

Tenaga Nasional (TNB MK)

Refining targeted subsidies

Routine pass-through

The government again upheld Tenaga's ICPT mechanism for 1H24. Tariffs are mostly maintained, with the only change being the removal of the 2.0sen/kWh rebate for household users consuming 600-1,500kWh/month. This signals further progress on targeted subsidies, and alleviation of already dissipating ICPT concerns, in our view. Maintain HOLD with an unchanged MYR10.00 TP. We prefer Mega First (MFCB MK, BUY, CP: MYR3.73, TP: MYR4.30) in the utilities space.

ICPT bill largely unchanged HoH

The only change this round is the removal of the 2.0sen/kWh rebate for household users consuming 600-1,500kWh/month (affects c.15% of households). Households consuming <600kWh/month continue to enjoy a 2.0sen/kWh tariff rebate, while a 10.0sen/kWh surcharge remains in place for households consuming >1,500kWh/month. The prevailing 3.7sen/kWh surcharge is maintained for low-voltage commercial, low-voltage industrial and agricultural users, and water/sanitation operators. The surcharge for all other non-domestic users remains at 17.0sen/kWh.

Kickstarting NETR generation projects

While the limelight has largely been on grid capex and RE export, Tenaga has begun rolling out the NETR generation projects. For hybrid hydro floating solar (c.2,500MW potential capacity by 2040), Tenaga has already closed an international EPCC tender in early Dec 2023 for the first 30MW (at Chenderoh reservoir in Perak) and is currently evaluating bids. On the large-scale solar parks (5 x 100MW), Tenaga had announced a MoU with state-owned Majuperak Holdings in Nov 2023 for one such park in Perak.

Maintain HOLD

Our net profit forecasts and MYR10.00 TP (DCF-based assuming 8.3% WACC and 1% LT growth) are unchanged. TNB's investment thesis revolves around its role in Malaysia's RE transition. Clarity on RE-related grid capex is unlikely to be forthcoming until RP4 (2025-2027) begins, in our view.

FYE Dec (MYR m)	FY21A	FY22A	FY23E	FY24E	FY25E
Revenue	52,630	73,183	51,906	52,794	53,698
EBITDA	15,326	16,468	15,954	16,328	16,709
Core net profit	5,141	4,703	4,300	4,605	5,061
Core FDEPS (sen)	89.5	81.4	74.5	79.7	87.6
Core FDEPS growth(%)	14.8	(9.0)	(8.6)	7.1	9.9
Net DPS (sen)	40.0	46.0	41.1	44.0	48.4
Core FD P/E (x)	10.4	11.8	13.5	12.6	11.5
P/BV (x)	0.9	0.9	1.0	0.9	0.9
Net dividend yield (%)	4.3	4.8	4.1	4.4	4.8
ROAE (%)	7.6	7.6	7.2	7.5	7.9
ROAA (%)	2.8	2.4	2.1	2.2	2.4
EV/EBITDA (x)	6.4	6.6	6.5	6.2	5.8
Net gearing (%) (incl perps)	72.7	83.4	69.2	62.2	54.5
Consensus net profit	-	-	3,732	4,481	4,514
MIBG vs. Consensus (%)	-	-	15.2	2.8	12.1

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HOLD

Share Price	MYR 10.06
12m Price Target	MYR 10.00 (+4%)
Previous Price Target	MYR 10.00

Company Description

Tenaga Nasional engages in the generation, transmission, distribution and sale of electricity and the provision of other related services.

