

SUSTAINABILITY STATEMENT



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OUTLINING THE SCOPE AND BOUNDARIES OF THIS STATEMENT

This report has been prepared in accordance with Bursa Malaysia's Main Market Listing Requirements (MMLR), with reference to local sustainability guidelines as well as international reporting frameworks as shown below :

Reporting Framework, Scope and Boundaries	
	Bursa Malaysia Sustainability Reporting Guide (3 rd Edition)
	Global Reporting Initiative (GRI) Standards GRI Electric Utilities Sector Disclosures
	Task Force on Climate-related Financial Disclosures (TCFD) framework
	United Nations Sustainable Development Goals (UN SDGs)

The scope and boundary of sustainability disclosures covers the activities of TNB and its subsidiaries ("TNB Group"). Where information is unavailable, we will cover at a minimum, our core and non-core business operations in Peninsular Malaysia under the purview of TNB divisions ("TNB Company"). Unless otherwise stated, this Statement excludes joint ventures and supplier activities.

This Sustainability Statement has not been subjected to an external verification process. Concurrently, we are preparing for internal assurance in FY2023 and to obtain external assurance in due course.

Our Statement contains data from the full Financial Year of FY2022 from 1 January 2022 to 31 December 2022. Please refer to our upcoming Sustainability Report 2022 for further information.

ESG SCORECARD FOR FY2022

ENVIRONMENT		
 Total renewable energy capacity 3,780 MW	 GHG Emissions Intensity¹ 0.55 tCO₂e/ MWh	 GHG Emissions Intensity¹ 2% reduction against baseline in 2020
 Avoided Emission 7,295,145 tCO₂e	 GHG Emission (Scope 1 and 2)¹ 38.90 MtCO₂e	 Scheduled Waste Generation 74,150 tonnes
SOCIAL		
 Total contribution to community development programmes RM12.20 million	 Lost Time Injury Frequency (LTIF) Rate 0.82	 Learning and Development Investment RM161 million
	 Fatalities 2 <i>TNB contractors</i>	 Employee Engagement Score (EES) 86.6%
GOVERNANCE		
 Equivalent Availability Factor (EAF)¹ 83.20%	 System Average Interruption Duration Index (SAIDI)¹ 45.06 minutes/customer/year	 Customer satisfaction index¹ 87%
	 System Availability¹ 99.79%	 Percentage spent on local suppliers¹ 95.14%

¹ TNB operations in Peninsular Malaysia

CHAMPIONING SUSTAINABILITY AT TNB

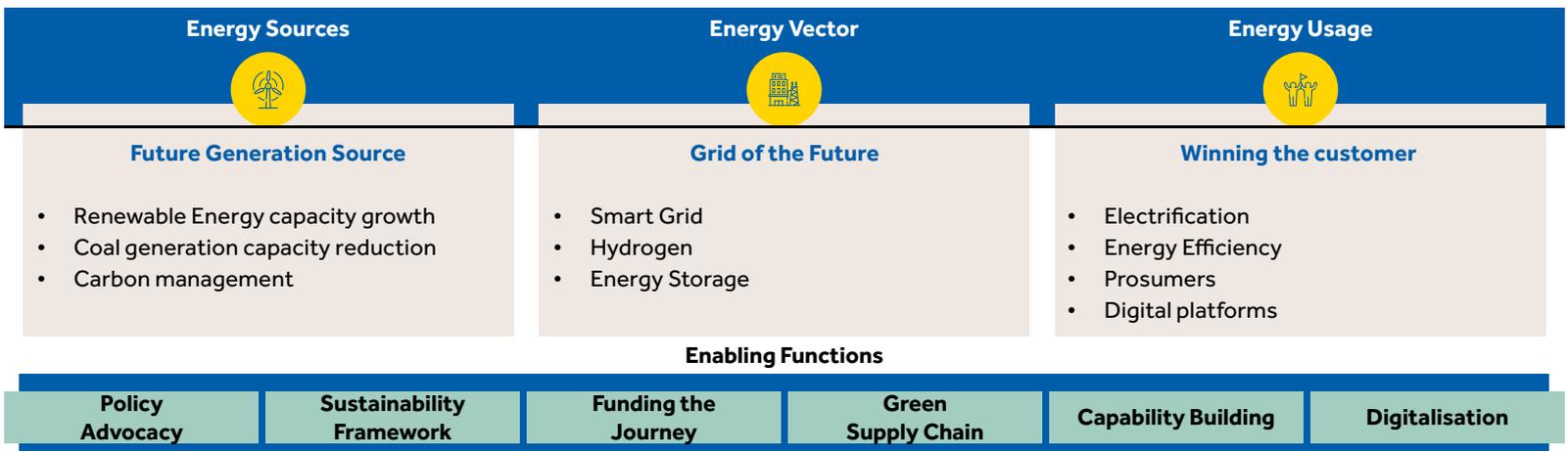
TNB'S SUSTAINABILITY STRATEGY

Our integrated sustainability strategy connects sustainability pillars - Environmental, Social and Governance (ESG) matters with our corporate strategy : Reimagining TNB 2025 (RT) to enable us to contribute to the United Nations Sustainable Development Goals (UN SDGs) and be a leading provider of sustainable energy solutions in Malaysia and internationally. We have prioritised eight (8) SDGs to deliver sustainable value, empowering both our people and the wider community. TNB Sustainability Pathway 2050 (SP2050) which was developed in 2021 has enabled the Group to advance its Energy Transition (ET) Plan in 2022.



For more information on TNB corporate strategy, please refer to Achieving Our Strategic Ambitions section, pages 38-53.

TNB's ET Plan is an extension of the RT, focusing on three (3) strategic pillars supported by key enablers in shifting from fossil-based energy mix to greener energy sources. These initiatives cut across the electricity value chain, from transitioning power generation to cleaner sources; enhancing the Grid of the Future (GoTF) to enable more green solutions; and facilitating consumer participation in the energy transition, including through digitalisation and electrification.



For more information on TNB Energy Transition Plan, please refer to Climate Strategy section, pages 94-95.

CHAMPIONING SUSTAINABILITY AT TNB

Feature Story 1

STRENGTHENING AND PROMOTING STRATEGIC PARTNERSHIPS

Partnerships unlock growth opportunities in high-value market segments which are beyond the traditional electric utility value chain. In driving innovative solutions towards decarbonisation and energy transition in Malaysia, TNB has established strategic partnerships and collaboration with both public and private entities, especially with key players in the energy sector industry.

FY2022

Highlight

TNB Fuel Services Sdn Bhd (TNBF) established a strategic partnership by signing a three-year memorandum of understanding (MoU) with three (3) local companies, MNA Fuel Services Sdn Bhd, Itochu (M) Sdn Bhd and Cement Industries of Malaysia Bhd. This entails a study on the development of biomass pellets produced from bamboo plants for use in power generation activities, research of ammonia supply chain as a new source of fuel and collaboration in various development areas including the supply of fuel, alternative raw materials, research and technical skills sharing, with the partners respectively.



TNBF signed a MoU with MNA Fuel Services Sdn Bhd, Itochu (M) Sdn Bhd and Cement Industries of Malaysia Bhd.

TNB is stepping up its responsible energy transition agenda through collaborative partnerships to promote the development of innovative solutions. The table below outlines TNB's partnership and collaboration in 2022.

Moving forward, we will continue to explore opportunities for strategic partnerships with potential in creating growth and value for our stakeholders.

