vs 2Q
UNITS SOLD	GWh		GWh		GWh		GWh
- TNB	28,916.5		29,005.0		27,069.5		(88.5)
- EGAT (Export)	-		(1.4)		5.2		1.4
- SESB	1,360.1		1,369.7		1,264.0		(9.6)
- UK WIND (TNBI)	16.2		15.3		8.4		0.9
- LPL	570.7		-		-		570.7
Total Units Sold (GWh)	30,863.5		30,388.6		28,347.1		474.9
REVENUE	RM mn	Sen/KWh	RM mn	Sen/KWh	RM mn	Sen/KWh	(RM mn)
Sales of Electricity							
- TNB *	11,512.8	39.8	11,531.0	39.8	10,712.5	39.6	(18.20)
- EGAT (Export)	-	-	0.4	-	1.3	-	(0.40)
- SESB	466.6	34.3	469.8	34.3	431.7	34.2	(3.20)
- UK WIND (TNBI)	19.2	124.6	20.2	128.7	10.3	122.6	(1.00)
- LPL	161.6	28.3	81.9	58.5	13.8		79.70
Sales of Electricity	12,160.2	39.4	12,103.3	39.8	11,169.6	39.4	56.9
LPL Operating Lease (MFRS117)	9.3		12.0		6.6		(2.7)
Unbilled Revenue	90.0		(191.2)		144.2		281.2
Recognition of Customers' Contribution **	1.3		1.0		0.4		0.3
Imbalance Cost Pass-Through	479.6		245.2		634.1		234.4
SESB Tariff Support Subsidy ***	120.9		119.2		111.8		1.7
Total Sales of Electricity	12,861.30		12,289.50		12,066.70		571.8
Goods & Services	112.8		125.4		124.9		(12.6)
Released Deferred Income	99.7		83.0		82.4		16.7
Total Revenue	13,073.80		12,497.90		12,274.00		575.9
* Without ICDT							

* Without ICPT

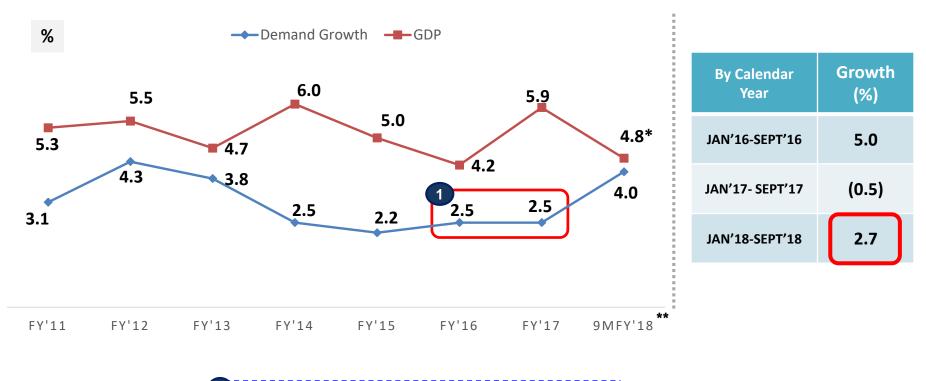
** Amortisation of customers contribution over 20 years. Customers' Contribution is defined as contributions received from customers consists mainly of upfront capital contributions for the construction of asset, used to connect the customers to a network or to provide them with the service.

*** Subsidy by government due to delay in IBR implementation in Sabah & Federal Territory of Labuan

Steady Sales Growth



KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS FINANCIAL DETAILS



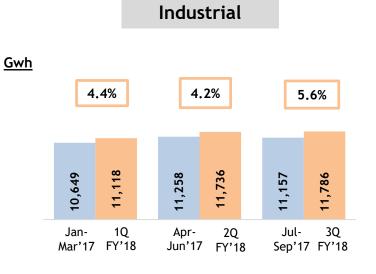
Average demand growth for FY2016 & FY2017. This is to eliminate the one-off El-Nino phenomenon during 3QFY'16

- * Actual 9M 2018 GDP
- ** Against 9MFY'17

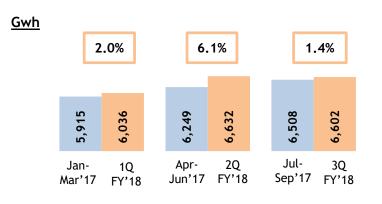
Positive Growth for Industrial, Commercial & Domestic Sector