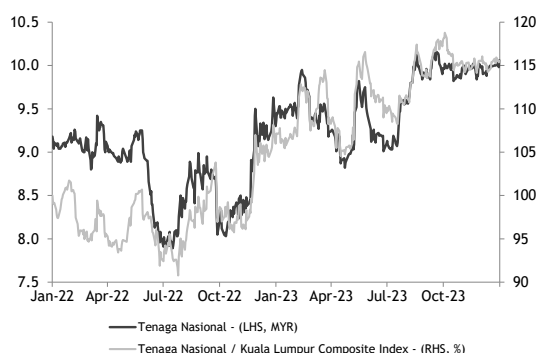
Statistics

52w high/low (MYR)	10.16/8.82
3m avg turnover (USDm)	6.9
Free float (%)	58.3
Issued shares (m)	5,753
Market capitalisation	MYR57.9B USD12.5B

Major shareholders:

Khazanah Nasional Bhd	22.6%
Employees Provident Fund	16.5%
Permodalan Nasional Bhd	15.5%

Price Performance



	-1M	-3M	-12M
Absolute (%)	0	1	8
Relative to index (%)	1	(1)	10

Source: FactSet

ESG@MAYBANK IBG

Tear Sheet Insert

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Risk Rating & Score¹	32.2 (High)
Score Momentum²	+0.2
Last Updated	24 May 2023
Controversy Score³ (Updated: 23 May 2023)	2 - Customer (quality & safety) incidents

Business Model & Industry Issues

- With the commissioning of Jimah East, Malaysia’s diversification into coal plants over the past decade has ended. New plants going forward will be gas or solar-based. The unit cost of generation for both gas and solar plants are for now still higher than coal, although this is essentially borne by consumers via the IBR tariff framework.
- Given the prevailing structure of PPAs in Malaysia, coal will however continue to feature very prominently in Peninsular Malaysia’s generation mix for at least the next decade. This means the “coal stigma” will continue to accompany Tenaga for the foreseeable future. Should such pressure increase, Tenaga could consider accelerating its renewable expansion (it already has international solar and wind platforms) or potentially de-merging or spinning off its generation unit.
- The push into renewables has seen the increased adoption of solar via solar farms and rooftop solar. From a land optimisation perspective, the technology is probably better suited for rooftops. With the right incentives, Tenaga’s panel leasing business could become more significant in contribution.
- Tenaga scores above-average in our proprietary scoring methodology (see next page) with an overall score of 63/100.

Material E issues

- Significant coal exposure with coal accounting for over 50% of Peninsular Malaysia’s generation mix. However, many of these coal plants are new and utilises ultra-supercritical technology. Meanwhile, the cost of insuring coal plants has risen by 10-20% annually in recent years.
- Balance of generation is largely gas-based, which is still a fossil fuel and thus create carbon emissions. In response, Tenaga has in recent years, been consciously increasing its renewable capacity in line with the government’s target of achieving a 20% renewable mix by 2025.
- Large-scale renewable facilities such as solar farms and hydro dams are typically land-intensive (a 50MW farm requires c.200 acres of land) and could have an effect on local biodiversity. In Peninsular Malaysia, there are no longer suitable sites for large dams while solar farms are typically situated on unused agricultural land.

Material S issues

- Average electricity tariffs in 2023 are c.20% higher relative to 2013 levels, steep for an essential service. Nevertheless, households have largely been insulated, with tariffs for the two lowest bands (c.70% of households) having been kept unchanged for the past decade.
- Tenaga was found liable for causing flash floods at Cameron Highlands (Bertam Valley) in 2013 having discharged water from its hydroelectric dam following heavy rains. Tenaga has since proactively engaged preventive measures such as regular cleaning of reservoir and dam, and conducting annual flood evacuation drills.
- Tenaga is a major employer in Malaysia, with a staff count of about 35,000 people of which 23,000 are represented by unions. 21% of Tenaga’s employees are female. It also owns and operates a leading university in Malaysia which enrolls c.10,000 students.