Strategic partnership and collaboration

Description

1	TNB and PETRONAS partnership for green hydrogen and Carbon Capture, Utilisation and Sequestration (CCUS)	TNB and PETRONAS have signed a MoU to explore the development of new green technologies including green hydrogen ecosystem and CCUS.
2	TNB and Ipoh City Council (MBI) in MoU to Help Realise Ipoh as A Low Carbon Smart City and "Bestari Sejahtera" by 2030	<p>TNB is committed to helping Ipoh to achieve its aspiration of becoming a smart, livable, resilient and sustainable city by 2030. In February 2022, TNB established a strategic partnership with the MBI to supply energy efficiency products and services as well as a Supply Agreement for Renewable Energy (SARE) with TNB's wholly owned subsidiary, GSPARX Sdn. Bhd. (GSPARX) for RE solutions to promote sustainable and green living.</p> <p>This partnership will drive the installation of photovoltaic solar systems, smart LED street lighting, energy performance and monitoring system, electric vehicle charging ecosystem and smart meters, which are key initiatives in establishing Ipoh as a Smart City.</p>

CHAMPIONING SUSTAINABILITY AT TNB

Feature Story 1

STRENGTHENING AND PROMOTING STRATEGIC PARTNERSHIPS

Strategic partnership and collaboration

Description

3	<p>TNB and Gamuda Land partners in the delivery of Malaysia's first solar powered electron stations</p>	<p>TNB entered into a strategic partnership with Gamuda Land in October 2022 to build two (2) TNB Electron Stations for electric vehicle charging at Gamuda Land's property development projects in Selangor. This will be the first TNB Electron stations with multiple chargers in one site and will be situated in Gamuda Cove in Southern Klang Valley and Gamuda Gardens in Northern Klang Valley. The stations are targeted to serve local communities as well as patrons to the theme parks and recreational areas within Gamuda Land developments.</p>
4	<p>TNB partners with S P Setia Bhd (S P Setia) to provide smart energy and renewable energy solutions</p>	<p>TNB is partnering with S P Setia to provide smart energy and renewable energy (RE) solutions for future property developments. The MoU was signed to enable the installation of rooftop solar PV system as well as ensuring properties are future-ready to support the installation of EV chargers and battery solutions in S P Setia's upcoming residential and commercial development projects.</p>
5	<p>TNB Power Generation Company Sdn. Bhd. (TNB GenCo), IHI Corporation and PETRONAS collaborate in Co-Firing Technology for Carbon-Free Ammonia</p>	<p>TNB GenCo, IHI and PETRONAS are collaborating on Co-Firing Technology for Carbon-Free Ammonia. The MoU includes a feasibility study on ammonia co-combustion in coal-fired power generation systems as part of initiatives to decarbonise the country's power sector. The scope of the study covers exploring the technology of co-firing ammonia at coal power plants in Malaysia and evaluating the technology and economics across the entire ammonia supply chain which includes green ammonia production from renewable energy sources and blue ammonia from natural gas.</p>
6	<p>TNB GenCo, Malaysia Solar Resources and Sungrow signed MoU for floating solar feasibility study</p>	<p>Conduct a feasibility study on the floating solar potential at hydro dams and opportunity to collaborate as a local floaters manufacturer.</p>
7	<p>TNB GenCo collaborated with Malaysian Space Agency (MYSA) to develop remote sensing-based application using a spatial database</p>	<p>This MoU aims to strengthen the use of remote sensing technology in the management of TNB's hydroelectric catchment areas in Malaysia. Through this strategic partnership, MYSA has developed and operated the TNB Hydro Dam Catchment Area Monitoring System (THyCAS) since 2020. The THyCAS system uses space technology (GPS) and other related technologies (GIS and ICT) which has been deployed in Perak, Kelantan, Pahang and Terengganu. With this system in place, the planning, management and monitoring of TNB's hydro dam catchment activities can be implemented more efficiently, effectively and systematically.</p>
8	<p>GSPARX Sdn. Bhd collaborates with AEON CO. (M) BHD. to install building integrated photovoltaic (BIPV) carpark</p>	<p>AEON CO. (M) BHD. has experienced a successful reduction of up to RM185,000 monthly in electricity bills since January 2022, thanks to the implementation of Solar PV by GSPARX which is a wholly owned subsidiary of TNB. GSPARX offers expert services from consultation, installation, maintenance and monitoring which guarantees optimal functioning of the solar PV system. This solution enables businesses to save 40-50% on their electricity bills without any upfront costs.</p>

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE



Related Material Matters

- Responsible Business and Financial Performance
- Reliable Energy and Fair Tariff
- Cybersecurity Management
- Sustainable Supply Chain

TNB's Board of Director at the FY2022 Annual General Meeting (AGM).

Feature Story 2

ACCELERATING RESPONSIBLE ENERGY TRANSITION

As we move forward into the 21st century, the need for a just transition towards sustainable and decarbonised energy systems has become increasingly urgent. The energy supply industry plays a crucial role in this transition. The energy sector has been a significant contributor to greenhouse gas emissions and the shift towards renewable energy sources is necessary to reduce the nation's carbon footprint. To achieve a successful energy transition, it is essential to understand the challenges and opportunities that lie ahead.

With the presence of diverse socio-economic challenges and anticipated uncertainties in the present business environment, TNB acknowledges the need for substantial investment, innovation, as well as cross-sector and cross-border collaborations to facilitate a just transition. TNB, is taking the lead to spearhead the nation's decarbonisation agenda through its Energy Transition Plan towards a more sustainable and resilient energy future. Showcasing our commitment to execute this strategy, TNB has allocated RM14 billion of the Group's total budgeted Capital Expenditure (CAPEX) for 2025 towards its energy transition initiatives.

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

Feature Story 2

ACCELERATING RESPONSIBLE ENERGY TRANSITION

Accelerating Decarbonisation

TNB is dedicated to achieving decarbonisation and a just energy transition through the implementation of initiatives aimed at reducing emissions and driving business growth. These strategies encompass the early retirement of coal plants, upgrading of existing plants with cleaner technology and collaborating with strategic partners to diversify its power generation portfolio towards cleaner and renewable sources. TNB will also prioritise the adoption of clean energy technologies such as hydro power, CCUS, hydrogen fuel and Small Modular Reactors. Furthermore, these initiatives are anticipated to expedite the economic feasibility of green technology adoption across the nation and beyond.



For more information on CCUS, please refer to Feature Story 3 : Decarbonisation through Innovative Solutions : Carbon Capture section, pages 83-84.



For more information, please refer to Sustainable Business Expansion section, pages 75-77.

To lead the Energy Transition and to drive the Green Economy, we have outlined the following priorities

As the custodian of Malaysia's power infrastructure, TNB is committed to developing and investing in enhancing the grid and network infrastructure in Peninsular Malaysia. Our investments in grid modernisation and digitalisation efforts will lead to improved grid flexibility and regional interconnections, making it easier to integrate Variable Renewable Energy (VRE) and Distributed Energy Resources (DER). We are also committed to minimising our impact on the environment by carefully managing land use, preserving forests and utilising cleaner and greener technologies in modernising the grid.



For more information, please refer to Smart Grid section, pages 73-74.



For more information, please refer to Electrification section, pages 98-100.

At TNB, we recognise the significant role that our customers can play in the energy transition journey. TNB encourages customers to take on an active role in monitoring their electricity consumption through smart meters and generating their own renewable electricity as prosumers. We aim to increase the adoption of electric vehicles by developing the EV ecosystem and digital interaction platforms.

