

UTILITIES

Maintain POSITIVE

RE Catalysts under NETR Phase 2

KEY INVESTMENT HIGHLIGHTS

- **NETR Phase 2 details out some 68GW RE capacity target by 2050**
- **Solar to be increasingly dominant in the capacity mix with complete coal phase out by 2050**
- **Grid third-party access, accelerated grid investments and RE exchange establishment are potential game changers**
- **We keep our POSITIVE stance on Utilities premised on a firm policy layout on the energy transition which should drive improved growth and ESG profile for the sector**

What's new under NETR Phase 2? The National Energy Transition Roadmap (NETR) Phase 2 yesterday outlined more granular details of the RE mix targets, EE initiatives as well as hydrogen and CCUS development. It also outlines key investments of some RM1.3t required for the energy transition (ET) along with financing and policy initiatives. A National Committee on Energy Transition (NCET) spearheaded by the Minister of Economy will be established to monitor implementation of NETR projects.

Detailed RE target. The 40% RE mix target for 2035 under the MyRER is marginally lifted to 41%, while new targets of 52%/64%/70% for 2040/2045/2050 were outlined. An average 2.2GW/annum RE capacity addition is expected between 2025-2050, a significant jump from an estimated ~0.5GW/annum currently. Ultimately, some 68GW RE capacity is targeted by 2050 from 12.4GW in 2025.

Underpinning our views in a [recent thematic](#), solar will be increasingly dominant accounting for 25%/39%/52%/58% share of capacity mix in 2035/2040/2045/2050, growing at CAGR of 14% between 2025-2050, whereas hydro and bioenergy are expected to make up 11% and 1% of 2050 capacity mix respectively. Coal would have been fully phased out by then (according to PPA expiry) with gas taking over as baseload. To accelerate utility scale solar deployment, suitable land plots will be identified for solar park development through collaboration between Federal and State Government, while the current LSS mechanism will be enhanced to improve financial sustainability for developers and differentiate among others, floating solar and agrivoltaic. The current NOVA program will be expanded to Government and residential buildings for leasing and aggregation of rooftop space, which should drive growth of rooftop solar.

TPA introduction. One of NETR's potential game changers is introduction of grid third-party access (TPA), which we reckon could drive growth of willing buyer-willing seller PPAs at potentially better returns compared to previous LSS programs, while a transparent mechanism for wheeling fee calculation will be introduced.

Accelerated grid investment. A total grid investment of RM420b (which is a +71% increase against BAU grid capex of RM245b) is expected between 2023-2050 to accommodate higher VRE penetration, which should benefit Tenaga as the grid infra monopoly given expansion of regulated asset base (RAB). The exact amount, timing and mode of funding for the grid investments will be established, while incentives will be provided for RE development and storage facilities to improve system flexibility in addressing RE intermittence.

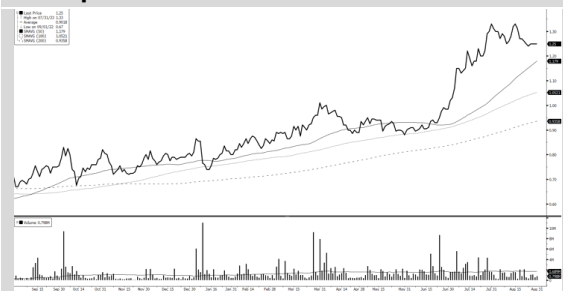
COMPANY IN FOCUS

Samaiden Group Berhad

Maintain **BUY** | Unchanged Target price: RM1.54
Price @ 29th August 2023: RM1.25

- Stands to benefit from emphasis on solar development under NETR, backed by a strong balance sheet
- Solid EPCC orderbook at 2.1x FY22 revenue
- Strong RM1b tenderbook – upcoming CGPP EPCC award a potential catalyst

Share price chart



Tenaga Nasional Bhd

Maintain **BUY** | Unchanged Target price: RM11.00
Price @ 29th August 2023: RM9.92

- Key beneficiary of accelerated grid upgrade investments
- Firm policies under NETR to drive aggressive RE targets serves to enhance RE capacity growth prospects
- Accelerated grid decarbonisation to improve ESG profile