Key G metrics and issues

- Tenaga’s constitution states a minimum of 2 and a maximum of 12 directors. MoF Inc being the special shareholder of Tenaga, has the right to appoint up to six directors.
- There are presently 11 members on Tenaga’s board comprising of 1 Executive Director (President/CEO), 4 Non-Independent Non-Executive Directors (including the Chairman) and 6 Independent Non-Executive Directors.
- 4 of the 11 board members (including Chairman and President/CEO are appointees by MoF Inc and Khazanah Nasional.
- In terms of board gender and diversity, 6 of the 11 board members are female, and 7 are of non-finance/accounting backgrounds.
- Tenaga has been audited by PricewaterhouseCoopers for at least the past decade.
- The cumulative remuneration of the CEOs represents less than 0.1% of Tenaga’s 2022 net profit.
- Female representation at the management level remains relatively low at 24% among senior management.
- Tenaga’s track record with its international acquisitions has been mixed - it has substantially impaired its associates in Turkey (fully written-off) and India a few years after acquisition.
- Tenaga’s balance sheet remains relatively under-levered, with a net debt-to-equity of 87% at end 2022. MFRS 16 with its lease liabilities has inflated the reported net gearing to c.1.4x, still a comfortable level.

¹**Risk Rating & Score** - derived by Sustainalytics and assesses the company’s exposure to unmanaged ESG risks. Scores range between 0 - 50 in order of increasing severity with low/high scores & ratings representing negligible/significant risk to the company’s enterprise value, respectively, from ESG-driven financial impacts. ²**Score Momentum** - indicates changes to the company’s score since the last update - a **negative** integer indicates a company’s improving risk score; a **positive** integer indicates a deterioration. ³**Controversy Score** - reported periodically by Sustainalytics in the event of material ESG-related incident(s), with the impact severity scores of these events ranging from Category 0-5 (0 - no reports; 1 - negligible risks; ...; 5 - poses serious risks & indicative of potential structural deficiencies at the company).

Quantitative Parameters (Score: 25)						
	Particulars	Unit	2020	2021	2022	Malakoff (MLK MK)
E	Scope 1 emissions	m tCO2e	39.04	39.80	38.58	16.82
	Scope 2 emissions	m tCO2e	0.22	0.19	0.32	0.07
	Scope 3 emissions	m tCO2e	N/A	N/A	N/A	N/A
	Total	m tCO2e	39.26	39.99	38.90	16.89
	GHG intensity (Scope 1 and 2)	tCO2e/MWh	0.57	0.55	0.55	0.86
	% Coal capacity	%	46%	43%	42%	65%
	% Renewable Energy capacity	%	20%	19%	22%	1%
S	% of women in workforce	%	21.1%	22.1%	21.4%	17.7%
	% of women in management roles	%	21.7%	23.1%	24.3%	12.5%
	Lost time injury frequency (LTIF)	number	1.29	1.03	0.82	0.29
	Contribution & sponsorship	MYR m	63	40	12	36
G	MD/CEO salary as % of reported net profit	%	0.12%	0.14%	0.12%	0.8%
	Board salary as % of reported net profit	%	0.30%	0.26%	0.11%	0.8%
	Independent directors on the Board	%	64%	67%	55%	56%
	Female directors on the Board	%	36%	33%	55%	11%

Qualitative Parameters (Score: 100)	
a) Is there an ESG policy in place and whether there is a standalone ESG committee or is it part of a risk committee?	<i>Yes. It has an established sustainability framework and a sustainability development committee headed by the CEO.</i>
b) Is the senior management salary linked to fulfilling ESG targets?	<i>Yes. ESG-related targets make up 30% CEO's total KPIs.</i>
c) Does the company follow the task force of climate related disclosures (TCFD) framework for ESG reporting?	<i>Yes</i>
e) Does the company have a mechanism to capture Scope 3 emissions - which parameters are captured?	<i>Yes, but Scope 2 and 3 emissions are inherently insignificant for an integrated electricity utility</i>
f) What are the 2-3 key carbon mitigation/water/waste management strategies adopted by the company?	<i>Tenaga has pledged to significantly increase its RE capacity, while also investing in emerging low-emission / green technologies.</i>
g) Does carbon offset form part of the net zero/carbon neutrality target of the company?	<i>Yes</i>

Target (Score: 100)		
Particulars	Target	Achieved
Increase RE capacity to 8,300MW by 2025	8,300	3,438
Reduce emission intensity by 35% in 2035 vs 2020 baseline	35%	N/A
Net-zero carbon emissions by 2050	Net 0	N/A
Reduce coal capacity by 50% in 2035	50%	0%
Reduce coal capacity by 100% in 2050	100%	0%
Zero fatalities and LTIP <1.0 in 2050	<1.0	1.0
1% of PAT towards environmental and community programs in 2050	1.0%	1.1%
Impact		
NA		
Overall Score: 63		
As per our ESG matrix, Tenaga has an overall score of 63.		