Modernisation of Grid of the Future

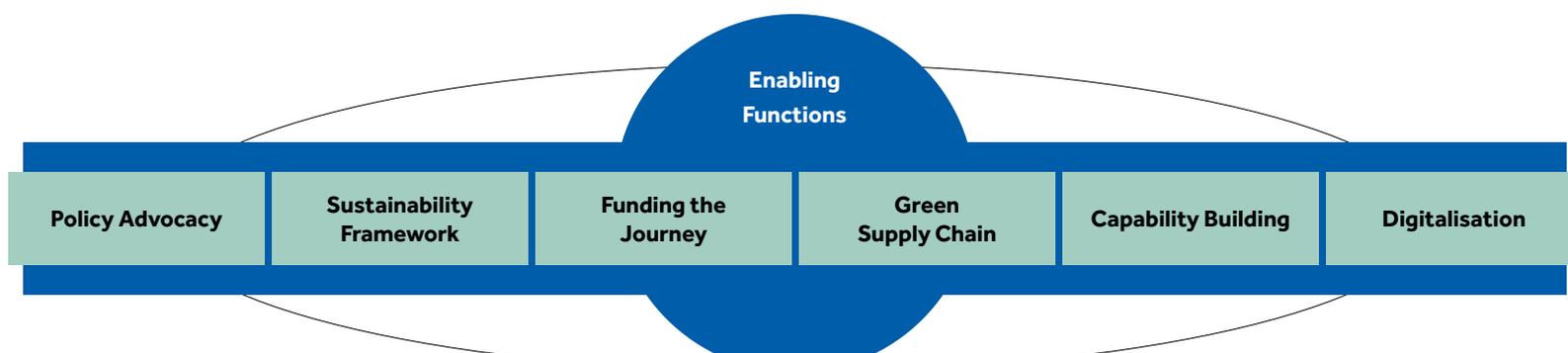
Empowering Customers in the Energy Transition

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

Feature Story 2

ACCELERATING RESPONSIBLE ENERGY TRANSITION

In order to remain competitive and meet the expectations of our stakeholders, it is crucial for TNB to develop a comprehensive plan that prioritises sustainability and builds resilience towards climate-related risks. In pursuit of these objectives, TNB has identified six (6) key enablers that can support the execution of the Energy Transition Plan :



Policy Advocacy	TNB seeks to contribute in shaping the nation's key climate policies through its efforts in policy advocacy and in influencing the wider ecosystem of stakeholders for accelerated climate action. Areas of advocacy prioritised are incentivisation of emissions reductions through energy efficiency, renewable energy incentives and regulatory measures, amongst others.
Sustainability Framework	To enhance sustainability management throughout the TNB's integrated value chain, it is essential to establish a comprehensive sustainability framework that provides a directional reference for the Group. This includes collaborating to develop a sustainability framework and structure to support business entities' (BEs) decarbonisation efforts and shape sustainability growth.
Funding the Journey	We aim to secure sustainable financing options for TNB's decarbonisation initiatives. Our investments in green technologies and infrastructure as well as renewable energy expansions will leverage on structuring innovative ways to utilise sustainable financing.
Green Supply Chain	In order for TNB to be a sustainability leader, we have to drive sustainability within our supply chain. We advocate sustainability practices to our suppliers to develop a green and resilient supply chain. As a start, TNB will engage with our strategic suppliers and set gradual expectations aligned to our sustainability goals in respecting human rights, reducing carbon emissions and environmental footprint, amongst others. This will improve transparency in emissions accounting and enable reductions within our Scope 3 emissions. Recognising the struggles faced by our small and medium-sized enterprise vendors, a Vendor Management Programme will be launched to educate and develop vendor capabilities in relation to emissions reduction. Suppliers will be assessed against a set of sustainability criteria aligned to our sustainability goals during pre-qualification stage and audits during project delivery.
Capability Building	We aim to invest in building the skills and knowledge of our employees to enable them to contribute to the Energy Transition Plan. By providing training on sustainability, promoting cross-functional collaboration and fostering a culture of sustainability throughout the organisation, we can empower our employees to drive the energy transition initiatives. We will continuously assess capability gaps and resource capacity requirements throughout our journey towards Net Zero 2050 aspiration.
Digitalisation	Digitalisation at TNB spans across three (3) dimensions : enabling a digital enterprise, adoption of digital solutions and promoting digital interactions. Digital solutions allow the modernisation of the grid system and scaling up renewable energy capacity penetration while empowering our customers through digital platforms. In FY2022, we upgraded the myTNB platform by adding the Energy Budget feature to enhance customer experience and established an EV digital platform as part of our aspiration of becoming a key EV player in Malaysia. TNB will continue to develop digital capabilities and infrastructure to support the decarbonisation efforts across our business entities.

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

SUSTAINABLE INFRASTRUCTURE AND ECOSYSTEM

TNB's key focus is to accelerate the energy transition and address climate change by digitalising the utilities industry, utilising efficient technology and exploring greener energy sources for enhanced power security.

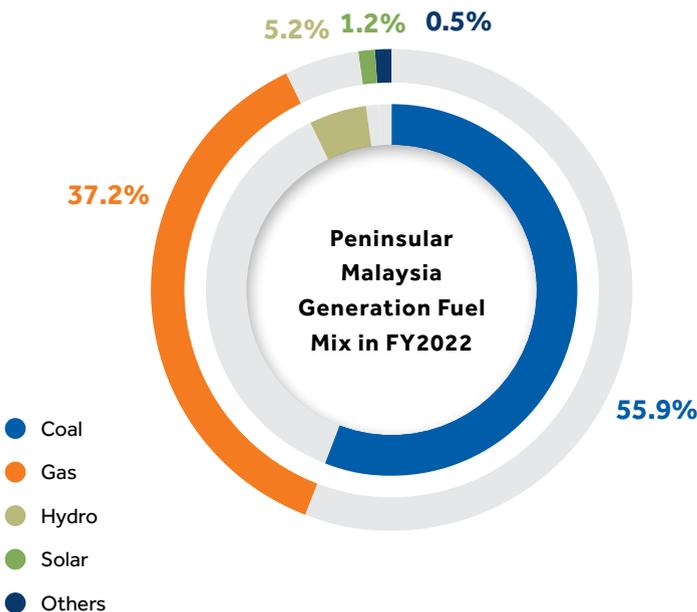
GENERATION FUEL MIX

As part of its 12th Malaysia Plan, the Malaysian Government has pledged to become a carbon-neutral country by 2050, ahead of COP26. To achieve this goal, the Government has committed to ending the construction of new coal-fired power plants. As a result, it is expected that the proportion of electricity generated from coal will decrease gradually in the coming years.

In balancing the energy trilemma, the Generation Development Plan will be based on a guiding principle of optimum fuel mix to achieve a *Herfindahl-Hirschman Index* (HHI) ≤ 0.5 . This would ensure optimum power security by providing adequate diversification of fuel and resources.

TNB's generation fuel mix depends on the Peninsular Malaysia's Generation Development Plan as approved by the Planning and Implementation Committee for Electricity Supply and Tariff (JPPPET), which is chaired by the Ministry of Natural Resources, Environment and Climate Change (NRECC). This plan is developed based on the underlying principle of balancing the security of electricity supply, affordability and environmental sustainability. TNB's target on renewable energy growth aligns with the nation's goal of increasing renewable energy capacity and reducing the greenhouse gas emission intensity of GDP by 45% by 2030.

Our two-prong strategy in greening our generation mix emphasises on reducing our coal capacity in a gradual manner while increasing our renewables energy portfolio.



SMART GRID

The Grid of the Future (GoTF) strategy, which is a part of TNB's Energy Transition Plan, aims to modernise and digitalise our grid and distribution infrastructures to support increased integration of distributed generations and renewables. This will lead to enhanced reliability and efficiency of our distribution network and system in delivering services to our customers. This is achieved by better management of distributed generation and possible interconnections with other countries. Additionally, digitalisation opens up possibilities to offer new products and services to meet our customers' needs and expectations.

TNB plans to invest a total of RM21 billion of Capital Expenditure (CAPEX) over a period of three (3) years from 2022 until 2024 in strengthening the grid and reliability of energy supply.

