| Headline    | Leading TENAGA in a chang | ging landscape |                     |
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### COVER STORY



lows, as less optimistic investors stay on the sidelines.

Tenaga's newly appointed president

and CEO Datuk Baharin Din was fully cog-nisant of these issues when he took over in March after his predecessor Datuk Seri Amir Hamzah Azizan left to helm the Employees Provident Fund.

Before addressing questions on the lat-est update of the Regulatory Period 3 (RP3), a mechanism that decides the rate of return of Tenaga's capex, Baharin stresses that he is positive about the utility giant's prospects and sees promising earnings growth ahead. He also highlights its ambitious renewable

He also nignights its amoutous renewate energy (RE) targets.

Baharin says the group's capex budget is RM7 billion to RM10 billion a year. The bulk of it is for modernising the country's power grid to facilitate energy transition in order to meet the government's target of having RE account for a 31% share of generation capacity by 2025 and 40% by 2035. Coal is currently the main fuel used in

Tenaga's power generation, accounting for more than 40% of the fuel mix. However, the utility giant does not want to be left behind in energy transition; neither can it afford to do so. The group's target is to more than double its RE capacity to 8,300mw by 2025 from 3,400mw now. "In our RP3 submission, we are looking at

increasing our capex to modernise our grid [to facilitate energy transition]. We believe the ST [Energy Commission] is very much in line with us, wanting to see a resilient, robust network that facilitates the modernisation of the industry," he tells The Edge in a virtual interview.

RP3 is a crucial element in Tenaga's earn-

ings, setting the rate of return of its regulated asset base (RAB). In addition, a review of electricity tariffs will determine the utility group's capex. RP2 has been extended until year end as the government has yet to con-clude RP3 owing to the pandemic.

Baharin, an electrical engineer by train-

ing, had been in talks with the relevant authorities on RP3 and the Malaysia Electricity Supply Industry 2.0 (MESI 2.0) initi-ative during his first 100 days on the job. He is optimistic that the details of RP3 will be firmed up by October, barring any unforeseen circumstances.

"If you get the RP3 going, it is good for the country and the investment climate. You bring certainty. IBR (incentive-based regulation) has been proved in RP1 and RP2

that it brings certainty," he states.
"In fact, we rode through the pandemic quite well compared with other industries, mainly because of IBR. You have a motiva-tion element, penalty element, incentive

element [in it].

"Even other industries are using the IBR framework as a benchmark. It is a good framework, tested and proven in the last seven years and I believe there is no reason for the government or the industry to not want this to continue." When asked if he was confident that

RP3 would be concluded soon, he says, "The country needs certainty, the industry wants certainty and investors, in fact, demand certainty. I think all parties, including the government, are fully aware of this."

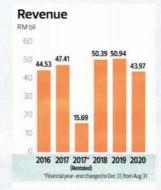
The finalisation of RP3 should bode well for Tenaga as it will remove one variable from the horizon and improve its earnings visibility. Nonetheless, some say the devil could be in the details, namely the weighted average cost of capital (WACC).

In the RP2 (2018-2020), the electricity

tariff of 39.45 sen/kWh reflects a WACC of 7.3%, as well as a benchmark coal price of US\$75 per tonne, a benchmark gas price of RM27.20 per mmbtu and an allowed capex of RM18.8 billion.

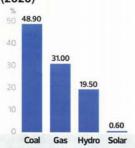
"While the RAB is likely to increase under RP3 [estimated at RM62.4 billion by end-2021], we do not discount the possibility of WACC being further lowered from 7.3% under RP2," says RHB Research in a July 6 note.