Share price chart

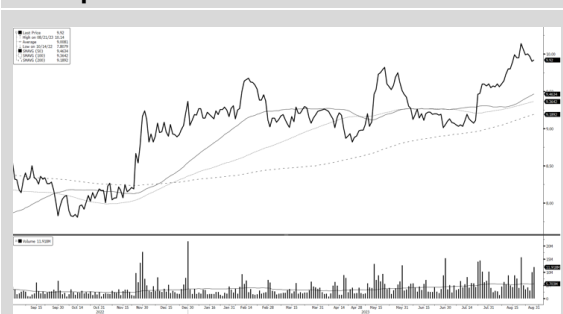
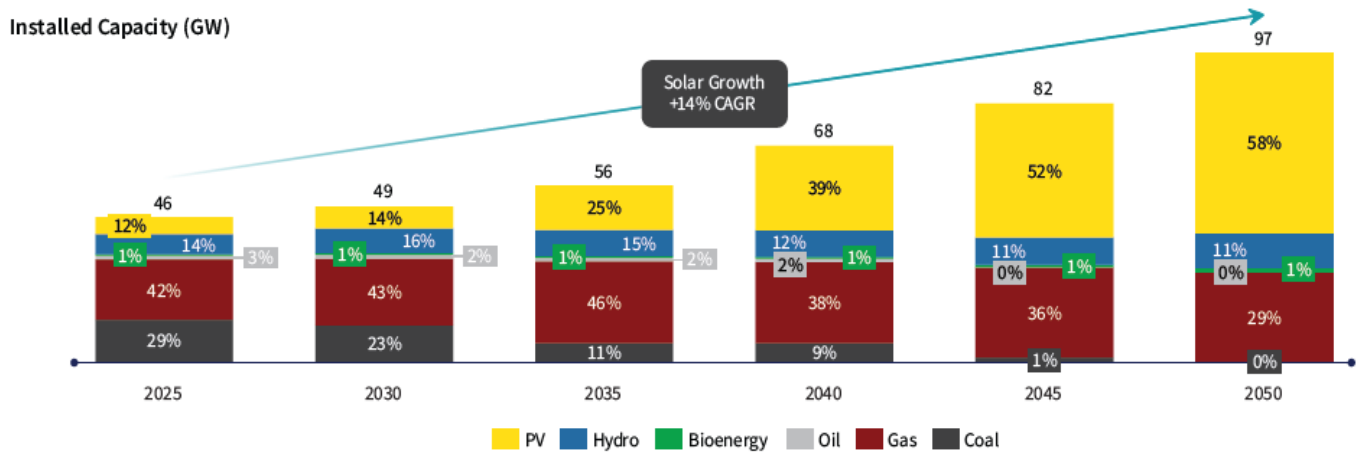
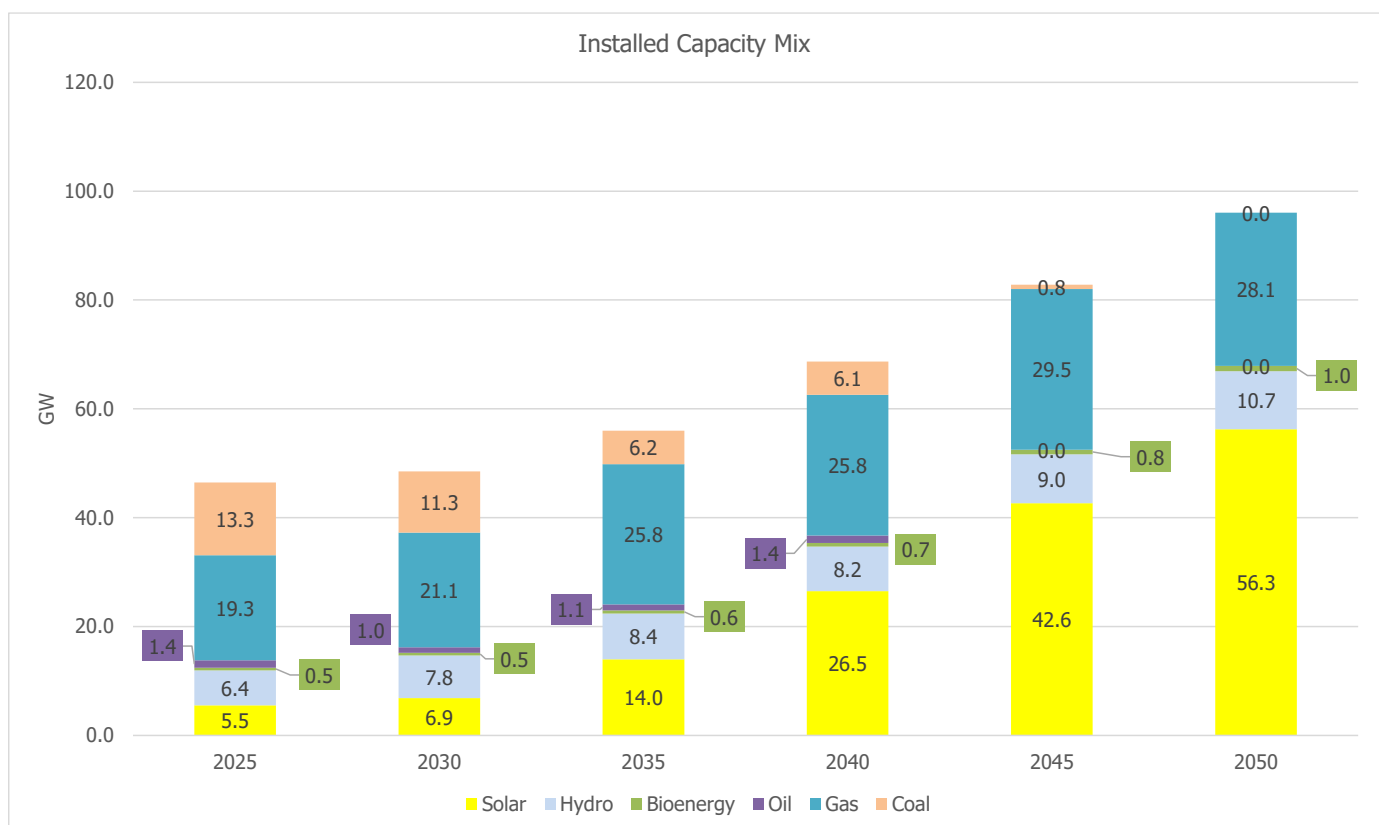


