Tenaga Nasional Bhd

Cleaning Up Its Energy

By Teh Kian Yeong / tehky@kenanga.com.my

OUTPERFORM ↔

Price : **RM9.85**

Target Price : **RM11.80 ↑**

TENAGA has committed to reduce its dependency on the more polluting coal-fired plants by 50% of capacity by 2035 before being coal-free by 2050, and we believe this is achievable. For a start, it will spend RM6.5b on 4,894MW RE expansion from now till 2025. And, this will not dent its balance sheet. Overall, we are positive on these plans which help to address the ESG issue which has pressured its share price in the past year. TENAGA remains an OP with a revised TP of RM11.80.

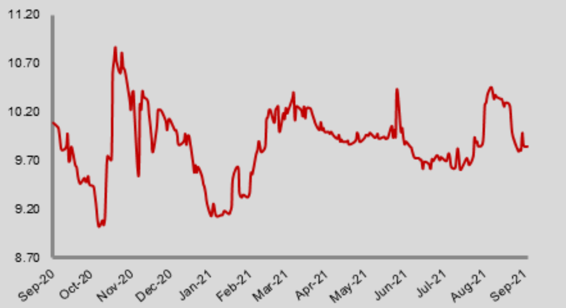
Journey to RE. As of March this year, coal-fired plants made up 48% of TENAGA's generation asset portfolio in Peninsular Malaysia and contributed c.24% to group revenue. To address these issue, TENAGA has set to increase its renewal energy (RE) assets to 8,300MW by 2025 from 3,406MW currently, with RE making up 10% of group revenue from 5% currently. It has budgeted RM6.5b for this capacity expansion where >97% of these are from two geographical areas, UK/Europe and Southeast Asia with only 361MW expansion locally. Meanwhile, our stress test shows that TENAGA has no financial issue for such expansion with its gearing still at comfortable levels of 45%-46% throughout FY22-FY25, meaning it still has room to gear up to the optimal level of 55%, from 46.3% in FY20A.

To be coal-free by 2050. After its last new coal plant, the 70%-owned Jimah East Power (JEP) which was commissioned in 2019, TENAGA has pledged not to invest in greenfield coal plant in the future. It has committed to reduce coal-based capacity by 50% in 2035 and to be coal-free by 2050. We believe this commitments are achievable given that two TENAGA's owned coal plants will be retired in 2029 and 2030, which would reduce its coal generation capacity by 46% by 2030 while the last coal plant JEP's PPA will expire by 2044, after which there will be no more coal-fired plant, way ahead of its 2050 coal-free target.

Foreigners turned net buyer. Its share price movement is fairly correlated to the changes of its foreign shareholding at 78%. The selling pressure intensified in the past two years as foreign shareholdings fell below the 20% mark in early 2019 to currently slightly below 12%, given the coal-based energy generating issue. However, the degree of sell-down has somewhat abated in the past 2-3 months. In fact, foreigners have turned net buyers for the first time in 21 months in Aug with net buying worth RM154m. Month-to-date in September, foreigners remained net buyers with a total net buying of RM94.7m. However, we reckon that this is still too early to conclude that the foreigners are finally coming back to buy this index-link heavyweight stock.

OUTPERFORM for resilient earnings. We are positive with its RE expansion plan and its commitment to be coal-free by 2050, to address the ESG concerns. We also like its resilient earnings profile which keeps its dividend payout consistent with potential special dividend in place. Thus, its perspective FY22E PER of 10.7x seems fairly attractive which values the stock at 1.5SD below its 3-year mean. As such, we continue to rate the stock an OUTPERFORM with a higher target price of RM11.80 from RM11.76, reflecting its updated asset valuation and trailing mean PER. The stock is also supported by a decent dividend yield of >4% with potential special dividend. **Downside risk to our recommendation** is weaker-than-expected earnings from non-regulated businesses.

Share Price Performance



KLCI	1,533.05
YTD KLCI chg	-5.8%
YTD stock price chg	-1.8%

Stock Information

Shariah Compliant	Yes
Bloomberg Ticker	TNB MK
Market Cap (RM m)	56,402.0
Shares outstanding	5,726.1
52-week range (H)	11.05
52-week range (L)	9.15
3-mth avg daily vol:	3,508,670
Free Float	30%
Beta	0.8

Major Shareholders

Khazanah Nasional Bhd	25.6%
Employees Provident	17.2%
Amanah Saham Nasional	15.1%