ESG score	Weights	Scores	Final Score
Quantitative	50%	25	13
Qualitative	25%	100	25
Target	25%	100	25
Total			63

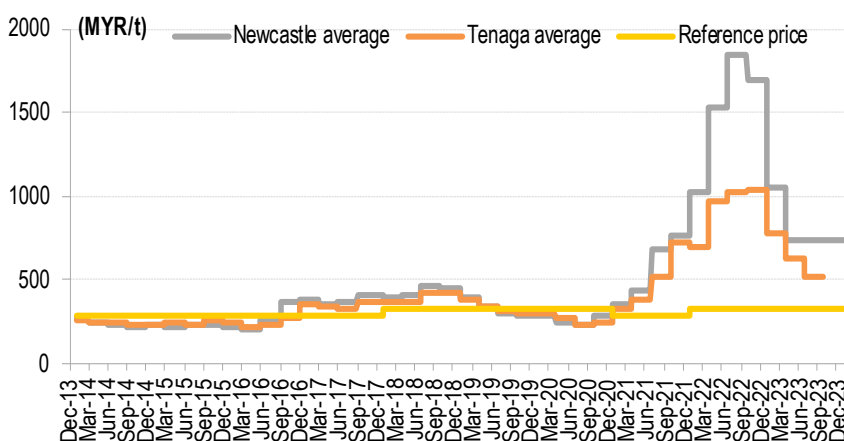
As per our ESG assessment, Tenaga has an established framework, internal policies, and tangible mid/long-term targets. Reduction of coal capacity is contingent upon the expiry of existing PPAs. Tenaga's overall ESG score is 63, which makes its ESG rating above average in our view (average ESG rating = 50; refer to Appendix I for our ESG Assessment Scoring).