We strive to meet the increasing demand for cleaner electricity contributed by electrification and population growth by accelerating the integration of clean energy within the grid infrastructure. In tandem with this, we are expanding grid accessibility to connect new loads and data centres from potential customers and smart cities in new development areas that will also spur national economic growth.

We facilitate customer participation from two (2) dimensions :

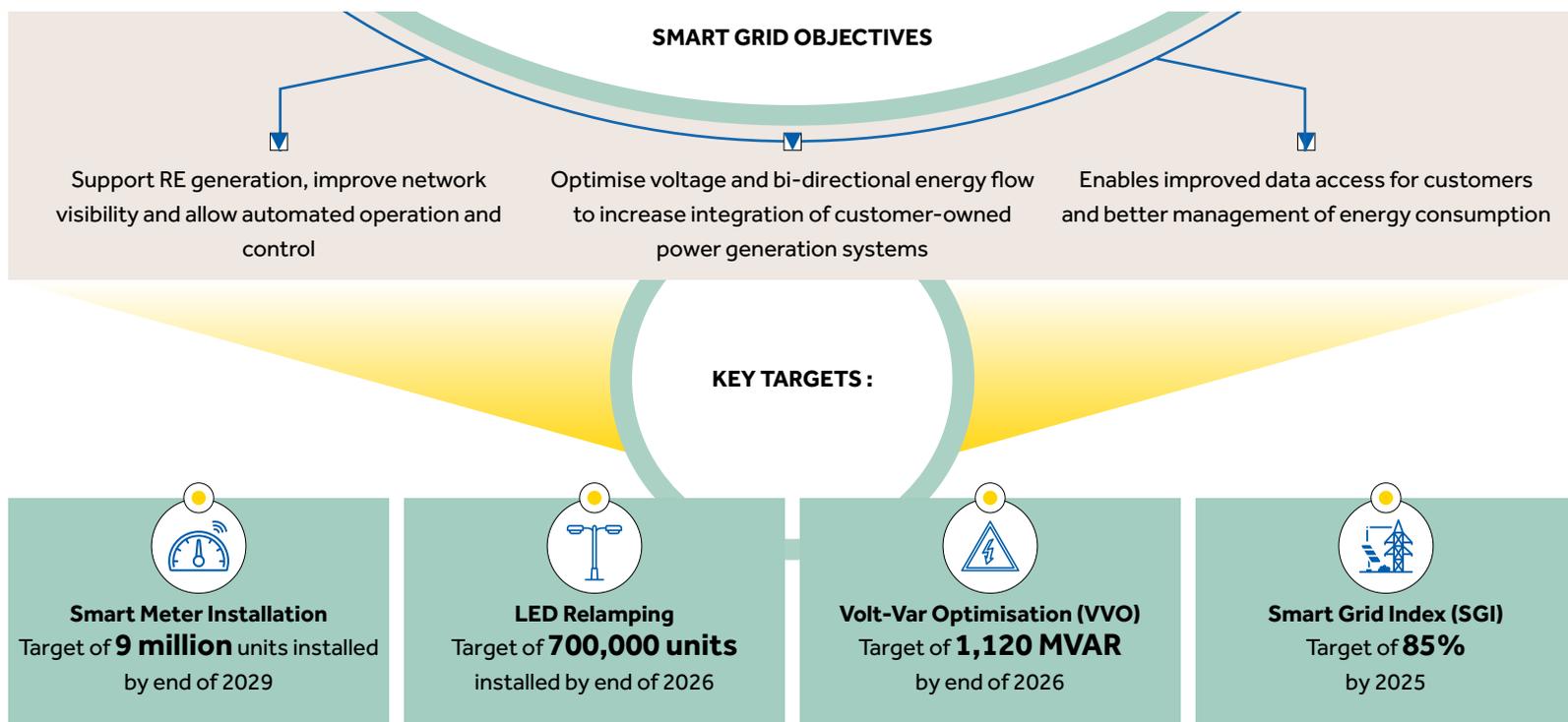
- Encouraging efficient electricity usage; and
- Self-generation of electricity. We enable customers to optimise their energy consumption using real-time electricity consumption data collected from Smart Meters and fed into myTNB app.

The installation of rooftop solar at customer's premises via initiatives such as Supply Agreement for Renewable Energy (SARE) and GSPARX to self-generate electricity on the other hand will encourage the growth of prosumers among TNB's customers.

TNB has made progress in integrating renewable energy into the grid by partnering with commercial customers to provide green energy solutions to reduce load on the grid, as well as conducting research and studies to identify suitable renewable energy solutions to increase RE capacity.

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

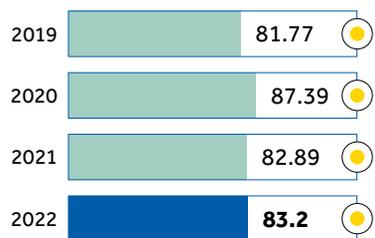
SUSTAINABLE INFRASTRUCTURE AND ECOSYSTEM



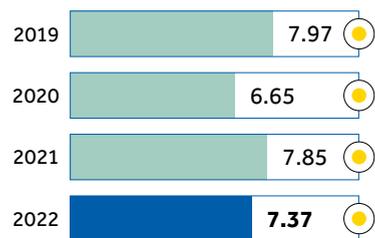
As part of the GoTF, over 2.6 million smart meters have been installed to date. The result of the massive efforts and investments by TNB is manifested through an improvement of the Smart Grid Index (SGI) to 71.4% this year as compared to the preceding year. We aim to achieve a SGI of 85% by 2025. With our ongoing initiatives and strategies in place, we are confident of achieving this target.

OUR PERFORMANCE FOR FY2022

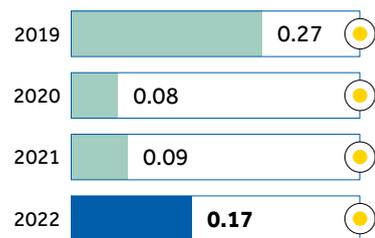
EQUIVALENT AVAILABILITY FACTOR (EAF) (%)



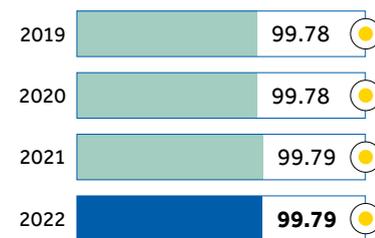
EQUIVALENT UNPLANNED OUTAGE FACTOR (EUOF) (%)



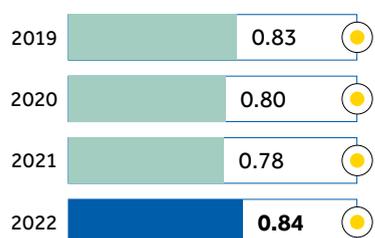
TRANSMISSION SYSTEM (MINUTES)



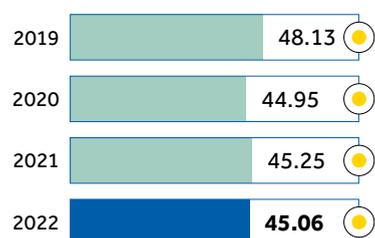
PERCENTAGE OF SYSTEM AVAILABILITY (%)



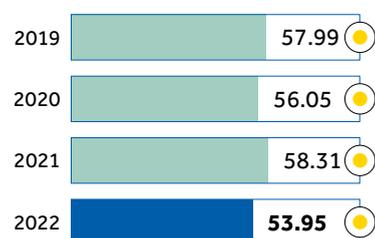
SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI)



SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI)



CUSTOMER AVERAGE INTERRUPTION DURATION INDEX (CAIDI)



RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

SUSTAINABLE BUSINESS EXPANSION

Our aspiration to become a leading provider of sustainable energy solutions aligns with our Energy Transition Plan, which we believe will create value for our stakeholders, spur growth in the energy industry and enhance our customer experience through diversified products and services. To ensure successful delivery of these strategic outcomes, we empower and provide support to relevant business entities to enable them to effectively execute plans and initiatives.