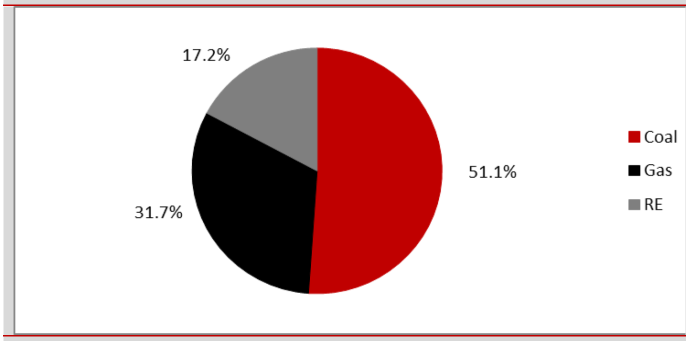
Summary Earnings Table

FY Jun (RM m)	2020	2021E	2022E
Turnover	43,976	50,389	50,886
EBIT	7,359	9,861	10,305
PBT	4,235	6,404	6,972
Net Profit (NP)	**3,593**	**4,840**	**5,272**
Core Net Profit	**3,804**	**4,840**	**5,272**
Consensus (NP)		4,770	4,864
Earnings Revision (%)		-	-
Core EPS (sen)	66.7	84.8	92.4
Core EPS growth (%)	-26.8	27.2	8.9
NDPS (sen)	80.0	42.4	46.2
BV/Share (RM)	9.79	10.21	10.67
NTA/Share (RM)	9.71	10.13	10.60
Core PER (x)	15.8	11.6	10.7
Price/BV (x)	1.01	0.96	0.92
Price/NTA (x)	1.01	0.97	0.93
Net Gearing (x)	0.65	0.60	0.53
Net Yields (%)	7.6	4.3	4.7

JOURNEY TO RENEWAL ENERGY

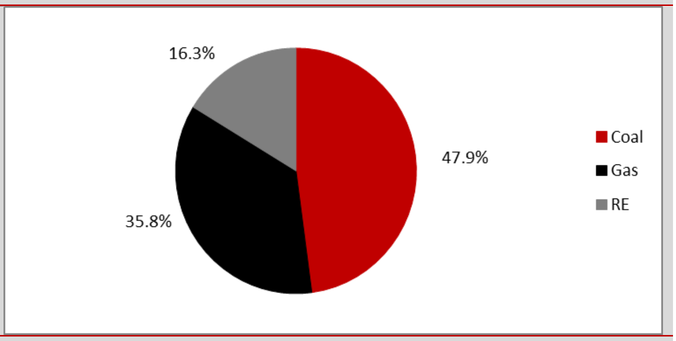
Coal made up 48% of energy generation mix. As of Mar 2021, TENAGA's installed generation capacity of 16,030MW made up 60.4% of the total installed capacity of 26,552MW in Peninsular Malaysia while the balance of 10,522MW or 39.6% are from the IPPs. This compared to the total installed capacity of 26,296MW in Peninsular Malaysia in Dec 2019 where TENAGA's installed capacity accounted for 57.2% or 15,038MW while IPPs made up the balance of 42.8% or 11,258MW. To recap, these TENAGA's generation installed capacity are based on its wholly- and majority-owned subsidiaries' gross capacity. Among these generation mix, coal-generated plant accounted for 47.9% as of Mar 2021, reduced from 51.1% in Dec 2019.

TENAGA Generation Installed Capacity In 2019



Source: Company

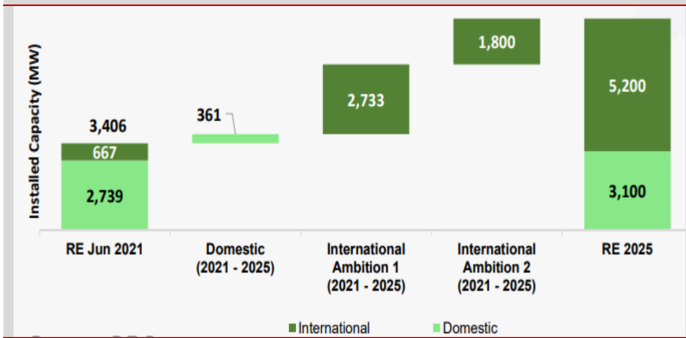
TENAGA Generation Installed Capacity In Mar 2021