| 100%-OWNED     | NO OF PLANTS | CAPACITY (MW) | EQUITY CAPACITY<br>(MW) | CAPACITY UNDER<br>CONSTRUCTION (MW) |
|----------------|--------------|---------------|-------------------------|-------------------------------------|
| Coal           | 2            | 4,080.00      | 4,080.00                | -                                   |
| Gas            | 7            | 3,926.43      | 3,926.43                |                                     |
| Non-carbon     | 73           | 2,650.38      | 2,650.38                |                                     |
| Others         | (2)          | -             | 2                       | -                                   |
| MAJORITY-OWNED | NO OF PLANTS | CAPACITY (MW) | EQUITY CAPACITY (MW)    | CAPACITY UNDER CONSTRUCTION (MW)    |
| Coal           | 2            | 3,474.00      | 2,284.40                | -                                   |
| Gas            | 2            | 690           | 439.76                  | 1,440.00                            |
| Non-carbon     | 30           | 446.03        | 268.01                  | -                                   |
| Others         | 50           | 250.97        | 208.3                   | -                                   |
| MINORITY-OWNED | NO OF PLANTS | CAPACITY (MW) | EQUITY CAPACITY (MW)    | CAPACITY UNDER<br>CONSTRUCTION (MW) |
| Coal           | 3            | 1,650.00      | 455.37                  | 350                                 |
| Gas            | 2            | 1,241.00      | 362.06                  | -                                   |
| Non-carbon     | 12           | 274.96        | 82.06                   | 1,380.00                            |
| Others         | 1            | 1,190.00      | 71.4                    |                                     |



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### Generation fuel mix in Peninsular Malaysia (2020)



"Assuming an annual capex of RM7 billion and 7% WACC, regulatory earnings are estimated to grow at 2.6% per annum in RP3. A reduction of 0.1% in WACC will reduce the regulatory earnings by RM66 million, in our

estimate," the research house adds. Tenaga requested for a RM25.1 billion capex allowance in RP2, but was allowed RM18.8 billion. This time, it is proposing a capex allocation of RM24 billion for its regulated assets for the three-year period.

"The government is fully aware that Tenaga can play a role in supporting the econom ic recovery. I believe this will very much be taken into account when they make a decision on the rate of return of RP3," say Baharin, stressing that the group's multibillion-ringgit capex budget will trigger mul-tiplier effects that will power the domestic economic recovery.

Nonetheless, as the deadline looms for

key policy decisions, including the RP3 and MESI 2.0, Malaysia's fluid political landscape raises doubts over them

'A more complete MESI' MESI 2.0 is a master plan that will set out a more liberalised landscape in the dome tic power industry as new players enter

From Tenaga's perspective, it is losing its dominant position in transmitting and distributing power from power producers

Third-party access to Tenaga's transmis sion and distribution assets will eventually happen should the master plan take off. That will also allow carbon-conscious clients to buy green energy from specific producers.

MESI 2.0 was launched in 2019 by former energy, science, technology, environment and climate change minister Yeo Bee Yin, but it underwent a review last year, soon after the change in the federal government. On top of that, the Low Carbon Mobility Blueprint 2021-2023 drafted by the Ministry of Environ-ment and Water is pending cabinet approval

Baharin expects policymakers to finalise MESI 2.0 within the next six months.

According to him, national development will be introduced as the fourth pillar in the MESI 2.0 review on top of the energy trilem ma issue of sustainability, reliability and affordability. "This is especially when you look at energy transition as another driver of economic growth, in particular the new energy levers," says Baharin. In pushing for a low-carbon future, he

says the initial MESI 2.0 focused on the sup

# Shaking off the 'dirty' perception

BY ADAM AZIZ

ow important is the ESG (environmental, social and governance) metric for the investing fraternity right now? One could look across the world at ExxonMobil, which just two months ago saw a histor-ic scuffle with shareholder activists who attempted to steer the company into the energy transition.

The clash resulted in three boardroom changes, including former Petroliam Nasional Bhd (Petronas) head honcho Tan Sri Wan Zulkiflee Wan Ariffin and the first non-American on the board. In the face of climate change, the reputable oilman's decades-long experience is deemed not suita ble, even in an oil major, according to the minority investor hedge fund Engine No 1. Last month, China's biggest bank, In-

dustrial and Commercial Bank of China Ltd, abandoned a plan to finance a US\$3 billion coal-fired power plant in Zimba-bwe. This may signify that Asian lenders are like their western peers in improving environment credentials.

At home, that same climate change reck-oning has brought investors away from utility giant Tenaga Nasional Bhd.

The reason is simple. Coal made up 48.9% of Tenaga's generation fuel mix in Peninsu-lar Malaysia in 2020, as opposed to less than 1% from solar. Its coal generation capacity is also bigger than its gas-fuelled capacity, which is considered clean fossil fuel.