TNB is fully committed to reduce 35% of its carbon emission intensity by the year 2035 via adoption of new emerging technologies such as ammonia, biomass, hydrogen co-firing and Carbon Capture, Utilisation and Storage. These initiatives were intensified across TNB's business unit, divisions and subsidiaries.

We aim to deliver our SP2050 initiatives through a multi-faceted approach. The areas of focus for our energy transition strategy are as follows :

- 1) Reduce Coal Capacity
- 2) Expand TNB's Low Carbon Generation Portfolio
- 3) Increase Adoption of Cleaner Fuel and Green Technology
- 4) Accelerate Green Technologies via Strategic Partnership
- 5) Increase operational efficiency

With regards to our energy transition strategy, our primary goal is to maintain the highest level of reliability excellence in our generation capabilities. This will enable us to uphold the availability and reliability of our critical assets while transitioning towards more sustainable energy sources.

Additionally, we strive to align our efforts with the objective of achieving net-zero emissions. In effort to reduce emission, TNB carbon management plan outlines three (3) key components : reduce, capture and offset emissions.

 For more information, please refer to Carbon Management section, page 95.

TNB's multi-faceted approach towards energy transition :

1.

Reduce Coal Capacity

Retiring selected coal plants, earlier, than the expiration of their Power Purchase Agreements (PPA), subject to shareholders' agreements and approvals from the relevant authorities and regulators. Feasibility study of coal plants co-firing with ammonia, biomass and coal are ongoing for Jimah East Power (JEP) – 2,000 MW, Kapar Energy Ventures (KEV) – 2,200 MW and Janamanjung – 4,080 MW.

2.

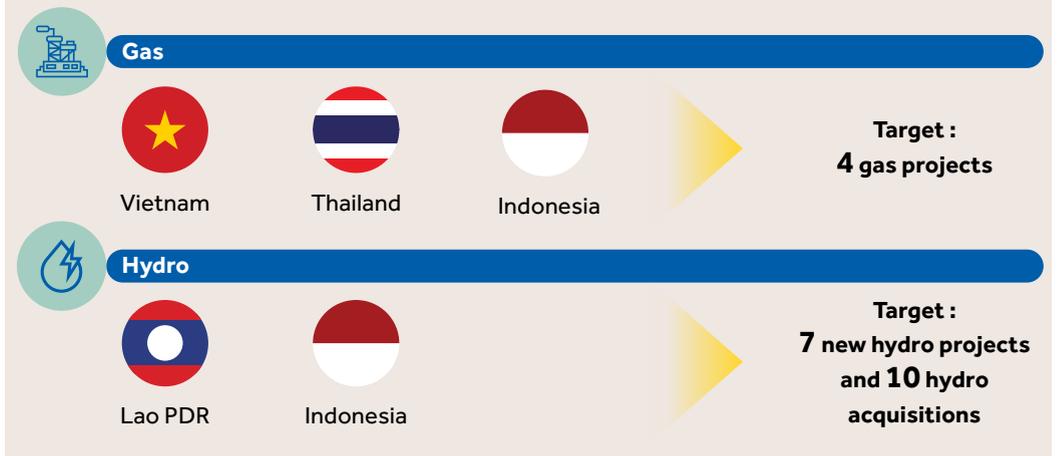
Expand TNB's Low Carbon Generation Portfolio

On the domestic front, development of Nenggiri hydro plant is expected to commence commercial operations in 2027. The hydro plant is expected to mitigate 0.3 million tonnes CO₂ yearly. Furthermore, the Energy Commission (EC) has approved TNB's Hydro Life Extension Programme for six (6) stations in the Sungai Perak Power Stations (SSJ Sungai Perak), with an investment of RM5.8 billion. This programme is set to begin in FY2022. As a result, we have increased renewables installed capacity to 3,780 MW representing a growth of 8% compared to FY2021. Overall, these domestic and international RE developments reflect our commitment to expanding its renewable energy portfolio and contributing to a more sustainable future.

On the international front, our New Energy Division (NED) was formed to venture and explore international opportunities. NED plans to expand renewable energy assets through strategic collaborations, mergers and acquisitions and asset development with leading renewable energy companies. We aim to realise our energy transition aspiration and provide better access to new technologies and markets while at the same time leveraging on opportunities to enhance capabilities and knowledge.

In FY2022, NED made significant progress in expanding its renewable energy portfolio. Through its subsidiary, NED has acquired CEI UK Ltd and added 97.3 MW onshore wind portfolio in the UK, increasing Vantage's installed capacity by 22% to 530 MW. In addition, GMR Energy Trading Limited, another shareholding company that operates in India, has successfully commissioned the 180 MW Bajoli Holi hydro power plant in June 2022. In parallel, TNB leveraged on secondment opportunities in enhancing our people's capabilities.

As the ASEAN Power Grid strengthens the ties among ASEAN nations, TNB is simultaneously increasing its renewable energy presence in the ASEAN markets through gas and hydropower projects with a target share of 360 MW share by 2030 and 800 MW capacity by 2050.



RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

SUSTAINABLE BUSINESS EXPANSION

3. Increase Adoption of Cleaner Fuel and Green Technology

TNB will construct gas-fired combined cycle gas turbine (CCGT) including hydrogen-ready technology plants, which are expected to be commissioned from 2030 and beyond.

4. Accelerate Green Technologies via Strategic Partnership

TNB plans to collaborate with strategic partners in leveraging technology, expertise and capital to drive the energy transition. TNB GenCo is currently collaborating with Original Equipment Manufacturers (OEMs) of existing power plants in exploring future opportunities.

Strategic partnerships play a vital role in expediting TNB's venture into new green technology development and deployment in the power generation sector as well as provide better access to new technologies and markets.

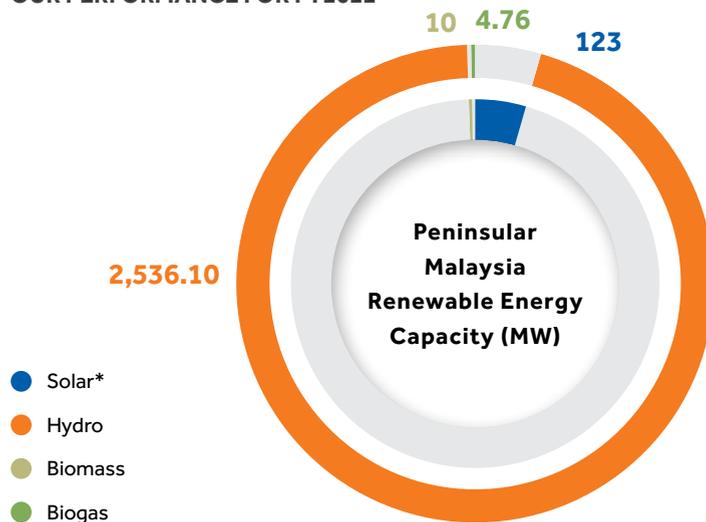
5. Increase operational efficiency

TNB aspires to become one of the top power generation solutions provider that sustainably delivers value to all stakeholders by focusing on key strategic initiatives : Turnaround Excellence, Productivity Uplift and Asset & Service Expansion while sustaining business-as-usual performance within Power Purchase Agreement (PPA) levels. This allows us to utilise our current assets for value uplifts while reducing environmental footprint of older and inefficient assets.