Source: Company

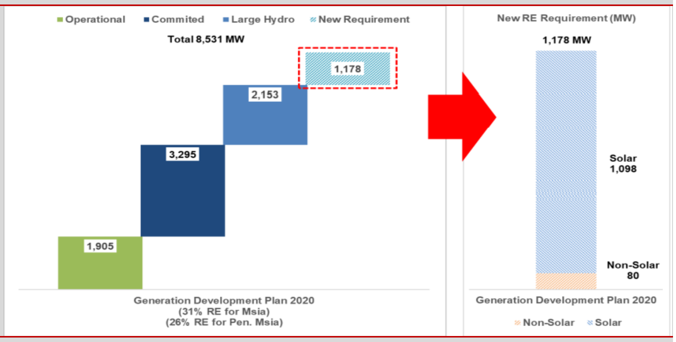
RE target of 8,300MW by 2025. TENAGA has revealed the details of its RE plan where 97% of its 4,894MW targeted RE new assets are coming from overseas expansion over the next four years. This includes 2,733MW from UK/Europe and 1,800MW from Southeast Asia. With this, TENAGA's RE portfolio would increase to 8,300MW or 32% of group's generation capacity by 2025 from 3,406MW or 17% currently. On the other hand, the Energy Commission (EC) has also sets a target for the RE capacity mix for Malaysia to achieve 31% by 2025 from 25% in 2020. As such, 1,178MW of new RE, of which 1,098MW are solar, are required over the next four years.

TENAGA RE Journey



Source: Company

Malaysia RE Capacity Mix Target To Achieve 31% by 2025

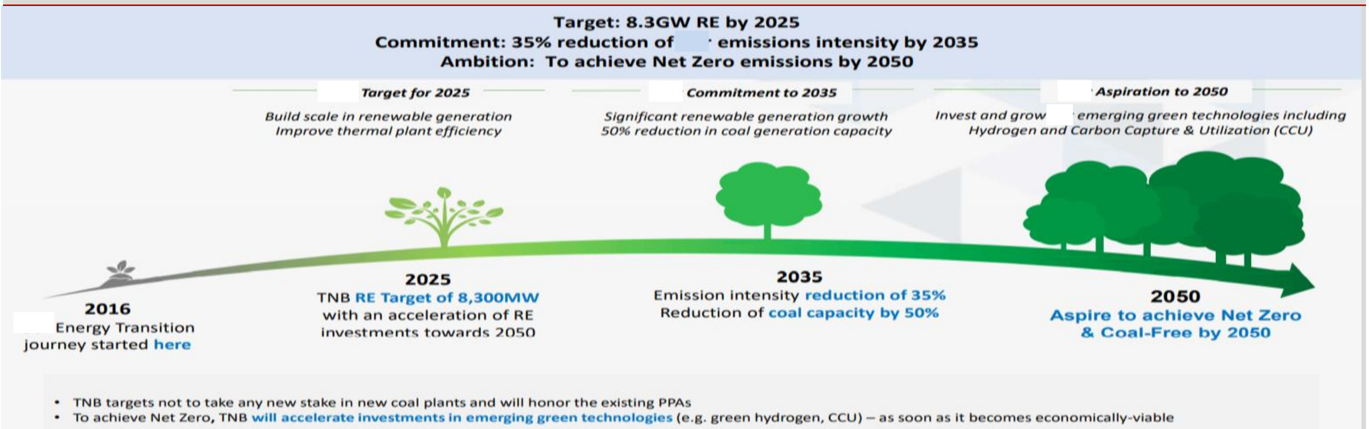


Source: EC

Committed to reduce coal-based generation capacity by 50% in 2035. Besides 8,300MW RE targeted capacity by 2025, TENAGA also revealed that by 2035 its coal-based capacity will be reduced by 50%. We believe this commitment is achievable given that four coal plants with a total installed capacity of 7,044MW are retiring from the system from 2029 to 2033. According to the EC's Report on Peninsular Malaysia Generation Development Plan 2020 released in Mar 2021, these four coal plants are the 1,474MW KEV Coal U3-U6 PPA expiring in 2029, 2,070MW TNB Janamanjung in 2030, 2,100MW TBP in 2031 and 1,400MW Jimah Energy Venture in 2033. As such, with the 60%-owned KEV and wholly-owned TNB Janamanjung plants, TENAGA's coal-based generation capacity will be reduced by 46% to 4,134MW from 7,678MW in Mar 2021. And this should help TENAGA to achieve its 35% reduction of emissions intensity commitment by 2035.

To achieve Net Zero & coal-free status by 2050. TENAGA will accelerate investments in emerging green technologies such as green hydrogen and carbon capture & utilisation, as soon as they become economically viable. This should help it to achieve Net Zero by 2050. With its last new coal plant JEP which was commissioned in 2019, TENAGA has pledged not to invest in green field coal plant in the future. With the 70%-owned JEP's PPA is expiring in 2044, TENAGA should be able to achieve coal-free status by 2050 while the last non-TENAGA's owned coal plant TBE is retiring in 2041 as well. However, the EC's Generation Development Plan 2020 still listed down three new coal plants in 2031 (2x700MW), 2034 (1x700MW) and 2037 (1x700MW). Nonetheless, this is still more than 10 years away and we believe the authority would have alternative option for this, such as gas-fired plant or RE to fill up the gap.