Adding to investor concern is the pandemic-induced lockdowns, which have affected Tenaga's electricity sales as many manufacturing plants have been shut down, coupled with the political uncertainties that further cast a shadow over the electricity supply industry policy as a whole

(see main story).
In an exclusive interview with The Edge, Tenaga's newly appointed president and CEO Datuk Baharin Din appears confident, with some sense of urgency, on the utility giant's plan to stay relevant in the arbon future

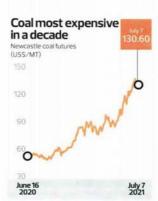
"Tenaga supports the climate change agenda. We are fully aware of the drift on ESG. It is a question of transition; we want to ensure the pathway is holistic, realistic and balanced," he says.

In the words of Baharin himself — a long-time Tenaga employee and who previously led the company's distribution network division — the utility giant has an "ambitious" target of more than dou-bling its renewable energy (RE) capacity to

8,300mw by 2025 from 3,400mw currently. Of the 4,900mw increase, the company targets to achieve 2,000MW from the European market, where the group already has equity participation of more than 226MW in solar and wind generation capacity. Additionally, it is banking on its strategic partnership with Singapore's Sunseap Group to tap into the Southeast

Tenaga is in the midst of developing a renewable asset company (RACo) and a renewable energy development company (Re-DevCo) to expand its RE footprint through acquisitions and greenfield developments

"We solicit funds from reputable inves tors, especially institutional investors, for example EPF (the Employees Provident Fund) and we hope to be able to capitalise on the liquidity to build up our assets overseas. We will be very selective," says



Baharin, Back-of-the-envelope calculations show that at 8,300mw by 2025, the RE portion will make up about 45% of Tenaga's total generation capacity when taking into account the retirement of four gas plants totalling 1,484MW during the same period.

Tenaga has received the nod for the Nenggiri dam in Kelantan that will add another 300mw of large hydro capacity, on top of an additional 50mw of solar capacity earmarked under the latest Large Scale Solar (LSS4) bidding round.

## Further separation of Tenaga's

power generation biz? In the meantime, Tenaga is stuck with its stake in seven coal-fired power plants. In Malaysia, it will retire a coal plant only in 2035. The group also has exposure to the dirty fossil fuel through its 30%-owned GMR Energy Ltd in India.

Whereas foreign investors need pacifying, financial institutions "understand the challenges" faced by Tenaga in phasing out the legacy coal assets to meet industry expectations of its carbon footprint, says Baharin, "If you ask me about pressure from the banks for future investments, we don't have much because we are not building any new coal plants. They [banks] like that very much, the fact that we are not going for new coal plants moving forward."

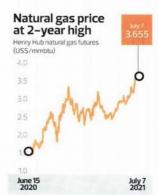
Tenaga does not have to refinance its coal assets, as the financing is matched to the tenure of the power purchase agree-ments. This leaves only the operations and maintenance costs in relation to its coal portfolio, Baharin explains when asked about its existing coal-fired power plants. Additionally, management is currently

developing a sustainability pathway, he says, hinting at more announcements in the next two months "as far as ESG is con-cerned". When asked if this will involve the spinning off of Tenaga's generation business to remove its coal footprint from its portfolio, which analysts revisited recently, he responds, "We may be thinking of creating a New Energy division, and this provides a hint that the end of the road will present

something close to that."

There has been talk of Tenaga spinning off its generation division for a while - early on, the market was more concerned about separating the power generation business from the transmission and distribution (T&D) to size up GenCo with its industry peers more effectively. "So, the market expectation is low right now," quips an analyst who covers the sector

But this time, the ESG clout is present



and here to stay, and Tenaga is already seeing evidence of investor decisions being governed by the new metric. Even Petronas has set up a net zero carbon deadline for itself despite its nature of business in the oil and gas industry. Despite its huge earnings, Tenaga may fall off investors' radar screens completely if it does not act fast.