Chart 1: Projected power system installed capacity mix 2050 (Composition)


Source: Ministry of Economy, MIDFR

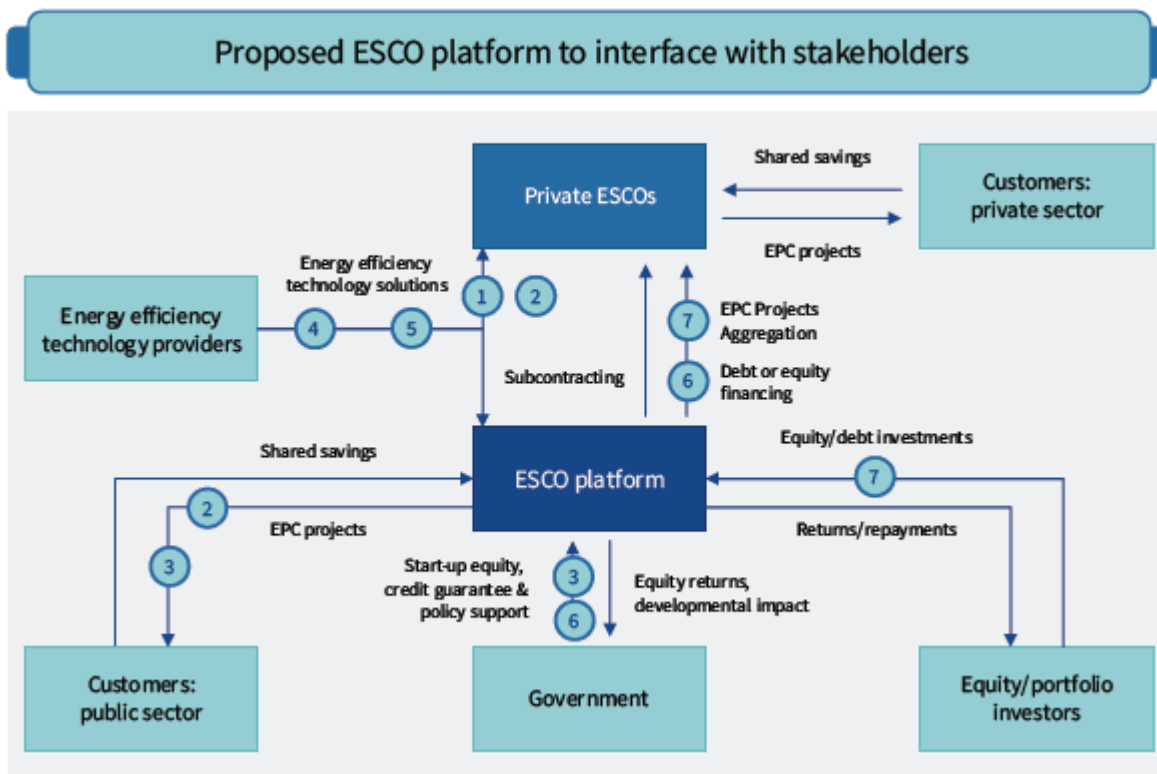
Chart 2: Projected power system installed capacity mix 2050 (GW)