TENAGA's Sustainability Pathway up to 2050



Source: Company

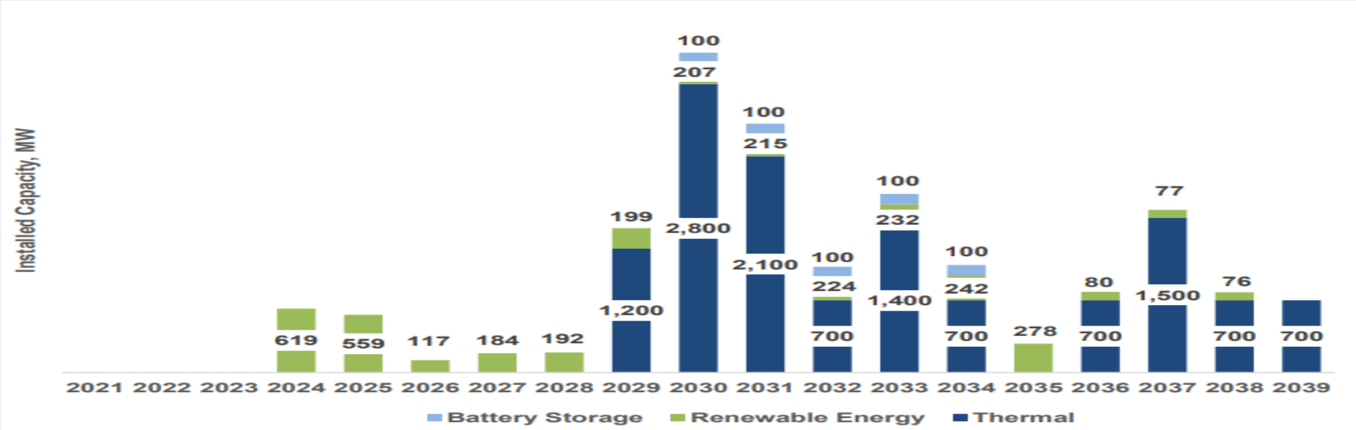
Malaysia Generation Development Plan (2021-2039)

Year	New Plants	Retiring Plants	Year	New Plants	Retiring Plants
2021	Edra Energy (CCGT) (3x747 MW) RE (860MW)	YTL Power (CCGT) (585MW)	**2031**	CCGT (1x700MW) **Coal (2x700MW)** BESS (1x100MW) RE (215MW)	**Tanjung Bin Power (Coal) (2,100MW)**
2022	RE (652MW)	TNB Pasir Gudang (CCGT) (275MW) GB3 (CCGT) (640MW)	**2032**	CCGT (1x700MW) BESS (1x100MW) RE (224MW)	
2023	RE (663MW)	Panglima (CCGT) (720MW)	**2033**	CCGT (2x700MW) BESS (1x100MW) RE (232MW)	**Jimah Energy Venture (Coal) (1,400MW)**
2024	TADMAX (CCGT) (2x600MW) RE (855MW)	SKS Prai (CCGT) (341MW) TTPC (CCGT) (650MW) TNB Gelugor (CCGR) (310MW)	**2034**	**Coal (1x700MW)** BESS (1x100MW) RE (242MW)	
2025	RE (818MW)	TNB Putrajaya GT4 & GT5 (OCGT) (249MW)	**2035**	RE (278MW)	
2026	THB (CCGT) (2x600MW) RE (117MW)	KLPP (CCGT) (675MW)	**2036**	CCGT (1x700MW) RE (80MW)	
2027	Nenggiri (Hydro) (300MW) RE (184MW)	SEV (CCGT) (1,303MW)	**2037**	CCGT (1x700MW) **Coal (1x700MW)** OCGT (1x100MW) RE (77MW)	TNB Prai (CCGT) (1,071MW) TNB CBPS (CCGT) (375MW)
2028	RE (192MW)	TNB Tuanku Jaafar PD1 (CCGT) (703MW)	**2038**	CCGT (1x700MW) RE (76MW)	Pengerang Power (Co-Gen) (600MW)
2029	CCGT (1x700MW) CCGT (1x500MW) RE (199MW)	KEV Gas U1 & U2 (Thermal Gas) (578MW) **KEV Coal U3-U6 (Coal) (1,474MW)**	**2039**	CCGT (1x700MW)	
2030	CCGT (4x700MW) RE (207MW) BESS (1x100MW)	TNB Tuanku Jaafar PD2 (CCGT) (708MW) **TNB Janamanjung (Coal) (2,070MW)**			