"A separate listing of the generation busi-ness would allow the ESG-focused funds to own Tenaga's T&D unit, hence potentially re moving the drag on Tenaga's group-wide val-uation," MIDF said in a November 2020 note

The valuation of Tenaga means that investors are "essentially getting the generation business for free", said MIDF, considering its estimated valuation of RM68 billion for the T&D and retail business es, based on its estimated segment profit breakdown for FY2019. The utility group's market capitalisation was RM55.48 billion. The research house estimates that RM881

million or 18.5% of Tenaga's RM4.7 billion net profit in FY2019 was derived from the ration segment, followed by 80.5% from its T&D business, and less than 1% from the retail business. MIDF also estimated that GenCo had a value of RM9.3 billion.

Other research houses had pointed to the possible carving out of a dedicated RE segment instead.

However, some quarters view that listing GenCo will help unlock asset value. But it may not help much in making Tenaga a clean energy producer so long as part of its earnings is generated by dirty coal-fired power plants.

It may appear that to remove the ESG risk will require GenCo to be carved out entirely from Tenaga and be held directly by interested shareholders of the utility giant. This effectively removes nearly one-

fifth of Tenaga's earnings from its books. Two of Tenaga's four largest shareholders Khazanah Nasional Bhd (25.69%) and EPF (17.88%) — are also signatories of the Principles for Responsible Investment (PRI). The other two major shareholders are Permodalan Nasional Bhd and Kumpulan Wang Persaraan (Diperbadankan).Together, the four institutions and other government agencies hold a 70.7% stake in the utility giant.

Having said that, environmental issues aside, the stability and reliability of RE, to some extent, is questionable, as sunlight and wind are certainly beyond the control of humans. For that, it could be another fine balancing act that Baharin and future chieftains of Tenaga will have to deal with. apart from balancing between national service and profitability.

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# Keeping its internet dream alive

BY ADAM AZIZ

fter successfully hooking up about 90,000 homes in Melaka and Perak with internet connectivity, Tenaga Nasional Bhd is upbeat on its prospects as an infrastructure provider in the tele-communications space.

"Somehow, in the value chain you will find Tenaga's presence being quite critical for the viability of any infrastructure develop ment, including 5G," says Tenaga president and CEO Datuk Baharin Din, when asked whether the utility giant would have a chance to be involved in 5G infrastructure building. "We are in talks with the government. That's all I can say

Tenaga's 18,000km-long fi bre-optic network is an asset that could earn recurring income, like its transmission grid. Its plan to activate its fibre-optic network along its transmission and distribution grid coincides with the government's Jalinan Digital Ne gara (Jendela) initiative, which is set to improve fixed broadband connectivity nationwide, achieve 100% 4G coverage and begin 5G deployment this year.

Malaysia's 5G rollout thus provides exciting growth opportu-

On July 5, Digital Nasion-al Bhd (DNB), the government's special-purpose vehicle tasked with executing the 5G rollout, an-



naga could increase its non-regulated returns through recurring income from its fibre-optic network

nounced that Ericsson had been selected to design and build Malaysia's nationwide 5G network.

The project is estimated to cost RM11 billion and will incorporate tower rental and fibre leasing, with the latter possibly proving to be lucrative for fibre asset owners such as Tenaga.

It is understood that DNB is likely to lease the existing fibre-optic cable network owned by different parties, including Tenaga and the telecommunications companies. However, more needs to be built and, for that, DNB will have an open tender to award the jobs

While microwave backhaul through towers is the most common technology for 4G/5G

backhaul, fibre is the preferred choice to confidently support 5G implementation such as the Internet of Things, where smart household appliances — dozens in each home - eventually flood

"You see our pole at the doorstep of most premises in the country that says something about our com-petitive advantage," says Baharin.

Like he says, Tenaga's compet-itive advantage is in its last-mile connectivity. Any home with electricity supply practically has Tenaga's fibre assets ready to be activated to support the 5G rollout.

Meanwhile, Telekom Malay-sia Bhd (TM) is also aggressively expanding its fixed broadband infrastructure, which it says will complement the setting-up of 5G mobile sites in the future.

In January 2018,TM and Tena-ga teamed up to undertake lastmile fiberisation in the country under the National Fiberisation Plan 2017-2019, but the collaboration was called off two months after the change in government in May that year.