Tariff history - Peninsular Malaysia

Date	Details
Jun-11	7.1% hike in tariff to 33.5sen/kWh. Gas price increased by 28% to RM13.70/mmBTU. A 1% feed-in-tariff for renewable energy fund beginning 1st Sept 2011.
Jan-14	14.9% hike in blended tariff to 38.53sen/kWh. Gas price increased by 11% to RM15.20/mmBTU. Feed-in-tariff for renewable energy fund raised to 1.6%.
Mar-15	Base tariff is unchanged, but a 5.8% (or 2.25sen/kWh) tariff rebate is offered to customers effective Mar-Jun 2015. Effective tariff thus falls to 36.28sen/kWh.
Jul-15	The 2.25sen/kWh tariff rebate will continue throughout 2H15. Effective tariff is thus maintained at 36.28sen/kWh.
Jan-16	Base tariff is unchanged, but tariff rebate is reduced to 3.9% (or 1.52sen/kWh). Effective tariff thus rises to 37.01sen/kWh.
Jul-16	Base tariff and tariff rebate (1.52sen/kWh) are unchanged. Effective tariff remains at 37.01sen/kWh.
Jan-17	Base tariff and tariff rebate (1.52sen/kWh) are unchanged. Effective tariff remains at 37.01sen/kWh.
Jul-17	Base tariff and tariff rebate (1.52sen/kWh) are unchanged. Effective tariff remains at 37.01sen/kWh.
Jan-18	Tariff schedule maintained, implying a 2.6% hike in base tariff to 39.45sen/kWh. Tariff rebate (1.52sen/kWh) is unchanged and is funded directly by the government. Effective tariff is now at c.37.93sen/kWh.
Jul-18	Tariff rebate (1.52sen/kWh) is removed and a surcharge (1.35sen/kWh) is implemented, with the household portion being funded by the government. Effective tariff is now at 40.8sen/kWh, representing a 7.6% increase.
Mar-19	Tariff surcharge increased to 2.55sen/kWh, with the household portion again being funded by the government. Effective tariff is now at 42.0sen/kWh, representing a 2.9% increase.
Jul-19	Base tariff and tariff surcharge (2.55sen/kWh) are unchanged, with the household portion again being funded by the government. Effective tariff remains at 42.0sen/kWh.
Jan-20	Tariff surcharge lowered to 2.0sen/kWh, with the household portion again being funded by the government. Effective tariff is now at 41.45sen/kWh, representing a 1.3% decrease.
Jul-20	Tariff surcharge removed. Effective tariff is back at 39.45sen/kWh, representing a 4.8% decrease.
Jan-21	Tariff rebate of 2.0sen/kWh offered. Effective tariff is at 37.45sen/kWh, representing a 5.1% decrease.
Jul-21	Tariff rebate of 2.0sen/kWh maintained. Effective tariff is unchanged at 37.45sen/kWh.
Feb-22	Base tariff maintained at 39.45sen/kWh. A 3.7sen/kWh tariff surcharge is introduced, with the government funding a 2.0sen/kWh tariff rebate for household users. Effective tariff is thus raised by 15.2% to 43.15sen/kWh.
Jul-22	The 3.7sen/kWh tariff surcharge is maintained for commercial and industrial users, while households continue to enjoy a 2.0sen/kWh tariff rebate. Effective tariff is unchanged at 43.15sen/kWh.
Jan-23	Households continue to enjoy a 2.0sen/kWh tariff rebate, the 3.7sen/kWh surcharge is maintained for low-voltage commercial, low-voltage industrial and all agricultural users, while a 20.0sen/kWh surcharge is imposed on all other non-domestic users.
Jul-23	Households consuming <1,500kWh/month continue to enjoy a 2.0sen/kWh tariff rebate, while a 10.0sen/kWh surcharge will be imposed on households consuming >1,500kWh/month. A 3.7sen/kWh surcharge is maintained for low-voltage commercial, low-voltage industrial and all agricultural users and now applies to water/sanitation operators, while a reduced 17.0sen/kWh surcharge is imposed on all other non-domestic users.
Jan-24	Households consuming 600-1,500kWh/month no longer enjoy the 2.0sen/kWh tariff rebate, while rebates/surcharges for all other categories are unchanged.

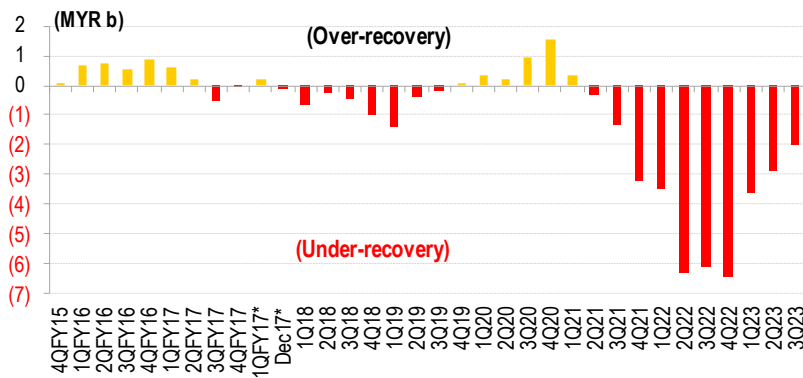
Source: Tenaga, Energy Commission, Maybank IBG Research