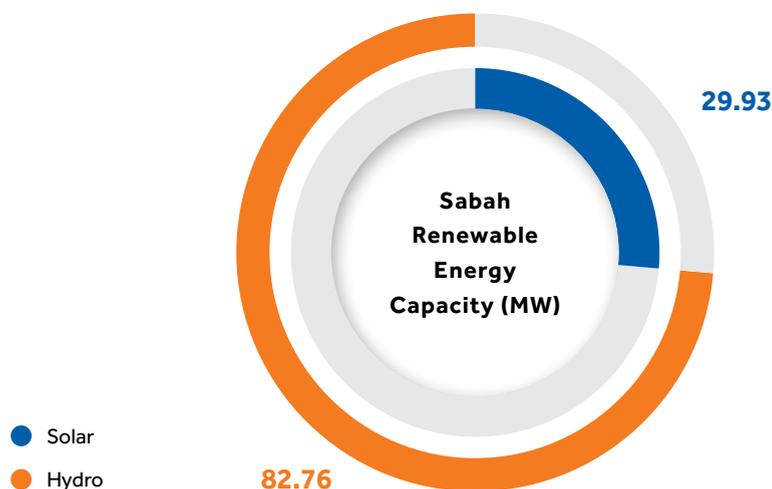
Our strategic imperatives under the ET Plan will enable us to deliver on our interim emission intensity target reduction of 35% by 2035 and put us on track to achieve our Net Zero aspiration by 2050.

For more information on Renewable Energy Growth Strategy, please refer to Energy Transition Pillar 1 : Future Generation Sources section, pages 94-96.

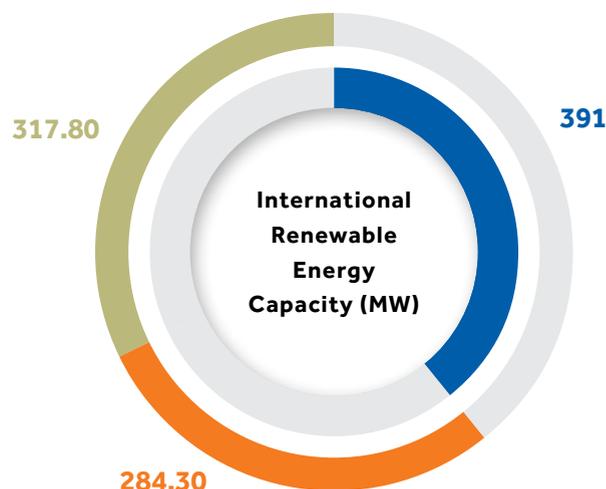
OUR PERFORMANCE FOR FY2022



* Exclude rooftop solar owned by GSPARX



● Solar
● Hydro



● Solar
● Wind
● Hydro

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

SUSTAINABLE BUSINESS EXPANSION

To ensure consistent business growth and support our Energy Transition Plan, we have assembled a pipeline of cleaner and renewable energy projects in both the domestic and international markets.

Key Activities	Description
New Combined Cycle Power Plant, Kapar	A proposal for development of a greenfield project that is marked for a combined cycle gas-fired plant, replacing KEV coal capacity and supplying cleaner electricity.
Solar Greenfield Development, UK	TNB has plans to develop Solar greenfield projects and co-located battery energy storage systems, which includes the acquisition of a Ready-to-Build (RTB) stage 102 MW solar and 65 MW co-located battery storage portfolio developed by JBM Solar in the UK. These plans present opportunities for environmental initiatives that align with TNB's wider biodiversity agenda.
LSS4 Solar Farm development	TNB through its wholly owned Special Purpose Vehicle company, TNB Bukit Selambau Solar Dua Sdn Bhd (TBSS2) has secured financing of up to RM185 million for its third Large Scale Solar (LSS) project in Bukit Selambau, Kuala Muda, Kedah under the Government's Large-Scale Solar 4 (LSS4) programme.

EXPANDING ENERGY SERVICES

Our wholly owned subsidiary, TNB Energy Services Sdn. Bhd. (TNBES) offers solutions for grid and distribution as well as energy services such as energy audits, efficiency and performance contracting. TNBES aims to secure projects worth up to RM 1.9 billion by 2027 from TNB Distribution Network (TNB DN), TNB Grid and electricity customer markets. To reach this goal, TNBES will focus on developing new capabilities, implementing new technology, increasing visibility and fostering innovation. Digitalisation will also play a crucial role in enhancing operational efficiencies and reducing costs. Key projects undertaken by TNBES include :

Key Activities	Description
Advance Metering Infrastructure (AMI)	TNB is currently expanding the deployment of installation for Advance Metering Infrastructure (AMI) project in RP3 and enhancing feeder identification works. TNBES provides smart meter installation services.
Distribution Network Infrastructure	Upgrading of TNB Distribution Network (TNB DN) infrastructure in providing the basic necessity of access to energy through rural electrification.
RE and Off Grid Power Plants	Operation and maintenance for solar hybrid stations, mini hydro stations and biogas plants throughout Malaysia owned by TNB/TNB DN.
Street Lighting	Upgrade and install LED street lighting in ensuring safer community through brighter surroundings.
Integrated Facilities Management (IFM)	IFM at Platinum Campus, which is certified with Green Building Index (GBI) platinum rating.
Supervisory Control and Data Acquisition (SCADA)	Automated system for fast service restoration in the event of 11kV system breakdown. This improves customer experience and business continuity.
Reliability	Visual inspection and thermal imaging of the Grid Infrastructure to ensure reliability.
Engineering, Procurement, Construction and Commissioning (EPCC)	Design, build and implement RE Plants and Interconnection Infrastructure.
Operation & Maintenance (O&M)	Operate and maintain RE Plants including TNB Grid and TNB DN infrastructure.
Energy Services	Reduce energy consumption and optimise energy usage for commercial and industrial clients through power quality and power system study.

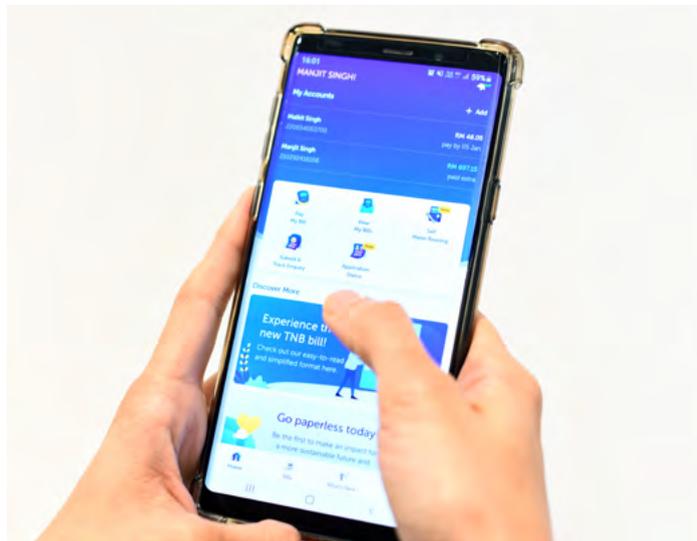
RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

CUSTOMER CENTRICITY

Our business purpose centres on our customers. We are dedicated to providing our customers with reliable, affordable and long-term services and solutions. We accomplish this by consistently engaging with our customers effectively, all the while preserving their trust in the quality of our products and services.

CUSTOMER ENGAGEMENT AND SATISFACTION

While we have four (4) main communication channels : Click, Call, Come Over and Go Over, we have experienced a significant growth in our Click channel over the years, with the myTNB platform garnering 6.3 million subscribers, representing 63% of our customer base. In FY2022, we achieved a customer interaction index of 90.76%, compared to 89.90% in 2021. The majority of respondents who were satisfied with our customer interactions were digital users, reinforcing our engagement strategy with digital platform users. For customers who prefer in-person transactions, we made it possible to also book appointments for Kedai Tenaga visits through the myTNB web portal.