Note: CCGT = Combined cycle gas turbine; OCGT = Open cycle gas turbine; BESS = Battery Energy Storage System; Co-Gen = Cogeneration Plant

Source: EC

Malaysia New Capacity Projection (2021-2039)



Note: Battery storage is used to stabilise the system and will not be considered in the capacity mix
Source: EC

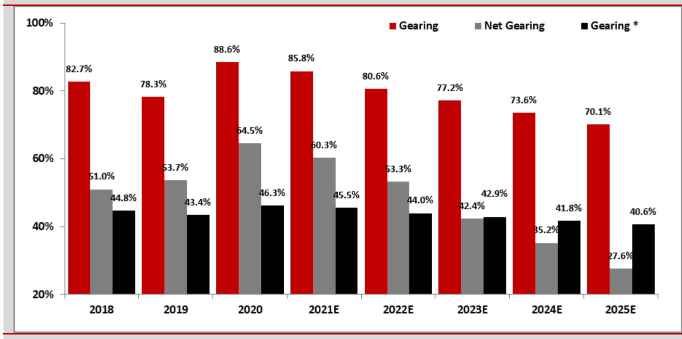
Malaysia Coal Generation Plants

Year	Retiring Plants	MW	Year	Retiring Plants	MW
2029	KEV Coal U3-U6	1,474	**2040**	Manjung 4	1,010
2030	TNB Janamanjung	2,070	**2041**	Tanjung Bin Energy	1,000
2031	Tanjung Bin Power	2,100	**2042**	Manjung 5	1,000
2033	Jimah Energy Venture	1,400	**2044**	Jimah East Power	2,000

Source: EC/Companies

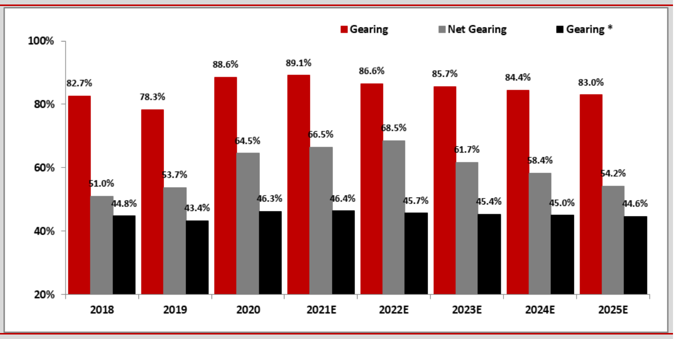
Enough financial strength to take RE expansion. In order to achieve 8,300MW RE assets by 2025, TENAGA has estimated capex of c.RM6.5b for its RE investments by adding 4,894MW RE assets. As such, we have assumed RM6.5b capex to be equally distributed over 2022 to 2025 with debt to equity ratio of 80:20 and expect a constant 50% dividend payout throughout the period. Even then, its gearing is expected to decline to 70.1% in FY25 from 88.6% in FY20A while net gearing will decline materially to 27.6% from 46.3% over the same period. On the other hand, using stress test based on 80 sen NDPS payout, implying 88-95% payout ratio, throughout the period, gearing will still decline to 83.0% in FY25 from 89.1% in FY20A. To recap, TENAGA distributed 80.0 sen NDPS in FY20A, including a 40.0 sen special dividend in 4QFY20. Based on TENAGA's gearing definition of total debt over the total summation of debt, equity and MI, gearing will still be fairly comfortable at 44.6% in FY25 from 46.3% in FY21A as it still has room to gear up to its optimal gearing level of 55%.

Gearing @ Based on 50% Earnings Payout



*Note: Gearing * is based on Total Debt / (Total Debt + Equity + MI)*
Source: Kenanga Research

Gearing @ Based on 80 sen NDPS Payout

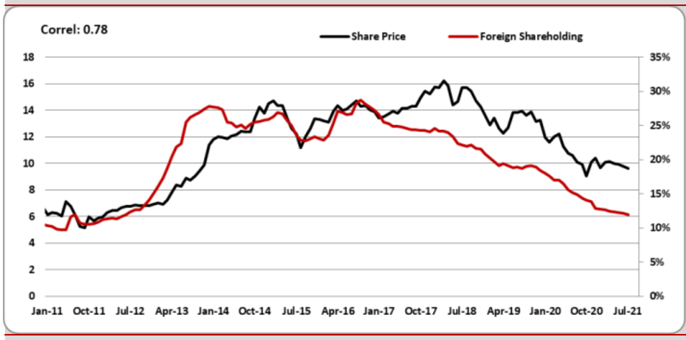


*Note: Gearing * is based on Total Debt / (Total Debt + Equity + MI)*
Source: Kenanga Research