Coal prices



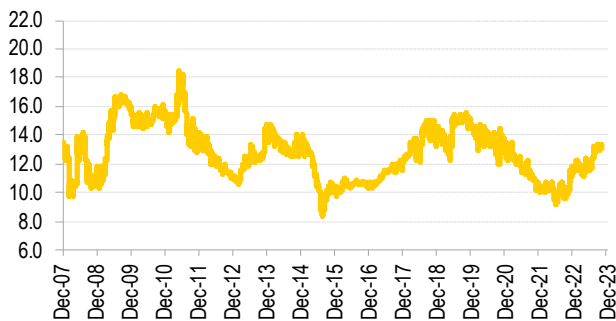
Source: Bloomberg, Maybank IBG Research

Generation cost imbalances



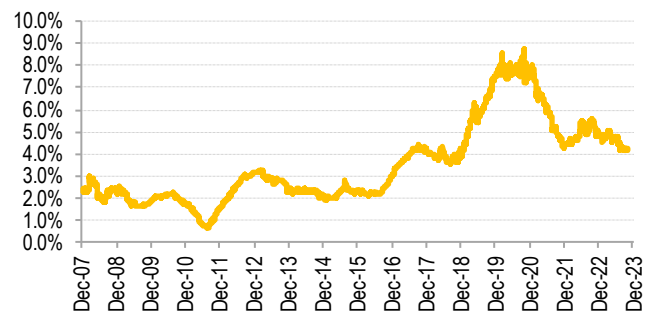
Source: Company. *Change of financial year end from Aug to Dec.

Trailing PER



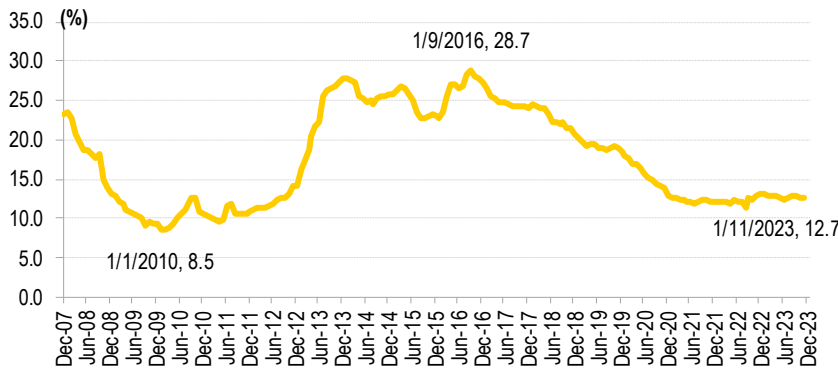
Source: Bloomberg, Maybank IBG Research

Trailing net yield



Source: Bloomberg, Maybank IBG Research

Foreign shareholding



Source: Company

Risk statement

There are several risk factors for our earnings estimates, price target, and rating for Tenaga. Regulatory developments, such as the determination of regulated returns, have direct impact on earnings. Changes in electricity demand patterns or plant outages could also result in loss of earnings for Tenaga.