Source: Ministry of Economy, MIDFR

RE exchange in the works. An RE exchange and the related regulations will be established by year-end to enable cross border RE trading. The exchange will be operated by a single market aggregator and will essentially function as a wholesale RE market. Players are expected to sell RE generation to this exchange, which in turn will manage the export to neighbouring countries, allowing monetization of excess power through bi- or multi-lateral power trading arrangements and providing an efficient price discovery mechanism. It is envisioned that this RE exchange will eventually function as regional energy exchange hub, taking advantage of Malaysia's location in the centre of ASEAN. The cross-border RE trading might also necessitate new or upgrade of existing interconnections with neighbouring countries.

ESCO platform to drive Government building rooftop solar adoption. A notable component of NETR's EE initiative is the establishment of the Energy Service Company (ESCO) platform, which is an integrated platform for Government building retrofits connecting private ESCOs with Government projects. An estimated 60%-70% of existing Government buildings are identified as energy inefficient (BEI>200), which is expected to be part of the retrofitting program. The EE initiative will be complemented by mandatory audits for energy-intensive commercial and industrial sectors and a mandatory national standard will be established for new residential and commercial buildings, as well as retrofit for existing buildings to meet minimum BEI levels. Broadly, the Government is targeting energy savings of 22% compared to BAU (residential: 20%, industrial & commercial: 23%) by 2050.

Exhibit 1: Proposed ESCO platform interface



Source: Ministry of Economy, MIDFR

Green mobility. As the second largest emitter after energy sector, NETR also places some emphasis on the transport sector, building on the existing Low Carbon Mobility Blueprint (LCMB). Key targets include elevating public transport modal share to 60% by 2050, accelerate xEV (defined as BEV, PHEV and hybrids) 4W and E2W penetration to 80% by 2050 and to foster robust local EV manufacturing capabilities to achieve 90% xEV local manufacturing. NETR also aims for continued improvements in ICE fuel economy, which is currently defined under the Energy Efficient Vehicle (EEV) program. For heavy vehicles, a 5% share of rail freight modal utilisation by end-2030 and 5% hydrogen heavy vehicle penetration is targeted by 2050. Meanwhile, the B30 biodiesel target by 2030 is maintained.