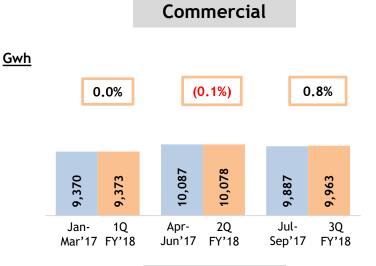




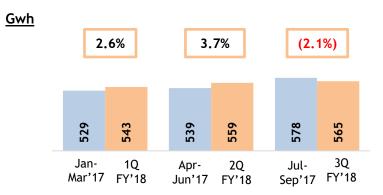


Domestic





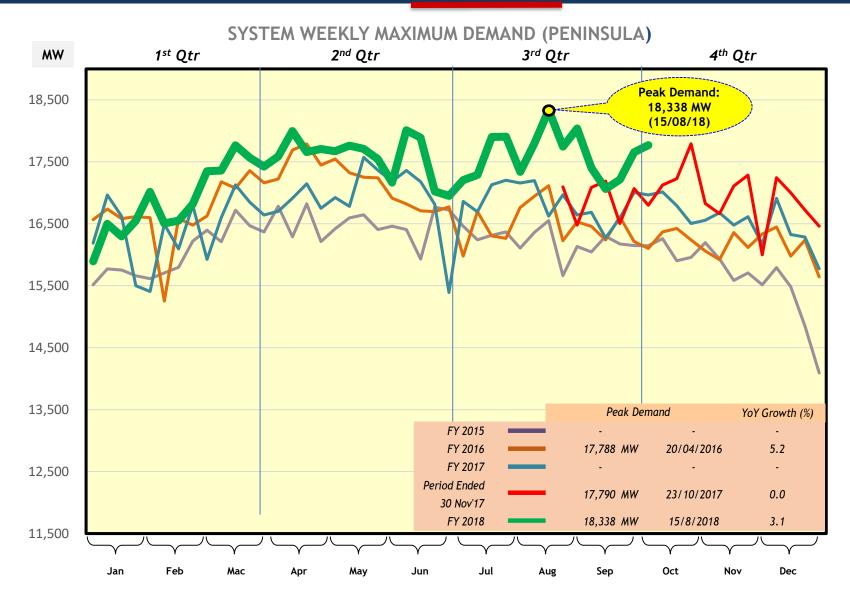
Others



New Peak Demand in 3QFY'18

KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS FINANCIAL DETAILS

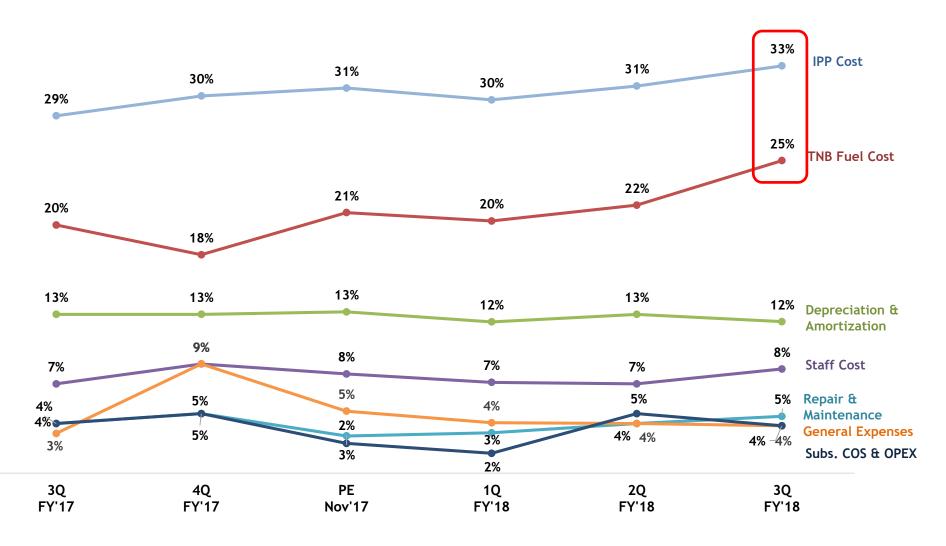




*The quarter arrangement is base on the new Financial Year (Jan - Dec)