FYE 31 Dec	FY21A	FY22A	FY23E	FY24E	FY25E
Key Metrics					
P/E (reported) (x)	13.2	11.5	13.5	12.6	11.4
Core P/E (x)	10.4	11.8	13.5	12.6	11.4
Core FD P/E (x)	10.4	11.8	13.5	12.6	11.5
P/BV (x)	0.9	0.9	1.0	0.9	0.9
P/NTA (x)	2.5	2.7	2.6	2.4	2.2
Net dividend yield (%)	4.3	4.8	4.1	4.4	4.8
FCF yield (%)	9.2	1.7	21.3	14.1	15.4
EV/EBITDA (x)	6.4	6.6	6.5	6.2	5.8
EV/EBIT (x)	12.0	12.1	12.6	11.8	10.7
INCOME STATEMENT (MYR m)					
Revenue	52,629.5	73,183.0	51,905.7	52,793.6	53,697.7
EBITDA	15,326.4	16,467.7	15,954.1	16,327.8	16,709.3
Depreciation	(7,218.1)	(7,526.6)	(7,689.6)	(7,809.0)	(7,653.0)
Amortisation	0.0	0.0	0.0	0.0	0.0
EBIT	8,108.3	8,941.1	8,264.5	8,518.8	9,056.2
Net interest income / (exp)	(1,909.6)	(2,178.6)	(2,614.0)	(2,467.6)	(2,405.1)
Associates & JV	193.5	97.6	100.0	100.0	100.0
Exceptionals	(858.0)	(319.3)	0.0	0.0	0.0
Other pretax income	0.0	0.0	0.0	0.0	0.0
Pretax profit	5,534.2	6,540.8	5,750.5	6,151.2	6,751.1
Income tax	(1,048.7)	(2,063.1)	(1,356.1)	(1,452.3)	(1,596.3)
Minorities	(202.9)	(94.1)	(94.1)	(94.1)	(94.1)
Discontinued operations	0.0	0.0	0.0	0.0	0.0
Reported net profit	4,282.6	4,383.6	4,300.2	4,604.8	5,060.7
Core net profit	5,140.6	4,702.9	4,300.2	4,604.8	5,060.7
BALANCE SHEET (MYR m)					
Cash & Short Term Investments	9,208.4	13,034.4	20,356.4	23,477.6	27,196.2
Accounts receivable	13,976.9	26,818.4	19,909.0	16,633.6	13,240.5
Inventory	1,977.1	3,290.8	1,996.1	2,024.5	2,040.9
Property, Plant & Equip (net)	114,105.6	116,577.1	118,387.5	119,578.4	120,425.4
Intangible assets	35,149.6	37,998.7	37,998.7	37,998.7	37,998.7
Investment in Associates & JVs	1,867.1	1,679.2	1,714.2	1,749.2	1,784.2
Other assets	6,315.9	6,523.7	6,523.7	6,523.7	6,523.7
Total assets	182,600.6	205,922.3	206,885.6	207,985.7	209,209.6
ST interest bearing debt	6,992.5	13,262.2	13,262.2	13,262.2	13,262.2
Accounts payable	8,596.7	11,509.7	10,535.0	9,560.0	8,503.7
LT interest bearing debt	44,685.7	50,620.0	50,620.0	50,620.0	50,620.0
Other liabilities	63,933.0	69,564.0	69,564.0	69,564.0	69,564.0
Total Liabilities	124,208.2	144,956.1	143,981.4	143,006.4	141,950.1
Shareholders Equity	56,608.4	58,517.1	60,452.2	62,524.4	64,801.7
Minority Interest	1,784.0	2,449.1	2,452.0	2,454.9	2,457.8
Total shareholder equity	58,392.4	60,966.2	62,904.2	64,979.3	67,259.5
Total liabilities and equity	182,600.6	205,922.3	206,885.6	207,985.7	209,209.6
CASH FLOW (MYR m)					
Pretax profit	5,534.2	6,540.8	5,750.5	6,151.2	6,751.1
Depreciation & amortisation	7,218.1	7,526.6	7,689.6	7,809.0	7,653.0
Change in working capital	(5,798.0)	(10,977.0)	7,229.4	2,272.0	2,320.3
Other operating cash flow	5,233.7	5,226.9	(100.0)	(100.0)	(100.0)
Cash flow from operations	13,353.9	9,377.9	21,827.4	17,147.6	17,433.3
Capex	(8,415.5)	(8,445.3)	(9,500.0)	(9,000.0)	(8,500.0)
Free cash flow	4,938.4	932.6	12,327.4	8,147.6	8,933.3
Dividends paid	(4,568.4)	(2,181.3)	(2,365.1)	(2,532.7)	(2,783.4)
Equity raised / (purchased)	0.0	0.0	0.0	0.0	0.0
Change in Debt	1,886.0	12,061.1	0.0	0.0	0.0
Other invest/financing cash flow	(6,714.9)	(7,012.1)	(2,640.2)	(2,493.8)	(2,431.3)
Effect of exch rate changes	0.0	0.0	0.0	0.0	0.0
Net cash flow	(4,458.9)	3,800.3	7,322.0	3,121.2	3,718.6