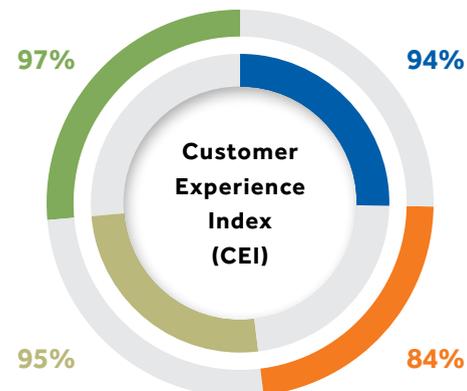


CUSTOMER SATISFACTION INDEX (CSI)

(%)



- myTNB app
- myTNB portal
- TNB CareLine
- Kedai Tenaga



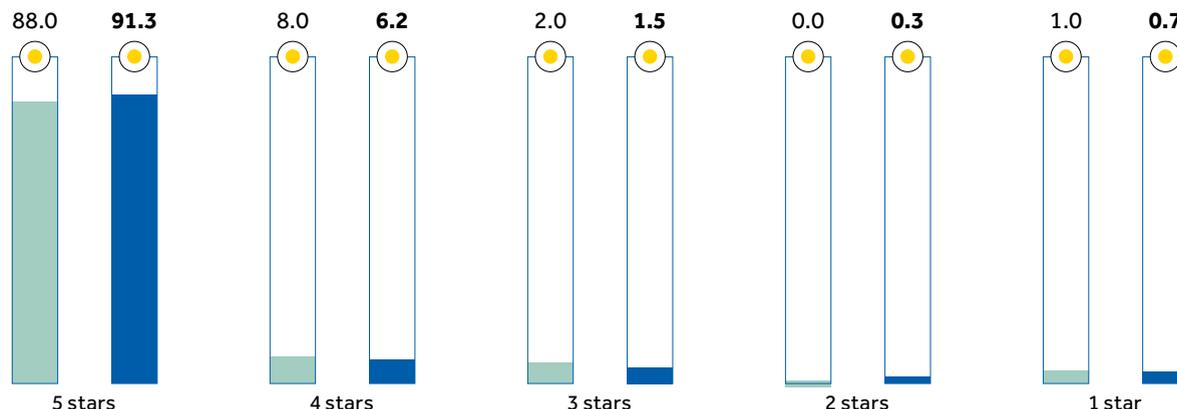
TNB has maintained 87% satisfaction in the Customer Satisfaction Index (CSI) for FY2022. We have successfully achieved the CSI target for FY2022 which was at 86%. The CSI methodology is based on customer segments such as Small Medium Enterprise (SME), Residential, Government and Large Business segment.

OUR PERFORMANCE FOR FY2022

myTNB APP FEEDBACK

(%)

● 2021 ● 2022

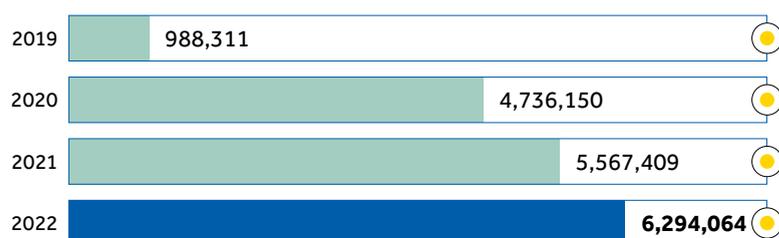


RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

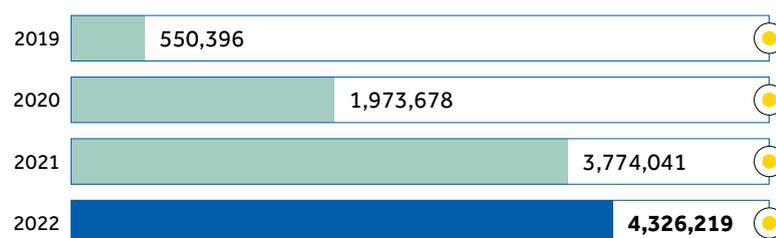
CUSTOMER CENTRICITY

Feedback on our myTNB app has also achieved an impressive 91.29% of 5 Star ratings received in FY2022 as compared to the 88.2% in FY2021. The number of customers registered on the web and app has also increased in FY2022 to 2.69 million and 5.44 million respectively as compared to FY2021 being 2.36 million and 4.70 million respectively.

NUMBER OF CUSTOMER SUBSCRIBED TO myTNB



NUMBER OF ACCUMULATIVE DOWNLOADS OF THE myTNB MOBILE APPLICATION



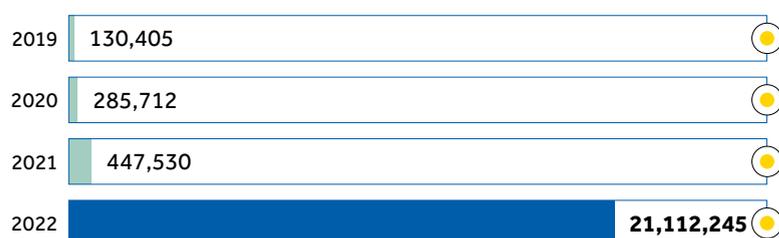
NUMBER OF COMPLAINTS RECEIVED



PERCENTAGE OF COMPLAINTS RESOLVED (%)



NUMBER OF SERVICE REQUESTS RECEIVED



PERCENTAGE OF SERVICE REQUEST RESOLVED (%)



DIGITALISING CUSTOMER SERVICES

To support our digitalisation efforts, we are continuously upgrading our digital customer platforms to offer more services that meet the needs and expectations of our customers. Our digitalisation initiatives for customers in FY2022 include :

myTNB Energy Budget

Enables myTNB smart meter customers to effectively manage their energy usage according to their consumption habits. The Energy Budget feature allows customers to manage their electricity consumption by setting threshold alerts. It proactively engages customers with automated push notifications through myTNB when they reach certain threshold levels (75% and 100%) of their overall budget. In FY2022, TNB had rolled out a new Energy Budget feature in myTNB apps to all residential smart meter customers nationwide. Around 178,000 customers had subscribed to the Energy Budget of which 95% of them have managed to reduce a total of 5.38 GWh which is equivalent to around 1,255 tonnes of CO₂ emission avoidance.

Digital Billing and Bill Redesign

Enhanced customer satisfaction and engagement by introducing a user-friendly digital billing layout and enabling customers to make informed choices by opting-in for digital billing and thus becoming more environmental friendly. Around 43,000 customers had successfully opted into digital billing.

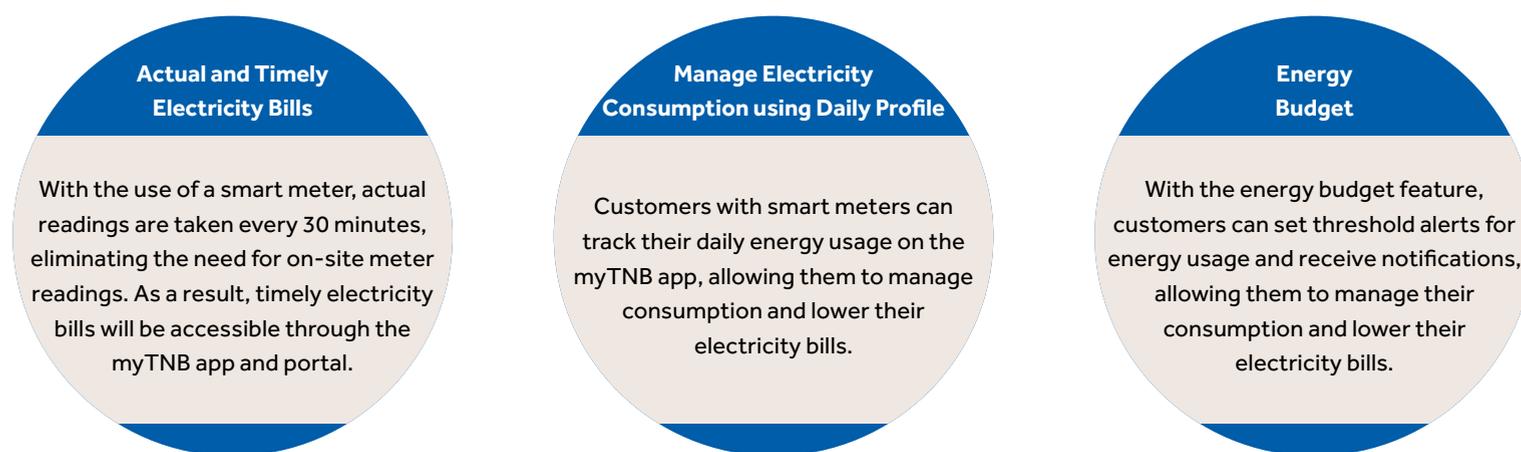
RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