FOREIGN SHAREHOLDING

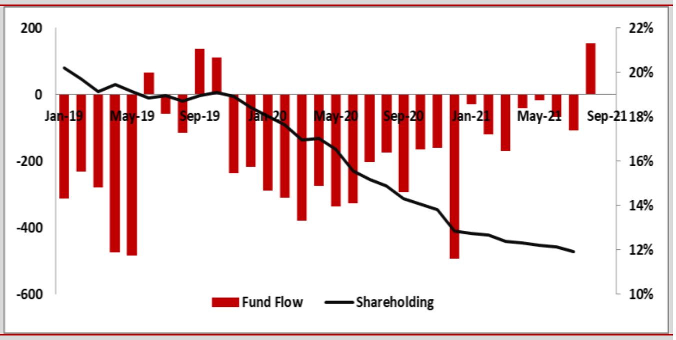
Foreigners turned net buyer in Aug. In the past 10 years, TENAGA's share price movement was highly correlated at 78% with its foreign shareholding. The foreigners bought shares ahead of the implementation of IBR in Jan 2014 that pushed TENAGA to new highs while the foreign shareholding was kept well above the 20% range to as high as 29% in Sep 2016 before tapering off. TENAGA saw its foreign shareholding falling below the 20% mark for the first time in Feb 2019. Since then, TENAGA has continued to face heavy selling as ESG become important as a key deciding factor in investment decision. Since then, foreigners have become net sellers, except for the month of Jun, Sep and Oct in 2019 while its share price continued to head southbound gradually as foreign shareholding fell below 12% for the first time in Jul 2021. However, foreigners turned net buyers for the first time in 21 months in Aug 2021 with net inflow of RM154m. Month-to-date in Sep, foreigners remain as net buyer with net inflow of RM94.7m. We believe this was partly due to the return of foreigners back to Malaysia market after a change in PM which could be signalling the foreigners' confident on the local market. However, we reckon that it is still too early to conclude that the foreigners are finally coming back to buy this index-heavyweight stock.

Share Price & Foreign Shareholding



Source: Company/Bloomberg

Foreign Fund Flow & Shareholding



Source: Company/DiBots

RECOMMENDATION

Target price upped slightly to RM11.80. To reflect the updated TENAGA's coal generation mix of 48% as opposed to our previous assumption of 65.9% based on fuel mix, the ESG discount is reduced to RM2.05 per share from RM2.82 previously, based on unchanged 50% discount to the book value of coal-based generators. To recap, we penalise the book value of coal power plants by halving their value based on US EIA (Energy Information Administration) 15 Dec 2020 report which suggested that coal fired plants emit approximately twice the amount of carbon dioxide compared to the less environmentally-damaging natural gas-fired plants. On the other hand, its trailing 3-year mean PER is also lowered to 15.0x from 15.7x, and this reduces mean valuation to RM13.85 from RM14.58 previously. As such, our new target price is increased slightly to RM11.80 from RM11.76, based on unchanged ESG discount to its 3-year mean valuation.

Valuation

	RM m	Remarks
Net book value of generators	48,829	FY20A PPE
Value attributed to coal	23,438	Based on 48% coal generation mix
Value penalised for CO2 emission	11,719	50% discount to book value
Issued share (m)	5,704.7	
Penalised value per share	2.05	
Mean valuation	13.85	3-year mean PER of 15.0x
ESG discount	-2.05	
Target price	RM11.80	

Source: Company/Kenanga Research

Valuation remains attractive; OP maintained While heavy selling is somewhat abating with foreigners turning net buyers since last month, its share price is still lacklustre given the ESG concerns. It has revealed its EGS commitment to reduce coal-based generation in the longer term which should well address the ESG issues. Meanwhile, the stock is trading at perspective PER of 10.7x or 1.5 SD below its 3-year mean which is fairly attractive given its resilient earnings profile. As such, we continue to rate TENAGA an OUTPERFORM with revised target price of RM11.80. The target price implies a valuation close to 1.0SD below its 3-year mean at FY22E PER of 12.7x. In addition, it also offers fairly decent dividend yield of >4% based on regular payout.