Continuous Uptrend in Generation Cost in 3QFY'18





Generation Costs Constitute 64% of the Group Operating Expenses



RM mn	3QFY'18	2QFY'18	1QFY'18	Variance 3Q vs 2Q	
				RM'mn	%
Non-TNB IPPs Costs	4,255.2	3,889.6	3,664.6	365.6	9.4
Capacity Payment	1,039.1	981.2	1,009.1	57.9	5.9
Energy Payment	3,216.1	2,908.4	2,655.5	307.7	10.6
Fuel Costs	3,275.3	2,736.2	2,482.3	539.1	19.7
Total Cost of Generation	7,530.5	6,625.8	6,146.9	904.7	13.7
Depreciation & Amortisation	1,621.7	1,553.0	1,532.0	68.7	4.4
Staff Costs	1,084.5	875.7	939.1	208.8	23.8
Repair & Maintenance	566.8	466.1	433.3	100.7	21.6
TNB General Expenses	508.4	548.4	469.9	(40.0)	(7.3)
Subs. Cost of Sales & Opex	479.0	614.4	245.6	(135.4)	(22.0)
Total Non-Generation Costs	4,260.4	4,057.6	3,619.9	202.8	5.0
Total Operating Expenses	11,790.9	10,683.4	9,766.8	1,107.5	10.4

Generation Costs (Peninsula)



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Fuel Costs (RM mn)							
				Varia	nce		
Fuel Type	3QFY'18	2QFY'18	1QFY'18	3Q vs	2Q		
				RM mn	%		
Gas	2,649.0	2,409.4	2,115.3	239.6	9.9		
LNG	60.7	19.6	17.0	41.1	>100.0		
Coal	3,225.6	2,905.9	2,454.1	319.7	11.0		
Dist.	0.7	23.2	11.8	(22.5)	(97.0)		
Oil	0.7	6.9	7.3	(6.2)	(89.9)		
Total	5,936.7	5,365.0	4,605.5	571.7	10.7		

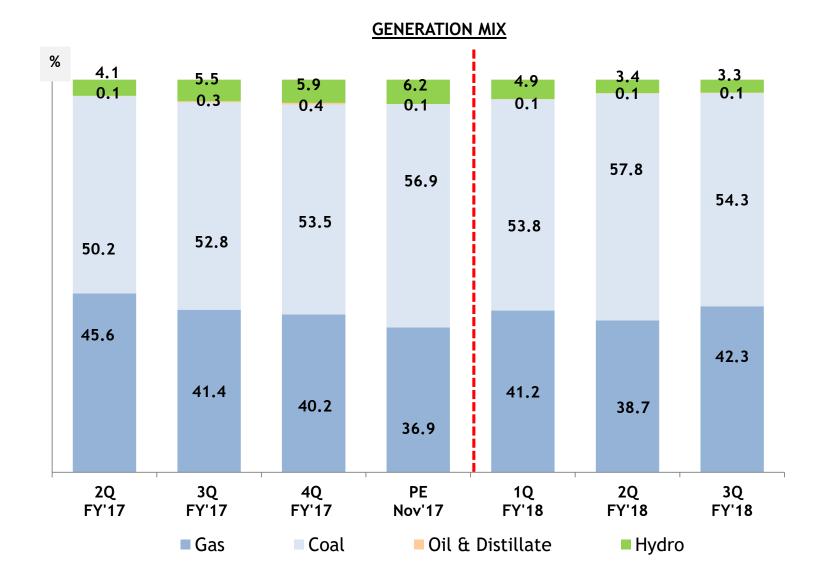
Unit Generated (Gwh)							
				Varia	ince		
Fuel Type	3QFY'18	2QFY'18	1QFY'18	3Q v:	s 2Q		
				RM mn	(%)		
Gas & LNG	13,760.3	12,352.1	12,444.6	1,408.2	11.4		
Coal	17,669.7	18,460.9	16,242.2	(791.2)	(4.3)		
Dist.	0.0	21.5	4.8	(21.5)	>(100.0)		
Oil	1.7	22.3	14.0	(20.6)	(92.4)		
Hydro	1,080.3	1,096.9	1,493.9	(16.6)	(1.5)		
Total	32,512.0	31,953.7	30,199.5	558.3	1.7		

Q-o-Q	3QFY'18	2QFY'18	1QFY'18
Daily Average Gas Volume (mmscfd)	1,016	923	949
Average LNG Price (RM/mmbtu)	31.63	30.98	30.05
Average Piped Gas Price (RM/mmbtu)	25.70	24.20	24.20
Average Coal Price Delivered (USD/MT)(CIF)	102.5	91.1	92.1
Average Coal Price Delivered (RM/MT)(CIF)	422.60	361.4	361.7
Coal Consumption (mn MT)	7.7	8.0	7.1