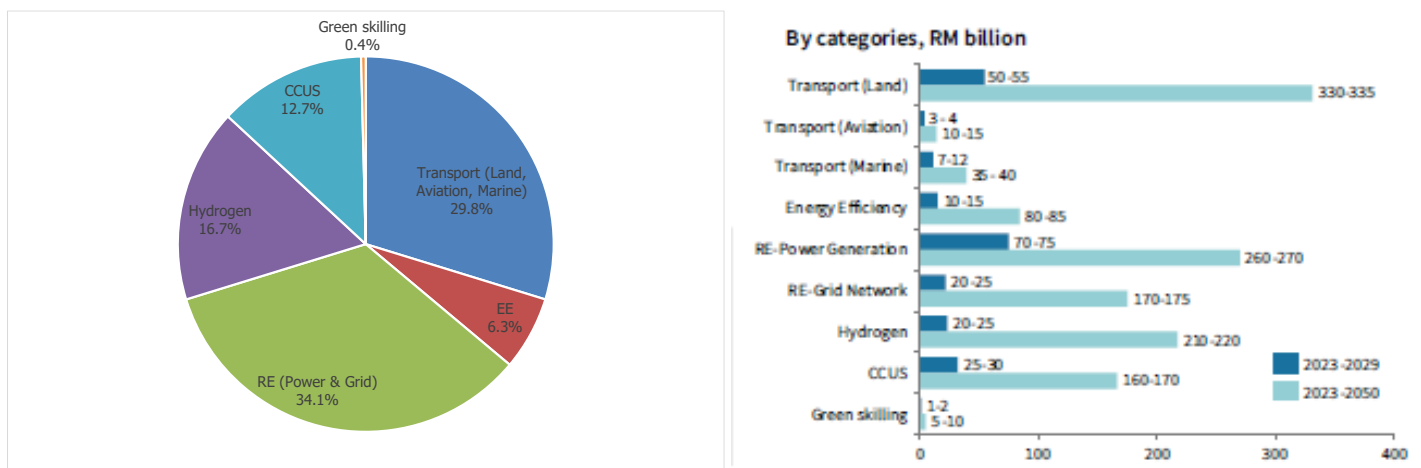
Exhibit 2: Measures for green mobility (land transport)

Energy Transition Lever: Green Mobility (Land Transport – Light Vehicle)		
Code	Initiatives	Champions
GM-LV1	Drive public transport modal share shift to 40% by 2040 and 60% by 2050 <ul style="list-style-type: none"> Financially support the ongoing or future buildout of public transport infrastructure to facilitate modal share shifts Facilitate electrification of public transport 	MOT
GM-LV2	Improve light vehicle fuel economy <ul style="list-style-type: none"> Establish robust methodology to measure fuel economy Strengthen fiscal policy measures based on fuel economy Determine long-term fuel standards 	MOT
GM-LV3	Accelerate electrification of light vehicles segment (E4W) <ul style="list-style-type: none"> Incentivise investments to build local manufacturing capacity and capability Continue co-funding of public charging infrastructure Implement stringent emissions standards to limit non-EEV manufacturing Expand product awareness and model availabilities of EVs Identify key localisation opportunities in EVs Reduce regulatory challenges in ramping up EV adoption including for setting up of charging infrastructure (e.g., right-to-charge regulation, approval process for charge point operator license, review of Uniform Building By-Laws) 	MITI
GM-LV4	Accelerate electrification of light vehicles segment (E2W) <ul style="list-style-type: none"> Incentivise E2W purchase or leasing cost to expedite total cost of ownership parity with ICE 2W, targeting B40 household Foster the expansion of E2W model availability through local manufacturing or support for foreign manufacturers' setup Monitor E2W charging infrastructure development and establish battery charging standards for public and home charging 	MITI