Income Statement

FY Dec (RM m)	2018	2019	2020	2021E	2022E
Revenue	50393	50940	43976	50389	50886
EBITDA	14762	19410	17981	19982	21563
Depreciation	-6491	-10319	-10622	-10121	-11258
EBIT	8271	9091	7359	9861	10305
Interest Income	424	525	318	371	416
Interest Expense	-1689	-3383	-3669	-3928	-3848
Associate	-189	53	77	100	100
Exceptional	-1354	-922	125	0	0
PBT	5046	5478	4235	6404	6972
Taxation	-1301	-1033	-619	-1537	-1673
Minority Interest	-21	84	-24	-27	-27
Net Profit	3724	4529	3593	4840	5272
Core Net Profit	5470	5194	3804	4840	5272

Balance Sheet

FY Dec (RM m)	2018	2019	2020	2021E	2022E
Fixed Assets	111446	109966	112596	112475	111217
Intangibles	241	241	434	443	447
Other FA	11259	42887	40601	39971	39668
Inventories	1296	1925	1584	1666	1607
Receivables	10332	8280	10835	11052	12424
Other CA	10451	9256	8942	8842	8795
Cash	8671	6292	6442	8005	9858
Total Assets	153695	178847	181433	182453	184017
Payables	10547	12987	14720	12600	12345
ST Borrowings	3928	3479	6409	1868	2689
Other ST Liability	7292	7336	7672	7815	7886
LT Borrowings	43905	41932	43044	48114	46363
Other LT Liability	28972	53831	52139	52155	52180
Minority Int.	1214	1300	1617	1649	1665
Net Assets	**57838**	**57982**	**55833**	**58253**	**60889**
Share Capital	11446	11446	11675	11675	11675
Reserves	46392	46536	44158	46578	49214
Equity	**57838**	**57982**	**55833**	**58253**	**60889**

Cashflow Statement

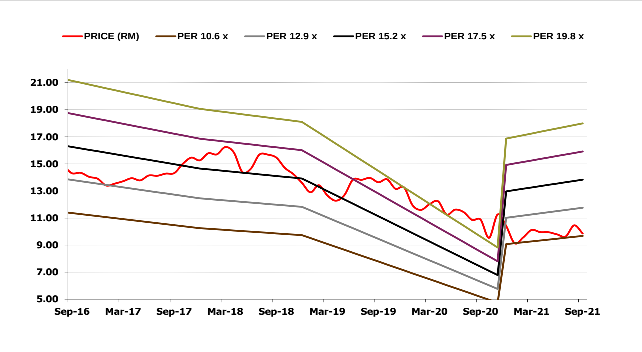
FY Dec (RM m)	2018	2019	2020	2021E	2022E
Operating CF	11671	11942	11603	14053	15650
Investing CF	-11874	-9456	-6110	-10699	-10336
Financing CF	2108	-5788	-5218	-1791	-3460
Change In Cash	1905	-3302	275	1563	1854
Free CF	-203	2486	5493	3354	5314

Financial Data & Ratios

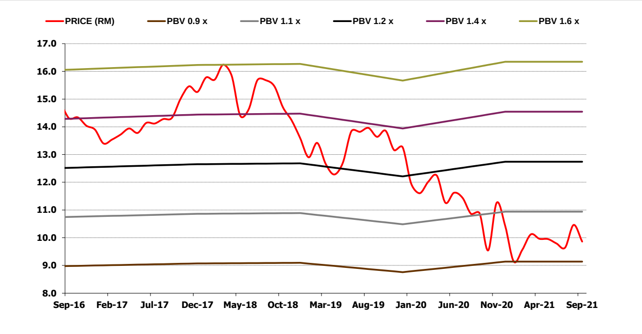
FY Dec	2018	2019	2020	2021E	2022E
Growth (%)					
Revenue	6.1	1.1	-13.7	14.6	1.0
EBITDA	-5.3	31.5	-7.4	11.1	7.9
Operating Income	-12.4	9.9	-19.1	34.0	4.5
Pre-tax Income	-43.5	8.6	-22.7	51.2	8.9
Net Income	-55.0	21.6	-20.7	34.7	8.9
Core Net Income	-10.4	-5.0	-26.8	27.2	8.9
Profitability (%)					
EBITDA Margin	29.3	38.1	40.9	39.7	42.4
Operating Margin	16.4	17.8	16.7	19.6	20.3
PBT Margin	10.0	10.8	9.6	12.7	13.7
Net Margin	7.4	8.9	8.2	9.6	10.4
Core Net Margin	10.9	10.2	8.7	9.6	10.4
Effective Tax Rate	29.3	7.6	16.8	19.6	24.0
ROE	9.5	9.0	6.7	8.5	8.8
ROA	4.8	5.2	4.1	5.5	5.0
DuPont Analysis					
Net margin (%)	7.4	8.9	8.2	9.6	10.4
Assets Turnover (x)	0.3	0.3	0.2	0.3	0.3
Leverage Factor (x)	2.7	3.1	3.2	3.1	3.0
ROE (%)	6.4	7.8	6.4	8.3	8.7
Leverage					
Debt/Asset (x)	0.3	0.3	0.3	0.3	0.3
Debt/Equity (x)	0.8	0.8	0.9	0.9	0.8
Net Debt/(Cash)	-29509	-31160	-36037	-35142	-32426
Net Debt/Equity (x)	0.51	0.54	0.65	0.60	0.53
Valuations					
Core EPS (sen)	95.9	91.1	66.7	84.8	92.4
NDPS (sen)	53.3	100.0	80.0	42.4	46.2
BV/share (RM)	10.1	10.2	9.8	10.2	10.7
NTA/share (RM)	10.1	10.1	9.7	10.1	10.6
Core PER (x)	14.5	14.6	15.8	11.6	10.7
Net Div. Yield (%)	3.8	7.5	7.6	4.3	4.7
PBV (x)	0.97	0.97	1.01	0.96	0.92
P/NTA (x)	0.98	0.97	1.01	0.97	0.93
EV/EBITDA (x)	5.8	4.5	5.1	4.6	4.1