In addition, Malaysia's telco giants — Maxis Bhd as well as the soon-to-merge Celcom Axiata Bhd and DiGi.Com Bhd — will jointly develop and share fibre infrastruc-ture as backhaul deployment to their base stations, focusing on 4G and potentially support 5G new sites as well.

On the other hand, another key infrastructure player in the picture is Axiata Group Bhd's edotco Group Sdn Bhd, which owns and operates the bulk of the telco towers in the country.

This year, Malaysia will see 5G rollout in Kuala Lumpur, Putrajaya and Cyberjaya, followed by Selangor, Penang, Johor, Sabah and Sarawak in 2022 and other states in 2023.

"At the moment, the industry is consolidating, the people are collaborating, and Tenaga is no exception," Baharin comments.

"We are quite open to that consolidation and to collaboration with different parties that see any mutual benefit of working together. It's a question of where and when we can go in. It's quite a crowded market."

Thus far, Tenaga's fibre venture has largely revolved around the provision of broadband services to operators riding on its infrastructure.

Since last year, Tenaga's whol-ly-owned unit Allo Technology Sdn Bhd has partnered with Astro, DiGi and Celcom to lease its assets, using a wholesale model. The utility group is now activating its fibre assets in Perak, Penang, Kedah and Johor, with a revised target of connecting 180,000 premises by year-end.

"The contribution is small at the moment, yes, but we see a future ahead," says Baharin.

## Tenaga 'delivers the aspiration of the rakyat'

ply side — such as third-party fuel sourcing — and did not address in detail the demand side, for instance, the adoption of electric vehicles (EVs). This will mean the building of new infrastructure like charging ports.

"Tenaga is ever willing to provide the nec-essary EV infrastructure across the nation. We are very serious on the EV front, and we are quite prepared for this," he adds.

Towards this end, Tenaga has signed a memorandum of understanding with DHL Express Malaysia, which entails the utility installing EV charging stations along DHL's key service routes. The latter is expected to roll out its first EV fleet in the country by early next year.

Tenaga is also partnering with the Malay-sian Green Technology and Climate Change Centre to install more EV charging stations nationwide. It installed 73 ChargEV stations in 2020 alone, according to its annual report.

Being a government-linked company (GLC), Tenaga cannot escape its social responsibility and the ripple effect of changes in the

political landscape.

The GLC, in which Khazanah Nasional Bhd holds a 25.69% stake, supports the na-tion's recovery efforts, with discounts on electricity bills being a regular fixture in Putrajaya's economic stimulus packages. Apart from discounts, it also offers deferred

Tenaga's 50MW Large Scale Solar (LSS) farm in Sepang, Selang

ayments, as well as subsidies, to eligible households and business sectors

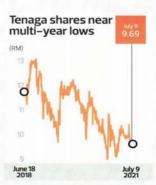
Tenaga contributed RM250 million in discounts last year, its annual report shows, with the rest shared with the Electricity Industry Fund as well as the government. Baharin sees the discounts as a way of nursing those affected by the pandemic, with Tenaga eventually benefiting when these end-users recover.

"Whoever the government is, we have proved that we are a trustworthy professional entity, an organisation that the government believes will be the entity that delivers the aspiration of the rakyat.

Asked about the impact of political uncer tainty on the company, Baharin replies, "The risk is there, but is mitigated and minimum because the party executing is Tenaga. Tenaga is basically serving the rakyat. Whatever we make goes back to the rakyat through investment funds such as Kumpulan Wang Persaraan (Diperbadankan) and the Employs Provident Fund. I think that goes well for any government governing the country.

Under its Reimagining Tenaga programm the group is striving to grow its pre-tax profit by an average of 9.9% annually over the next five years, from about RM7.3 billion in 2020.

In the immediate term, it will emphasise



improving the performance and cost management of its generation assets; completing its smart meter installation target of 1.5 million by year end, from just under 900,000 currently; further automating its distribution network; and expanding its rooftop so-lar portfolio under subsidiary GSPARX from 81MW currently.

At the time of writing, Tenaga has 14 "buy", one "hold" and two "sell" calls among ana lysts.Their target prices range from RM9.30 to RM14.20, with an average of RM12.06.

Will investors listen to the bullish ana-lysts soon? The cloud of uncertainty has to disperse before that happens.