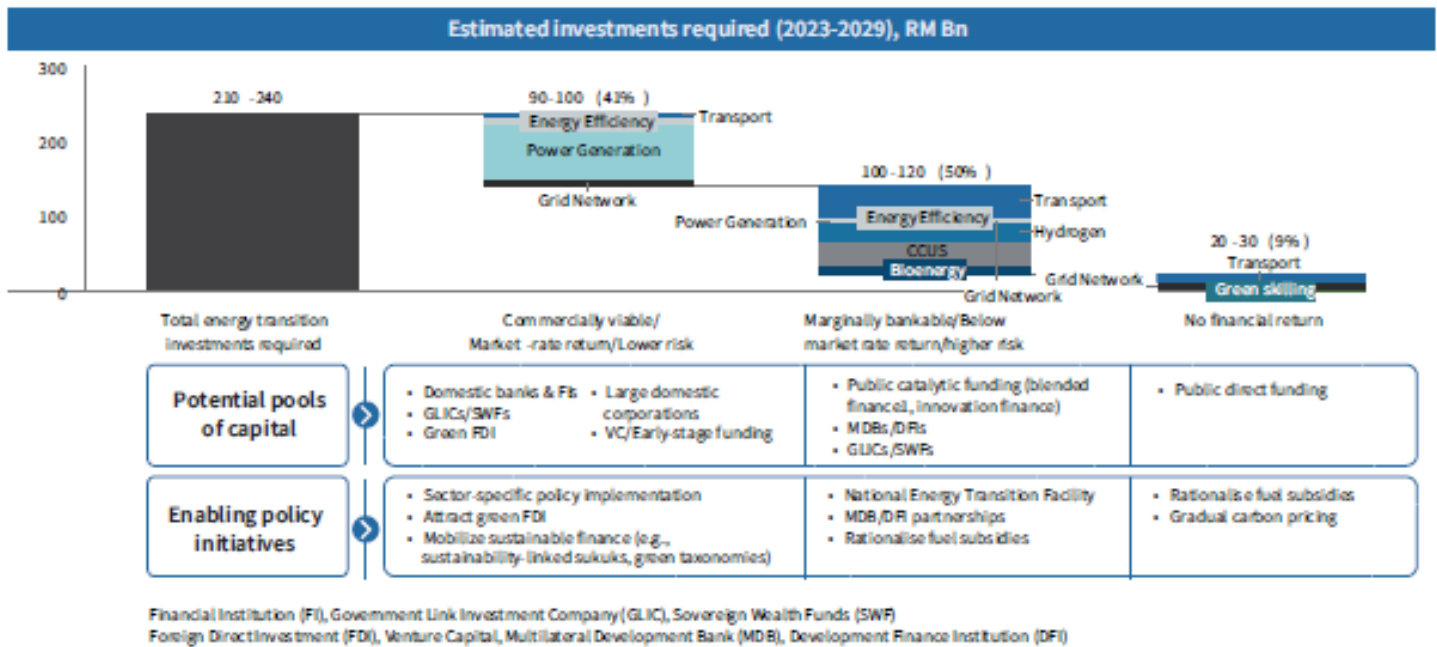
Source: Ministry of Economy, MIDFR

Total funding of up to RM1.3t is required. Total investment of RM1.2-1.3tr is required for the energy transition up till 2050. RE (RE power generation & grid network) and transportation sectors (expansion of public transport, amplification of domestic EV manufacturing capacities, manufacturing of EV chargers) account for the majority 34% and 30% of the amount respectively, while hydrogen (17%) and CCUS (13%) make up the majority of the balance. In the medium-term however (2023-2029), some RM206b ET investment is required with RE accounting for the bulk of investments (44% of total) followed by the transport sector (29%) and CCUS (12%).

Chart 3: Breakdown of NETR investments by key sectors



Source: Ministry of Economy, MIDFR

Exhibit 3: Estimated NETR investments 2023-2029


Source: Ministry of Economy, MIDFR

Key financing initiatives and enablers. The ET investments are segregated into three distinct categories; commercially viable (mostly comprising RE power generation and grid network), marginally bankable projects (comprising mainly transport, hydrogen and CCUS) as well as those with no financial return (mainly human capital upskilling). Among the key initiatives for financing include introduction of the National Energy Transition Facility (NETF) with initial seed funding of RM2b, rollout of a carbon pricing mechanism (in which proceeds will go towards energy transition initiatives) and mobilization of private capital via FDI, capital markets, venture capital, private equity and green bonds/sukuk. Other key policy enablers include rationalization of energy subsidies leveraging on the Pangkalan Data Utama (PADU) to facilitate targeted subsidies.