Source: Kenanga Research

Fwd PER Band



Fwd PBV Band



Source: Bloomberg, Kenanga Research

Peer Comparison

Name	Last Price	Market	Shariah	Current	Revenue Growth		Core Earnings Growth		PER (x) - Core Earnings			PBV (x)		ROE (%)	Net Div.Yld. (%)	Target	Rating
	(RM)	Cap	Compliant	FYE	1-Yr. Fwd.	2-Yr. Fwd.	1-Yr. Fwd.	2-Yr. Fwd.	Hist.	1-Yr. Fwd.	2-Yr. Fwd.	Hist.	1-Yr. Fwd.	1-Yr. Fwd.	1-Yr. Fwd.	Price (RM)	
GAS MALAYSIA BHD	2.66	3,415.4	Y	12/2021	-11.9%	8.6%	-0.4%	5.4%	15.3	15.3	14.6	3.2	3.1	20.4%	5.9%	3.00	OP
MALAKOFF CORP BHD	0.810	3,958.4	Y	12/2021	-8.0%	0.4%	24.9%	3.3%	16.0	12.8	12.4	0.8	0.8	5.9%	6.3%	1.06	OP
PESTECH INTERNATIONAL BHD	1.10	837.3	Y	06/2022	12.4%	5.0%	4.7%	14.9%	11.6	11.1	9.7	1.4	1.3	12.2%	0.0%	1.39	OP
PETRONAS GAS BHD	16.98	33,598.9	Y	12/2021	0.7%	1.4%	3.5%	0.5%	16.8	16.2	16.1	2.7	2.6	16.2%	5.2%	17.06	OP
TENAGA NASIONAL BHD	9.85	56,402.0	Y	12/2021	14.6%	1.0%	27.2%	8.9%	13.7	11.6	10.7	0.9	1.0	8.5%	4.3%	11.80	OP
YTL POWER INTERNATIONAL BHD	0.670	5,428.4	N	06/2022	-4.8%	1.6%	-3.9%	6.2%	10.4	10.8	10.2	0.4	0.4	3.4%	7.5%	0.890	OP
Simple Average					**0.5%**	**3.0%**	**9.3%**	**6.5%**	**14.0**	**13.0**	**12.3**	**1.6**	**1.5**	**11.1%**	**4.9%**		

Source: Bloomberg, Kenanga Research

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Stock Ratings are defined as follows:

Stock Recommendations

OUTPERFORM	: A particular stock's Expected Total Return is MORE than 10%
MARKET PERFORM	: A particular stock's Expected Total Return is WITHIN the range of -5% to 10%
UNDERPERFORM	: A particular stock's Expected Total Return is LESS than -5%

Sector Recommendations***

OVERWEIGHT	: A particular sector's Expected Total Return is MORE than 10%
NEUTRAL	: A particular sector's Expected Total Return is WITHIN the range of -5% to 10%
UNDERWEIGHT	: A particular sector's Expected Total Return is LESS than -5%

Sector recommendations are defined based on market capitalisation weighted average expected total return for stocks under our coverage.

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KENANGA INVESTMENT BANK BERHAD (15678-H)
Level 17, Kenanga Tower, 237, Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia
Telephone: (603) 2172 0880 Website: www.kenanga.com.my E-mail: research@kenanga.com.my