FYE 31 Dec	FY21A	FY22A	FY23E	FY24E	FY25E
Key Ratios					
Growth ratios (%)					
Revenue growth	19.7	39.1	(29.1)	1.7	1.7
EBITDA growth	10.6	7.4	(3.1)	2.3	2.3
EBIT growth	18.6	10.3	(7.6)	3.1	6.3
Pretax growth	10.2	18.2	(12.1)	7.0	9.8
Reported net profit growth	1.8	2.4	(1.9)	7.1	9.9
Core net profit growth	15.3	(8.5)	(8.6)	7.1	9.9
Profitability ratios (%)					
EBITDA margin	29.1	22.5	30.7	30.9	31.1
EBIT margin	15.4	12.2	15.9	16.1	16.9
Pretax profit margin	10.5	8.9	11.1	11.7	12.6
Payout ratio	53.4	60.2	55.0	55.0	55.0
DuPont analysis					
Net profit margin (%)	8.1	6.0	8.3	8.7	9.4
Revenue/Assets (x)	0.3	0.4	0.3	0.3	0.3
Assets/Equity (x)	3.2	3.5	3.4	3.3	3.2
ROAE (%)	7.6	7.6	7.2	7.5	7.9
ROAA (%)	2.8	2.4	2.1	2.2	2.4
Liquidity & Efficiency					
Cash conversion cycle	11.5	55.2	87.5	54.1	39.3
Days receivable outstanding	82.7	100.3	162.0	124.6	100.1
Days inventory outstanding	16.3	16.0	23.5	17.6	17.7
Days payables outstanding	87.6	61.1	98.0	88.1	78.6
Dividend cover (x)	1.9	1.7	1.8	1.8	1.8
Current ratio (x)	1.0	1.2	1.2	1.2	1.3
Leverage & Expense Analysis					
Asset/Liability (x)	1.5	1.4	1.4	1.5	1.5
Net gearing (%) (incl perps)	72.7	83.4	69.2	62.2	54.5
Net gearing (%) (excl. perps)	72.7	83.4	69.2	62.2	54.5
Net interest cover (x)	4.2	4.1	3.2	3.5	3.8
Debt/EBITDA (x)	3.4	3.9	4.0	3.9	3.8
Capex/revenue (%)	16.0	11.5	18.3	17.0	15.8
Net debt/ (net cash)	42,469.8	50,847.8	43,525.8	40,404.6	36,686.0

Source: Company; Maybank IBG Research

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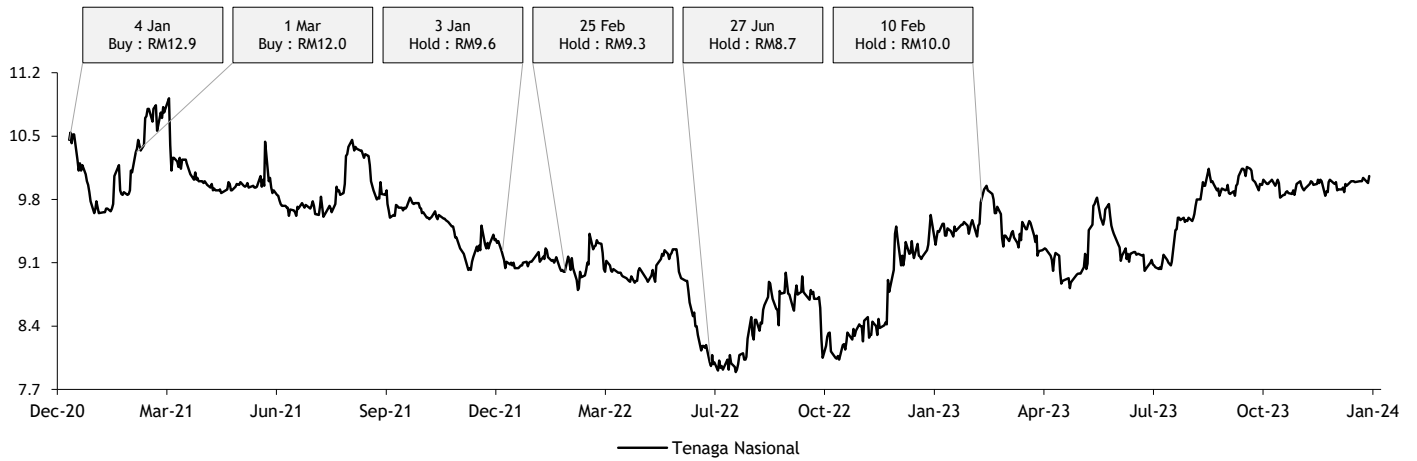
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