Exhibit 4: NETR financing and policy measures

Enabler: Financing and Investment		
Code	Initiatives	Champions
EN1	Launch a National Energy Transition Facility (NETF) <ul style="list-style-type: none"> Launch initial seed fund amounting to RM2 billion Explore the catalytic blended finance platform, aimed at expediting the mobilisation and deployment of capital to enhance the accessibility of funds, streamline investment processes, and ensure a seamless flow of financial resources towards energy transition projects. 	Ministry of Economy
EN2	Mobilise and attract private capital for energy transition sectors <ul style="list-style-type: none"> Attract private capital from the green foreign direct investments (FDI), international and domestic capital markets, venture capital (VC), and private equity (PE) Accelerate adoption of innovative sustainable finance instruments e.g. sustainability-linked/green/SDG financing, bonds and sukuk, blended finance structures Develop capacity building programme to upskill FIs and fund managers in collaborations with Joint Committee on Climate Change (JC3) and financial industry training institutes Scale-up sustainable finance literacy, awareness programmes and technical capacity building targeting SMEs by JC3 including through pilot programmes such as Greening the Value Chain Expedite VC investments in high-risk, early-stage energy ventures in suitable areas 	MITI BNM SC
EN3	Roll out carbon pricing mechanism <ul style="list-style-type: none"> Implement a phased and meticulously calibrated carbon pricing mechanism that sends clear market signals on decarbonisation while simultaneously creating an additional capital pool for investments in energy transition Roll out communication strategy to seek buy-in from the businesses and rakyat 	MOF NRECC
Enabler: Policy and Regulation		
Code	Initiatives	Champions
EN4	Rationalise energy subsidies <ul style="list-style-type: none"> Develop a targeted subsidy mechanism based on needs Ensure transparency and effective communication on subsidy removal Leverage Pangkalan Data Utama (PADU) to facilitate targeted subsidies 	MOF Ministry of Economy KPDN NRECC
EN5	Launch the Natural Gas Roadmap (NGR) <ul style="list-style-type: none"> Optimise country value-add of indigenous natural gas resources Enhance competitiveness of upstream oil and gas to meet domestic demand and energy transition needs (sustainability and security) Plan and execute timely, and cost-effective build-out of gas infrastructure 	Ministry of Economy

Source: Ministry of Economy, MIDFR

RE EPCC likely to be one of biggest winners from RE initiatives. Other than the asset owners, we believe RE EPCC players are among the biggest beneficiaries given huge EPCC prospects from the aggressive RE scale up under NETR. The 50.8GW incremental solar capacity between 2025-2050 could give rise to some RM152b worth of EPCC prospects, on our estimates, or an average RM6b/annum. We reckon EPCC orderbooks are set to expand exponentially in the medium-term relative to the ~RM1.3b aggregate orderbook of EPCC players under our coverage currently (comprising Samaiden, Sunview and Pekat).

Immediate-term prospects from NETR Phase 1 projects. In the immediate term, we believe flagship solar projects announced under NETR Phase 1 could potentially boost orderbook prospects. To recap, a total of 1.5GW large scale solar projects were announced under NETR comprising a 1GW hybrid solar plant spearheaded by UEM Group & Itramas Corporation and a 500MW solar park under Tenaga. These could entail an estimated EPCC value of RM4.5b. There is also another 2.5GW hybrid hydro floating solar to be undertaken by Tenaga at its Kenyir and Sungai Perak hydro dams, which could entail prospective EPCC jobs of some RM10b-12.5b, on our estimates.

RE export play. In the immediate term, we believe **YTL Power (BUY, TP: RM2.45)** is a prime beneficiary of potential RE exports to Singapore, having an advantage of existing generation and retail operations in the Singapore market – YTL Power could benefit from both RE export margins from Malaysia and at the other end, sale of green electricity to the Singapore market. Furthermore, YTL Power attains a sizeable balance sheet that can support expansion in its RE capacity for exports, which was beefed up by the RM3b proceeds from sale of its 33.5% stake in Electranet recently, coupled with rising cash flows from a strong recovery in Power Seraya earnings.

Asset ownership plays. We also like RE asset owners as potential plays into the theme. **Tenaga (BUY, TP: RM11.00)** has a large balance sheet to take advantage of potential growth in domestic RE capacity. The potential expansion in RE capacity could serve to accelerate its ambition to double its RE capacity to 8.3GW by 2025 and more importantly, to decarbonize the grid and improve its ESG profile. Additionally, Tenaga is a key beneficiary of wheeling charges in the envisioned regional power trade and accelerated grid investments to support higher VRE penetration given its monopoly of the national grid. Tenaga expects to double grid investments to RM90b between 2025-2030 from RM45b in 2018-2024, which underpins expansion in its RAB and ultimately, regulated earnings. We also like **Ranhill (BUY, TP: RM0.73)** as an asset ownership play. Ranhill is the largest IPP in Sabah via its 380MW CCGT capacity but has been making inroads into the RE space from its 50MW LSS4 solar plant win, which is on track for completion by year-end. In the mid-term, Ranhill is targeting to expand its total generation capacity and RE capacity to 1000MW and 300MW respectively from 430MW and 50MW currently. With an established track record in the power sector, we believe Ranhill could capitalize on the expected expansion of RE capacity in the country, including for RE exports.