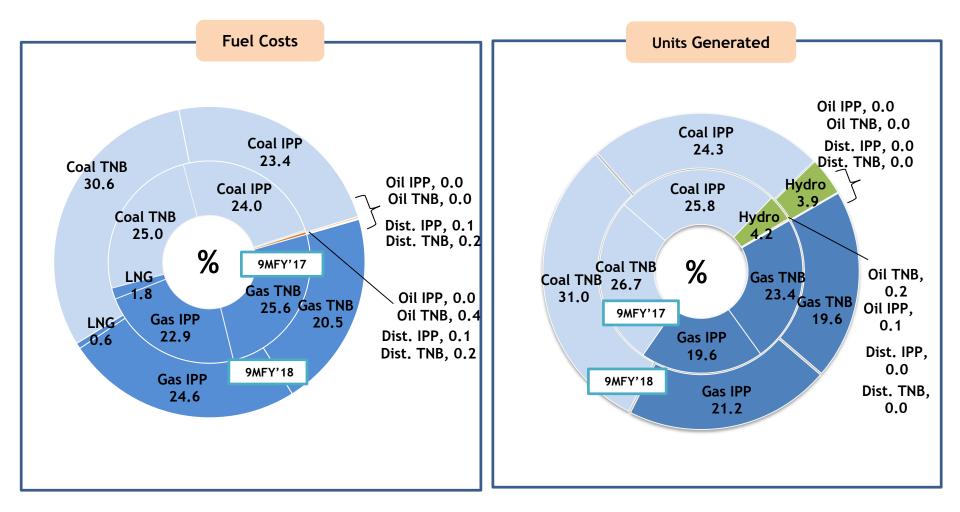
Average Coal Price Delivered (USD/MT)							
	3QFY'18	2QFY'18	1QFY'18	Variar 3Q vs			
				USD	%		
FOB	94.3	83.5	84.8	10.8	12.9		
Freight	7.7	7.4	6.8	0.3	4.1		
Others	0.5	0.2	0.5	0.3	>100.0		
CIF	102.5	91.1	92.1	11.4	17.0		

Shift of Generation Mix from Coal to Gas

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Fuel Costs (TNB & IPPs - Peninsula)



Higher Coal Requirement Expected for 2018

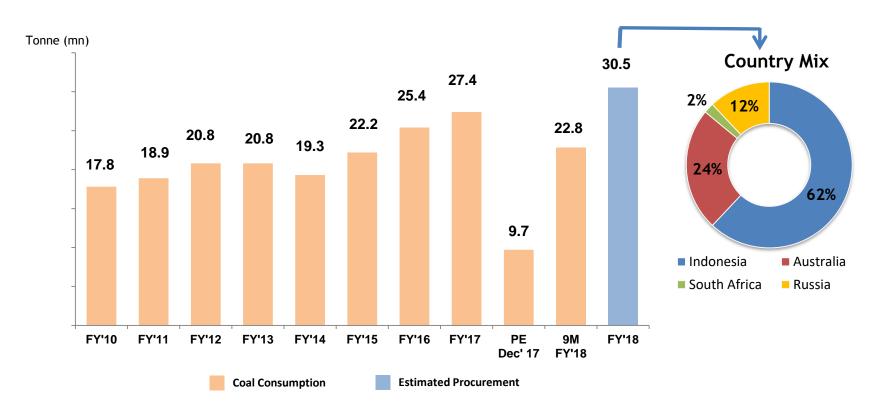


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Average Coal Price (CIF)	FY'10	FY'11	FY'12	FY'13	FY'14	FY'15	FY'16	FY'17	9MFY'18
USD/metric tonne	88.2	106.9	103.6	83.6	75.4	66.0	55.7	72.7	94.8
RM/metric tonne	293.8	325.9	321.9	259.5	244.6	236.0	231.1	314.7	378.1

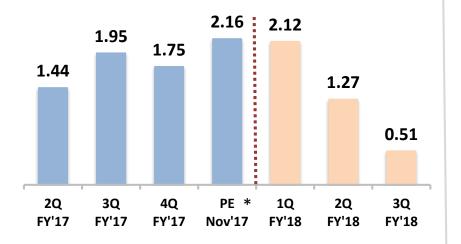


Financial Performance Overview for 3QFY'18

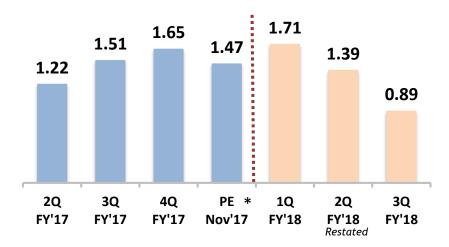
KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS FINANCIAL DETAILS