Recommendation. We reaffirm our **POSITIVE** call on Utilities on the back of a clear and firm policy layout on the energy transition, which we believe should drive a sector re-rating on improved growth and ESG profile. Our top picks are the EPCC sub-sector players namely **Samaiden (BUY, TP: RM1.54)**, **Sunview (BUY, TP: RM1.32)** and **Pekat (BUY, TP: RM0.57)** being key beneficiaries of the NETR project rollouts. **Tenaga (BUY, TP: RM11.00)** is a key beneficiary in the asset ownership space from both RE capacity expansion and grid upgrade investments. We believe the big movers in the immediate-term will come from its upcoming 500MW solar park project and 2.5GW hybrid hydro-floating solar projects under NETR Phase 1. Meanwhile, the upcoming RP4 review should underpin the expansion in Tenaga's grid capex and RAB, in our opinion.

Table 4: Sector Valuation Summary

			Shr Price	EPS (sen)		PE (x)		ROE	Div Yield	Market Cap	TP	Total Upside
Companies	FYE	Rating	(RM)	FY23	FY24	FY23	FY24	(%)	(%)	(RMm)	(RM)	(%)
Ranhill Utilities	Dec	BUY	0.680	3.6	3.5	18.9	19.4	5.9	4.4	869.1	0.73	11.8
Tenaga Nasional	Dec	BUY	9.920	70.4	85.6	14.1	11.6	7.0	5.2	56,717.8	11.00	16.1
YTL Power*	Jun	BUY	2.150	25.0	27.3	8.6	7.9	8.0	5.8	9,560.6	2.45	19.8
Samaiden	Jun	BUY	1.250	2.9	5.9	43.4	21.1	19.3	0.0	492.5	1.54	23.2
Sunview	Dec	BUY	0.900	2.8	4.7	32.1	19.1	17.5	0.0	421.2	1.32	46.7
Pekat	Dec	BUY	0.500	1.9	2.3	26.3	21.7	9.5	0.0	322.5	0.57	14.0

Source: Companies, Bloomberg, MIDFR *FY24/FY25

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MIDF AMANAH INVESTMENT BANK : GUIDE TO RECOMMENDATIONS

STOCK RECOMMENDATIONS

BUY	Total return is expected to be >10% over the next 12 months.
TRADING BUY	Stock price is expected to <i>rise</i> by >10% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -10% and +10% over the next 12 months.
SELL	Total return is expected to be <-10% over the next 12 months.
TRADING SELL	Stock price is expected to <i>fall</i> by >10% within 3-months after a Trading Sell rating has been assigned due to negative newsflow.

SECTOR RECOMMENDATIONS

POSITIVE	The sector is expected to outperform the overall market over the next 12 months.
NEUTRAL	The sector is to perform in line with the overall market over the next 12 months.
NEGATIVE	The sector is expected to underperform the overall market over the next 12 months.

ESG RECOMMENDATIONS* - source Bursa Malaysia and FTSE Russell

☆☆☆☆	Top 25% by ESG Ratings amongst PLCs in FBM EMAS that have been assessed by FTSE Russell
☆☆☆	Top 26-50% by ESG Ratings amongst PLCs in FBM EMAS that have been assessed by FTSE Russell
☆☆	Top 51%- 75% by ESG Ratings amongst PLCs in FBM EMAS that have been assessed by FTSE Russell
☆	Bottom 25% by ESG Ratings amongst PLCs in FBM EMAS that have been assessed by FTSE Russell

* ESG Ratings of PLCs in FBM EMAS that have been assessed by FTSE Russell in accordance with FTSE Russell ESG Ratings Methodology