PAT (RM bn)



Normalized PAT (RM bn)



1Q 2Q 3Q YTD RM bn FY'17 FY'18 FY'18 FY'18 Forex Translation (0.09) 0.01 0.17 0.17 (Gain)/ Loss Reinvestment (0.85) (0.32)(0.24)(0.08)Allowance Impairment 0.20 0.29

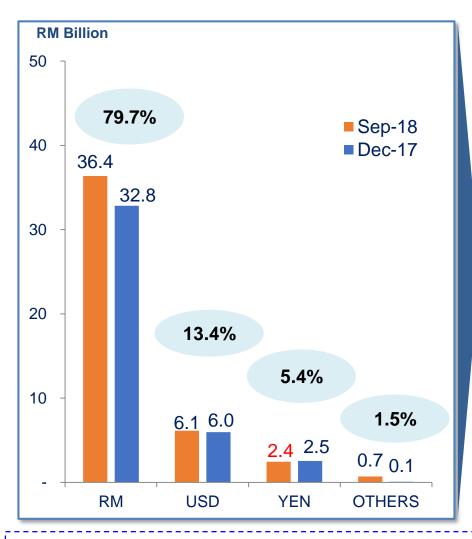
As per reported in FY2017 As per reported in FY2018 (Calendar year)

*Period Sept-Nov 2017

Gearing Level Registered at 43.6%

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KEY HIGHLIGHTS INTERNATIONAL INVESTMENTS FINANCIAL DETAILS



Statistics	30 th Sept'18	
Total Debt (RM' Bil)	45.5	
Net Debt (RM' Bil) *	27.1	
Gearing (%)	43.6	
Net Gearing (%)	25.9	
Fixed : Floating	95:5	
Weighted Average Cost of Borrowing	4.98	
Final Exptsure**	4.98	

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

** Inclusive of interest rate swap

Closing FOREX	30 th Sept'18
USD/RM	4.14
100YEN/RM	3.65
GBP/RM	5.41
USD/YEN	113.41

Guidance on MFRS



	ltems	Dre Adaption	Dest Adention	Potential Impact Post Adoption		
	items	Pre Adoption	Post Adoption		P&L	Balance Sheet
MFRS 15	(a) Sales of electricity	Revenue recognised as and when customer is billed	No changes	No Changes	/	
Revenue fro Contracts w Customer Adoption da 1 Jan 201	ith s (b) Recognition of Customers' te : Contributions	Full recognition of revenue in P/L	over 20 years	Overall P&L impact- Significant reduction in revenue	1	

Guidance on MFRS



				Potential Impact Post Adoptio		
	ltems	Pre Adoption	Post Adoption		P&L	Bal Sheet
	· /	3 classes of financial assets:	3 classes of financial assets:			
		(1) Fair value through P/L (FVTPL)	(1) Fair value through P/L (FVTPL)			
		(2) Loans and Receivables (L&R)	(2) Amortised Cost (AC)	Estimated no financial impact	-	-
MFRS 9		(3) Available for Sale (AFS)	Other Comprehensive			
Financial Instruments			Income (FVOCI)			
		An impairment loss is incurred only if there is objective evidence of impairment (incurred loss model)	An impairment loss is based on expected credit losses which incorporates forward-looking elements (expected credit loss model).	 First time changes in provisions of doubtful debts taken to Retained Earnings Recognise provisions of doubtful debt in GOE on quarterly basis (as is treatment) 	/	/

Guidance on MFRS



	ltems	Pre Adoption Post Adoption		Potential Impact Post Adoption		
					P&L	Balance Sheet
		2 classes of leases: (1) Finance lease (on balance sheet)	Single lease model: (a) recognise a lease liability	(a) Increase in asset (ROU) and liability (lease liability) at initial recognition		1
MFRS 16		(2) Operating lease (off balance sheet)	(b) recognise a 'right-of- use' ('ROU') asset	(b) PAT Impact:i. Decrease in operating expenses		
Leases Adoption date : 1 Jan 2019	TNB as Lessee		(c) ROU asset is depreciated(d) lease liability is accreted over time with	(due to elimination of capacity payment) ii. Increase in depreciation	/	
			interest expense recognised in P/L	iii. Increase in finance cost Overall P&L impact- Insignificant reduction in PAT	/	

Question & Answer

This award is a testament to the dedication and commitment of 35,000 employees who work hard in building and growing TNB brand.



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THANK YOU

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