CUSTOMER CENTRICITY

ELEVATING CUSTOMER EXPERIENCE THROUGH CUSTOMER EMPOWERMENT

TNB is vested in enabling greater customer participation in the energy transition journey, facilitated by the Advanced Metering Infrastructure (AMI). The AMI is a smart and integrated system which provides customers with greater control and transparency over their energy consumption. With near real-time access to energy usage data through myTNB web portal and myTNB apps, customers can make informed decisions about their energy usage and adjust their consumption behaviour accordingly. Prudent consumption patterns potentially result in cost savings and a more sustainable lifestyle.

Besides elevating customer experience by providing customers with the ability to monitor their electricity usage, smart meters are also able to monitor bi-directional energy from DER = Distributed Energy Resources such as rooftop solar and electric vehicles. TNB would be able identify issues within the grid in relation to power quality to consumers and understand consumer habits through the AMI and therefore enabling TNB to further improve its services. In 2022, AMI installations exceeded the 2022 target of 600,000 units by installing a total of 838,830 units, with a budget utilisation of RM511.52 million. The AMI deployment in Malaysia has been recognised internationally, as TNB recently won the "Energy Advocate of the Year" award in the smart grid category at Enlit Asia.



CUSTOMER PRIVACY

As we improve our customers' experience through digitalisation, we are committed to safeguarding their data privacy from cybersecurity risks and threats. We continuously implement various cybersecurity measures to safeguard our customers' data. The measures include robust initiatives identified in our cybersecurity operating model as well as compliance with the regulations such as Personal Data Protection Act (PDPA) and industry standards such as Payment Card Industry Data Security Standard (PCIDSS). We remain vigilant in our efforts to protect our customers' data from unauthorised access and use.

EMPOWERING CUSTOMERS TOWARDS ENERGY TRANSITION

We believe that our customers can play a role in supporting the energy transition by making smart choices and participating in the various Renewable Energy (RE) and Energy Efficiency (EE) programs that we have planned. Our key initiatives for FY2022 include :

Key Activities	Description	Key Contribution
Feed-in Tariff (FIT) Programme	A mechanism granted to selected customers to export all solar energy produced to the TNB grid at a fixed price.	9,482 FIT projects have been commissioned with an installed capacity of 558.09 MW.
Net Energy Metering (NEM) Scheme	Allows customers in Peninsular Malaysia to export excess energy produced from their solar PV systems back to the grid.	14,015 NEM participants making up a total capacity of 698.64 MW.

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

CUSTOMER CENTRICITY

Key Activities	Description	Key Contribution
Green Electricity Tariff (GET)	<p>GET is a government initiative to provide any electricity customer an option to obtain renewable energy supply to reduce their carbon footprint.</p> <p>All consumers are eligible for the GET programme which are available in 100 kWh blocks for residential consumers and 1,000 kWh blocks for non-residential consumers at a rate of 3.7 sen/kWh.</p> <p>Consumers enrolled in the GET programme will receive internationally recognised Renewable Energy Certificate (REC) at the end of the calendar year.</p>	In FY2022, GET was fully subscribed from the annual quota of over 4,000,000 MWh.
Supply Agreement for Renewable Energy (SARE)	TNB offers beyond-the-meter scheme, which is a SARE that consists of Power Purchase Agreement (PPA) and Metering, Billing & Collection Agreement in one comprehensive document.	In FY2022, 723 contracts were secured by commercial and industrial customers through SARE. This resulted in a total SARE contracted capacity of 252.34 MWp.
Rooftop Solar PV (GSPARX)	<p>GSPARX is committed to generating new revenue stream for TNB as a preferred choice for one-stop rooftop solar solutions in Malaysia. The potential for rooftop solar projects in Peninsular Malaysia is immense, as it can generate up to 32,000 MW of electricity. Through GSPARX, we empower customers to transition to prosumers through self generation of electricity.</p> <p>GSPARX allows customers (residential, commercial and industrial) to install Solar PV at zero upfront cost and enjoy savings via self-consumption.</p>	<p>In FY2022, GSPARX obtained 248 MWp of rooftop solar PV projects that includes government buildings, universities, commercial and industrial segments.</p> <p>GSPARX has installed solar PV systems at 16 sites within UPM Serdang campus, comprising various buildings including a mosque, rooftop carpark and a floating solar system, making the project the largest solar installation amongst public institutions of learning in Malaysia.</p>
Pelan Jalinan Digital Negara (JENDELA)	Allo Technology Sdn. Bhd. (Allo) aims to extend TNB's fibre coverage throughout Peninsular Malaysia and support the JENDELA programme to build a robust digital infrastructure and bridge the digital divide between the rural and urban communities.	FY2022, Allo completed 178,514 home passes under the JENDELA programme across Melaka, Perak, Kedah, Penang, Selangor, Kuala Lumpur and Johor. Allo aims to expand our network coverage to over 600,000 premises by 2027.

We have also taken steps to increase energy efficiency awareness among our customers through key initiatives :

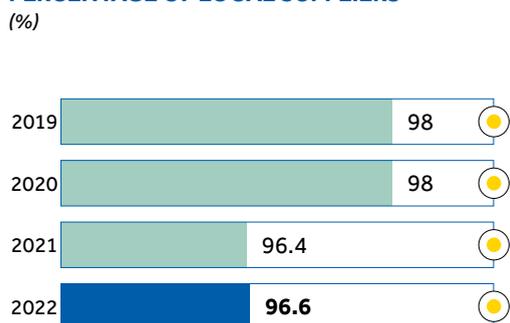
Initiative	Our Performance in FY2022
Sustainability Achieved Via Energy Efficiency (SAVE) 3.0	We supported the Government through the promotion of the SAVE 3.0 programme which offers a RM400 e-rebate programme for households that purchase energy efficient that has undergone a performance test for energy efficient appliances that received a 4 or 5-star energy efficiency labels from the Energy Commission (ST).
Energy Efficiency Awareness Programmes	In collaboration with <i>Persatuan Pengguna Islam Malaysia</i> (PPIM), we conducted <i>Kempen Kesedaran dan Didikan Pengguna Bijak Tenaga</i> via seven (7) videos posted on PPIM social media platforms to raise awareness related to electricity and saving energy. Additionally, we organised <i>Kuasa Di Tangan Anda</i> seminar programme from May to October 2022, in collaboration with Ministry of Higher Education (MOHE) and <i>Jabatan Pendidikan Politeknik dan Kolej Komuniti</i> (JPPKK), which involved conducting 10 seminars at eight (8) Polytechnics and two (2) Community Colleges. These seminars outreached to 1,362 student participants and helped them gain a better understanding about energy efficiency, electrical regulations and safety practices.

RESPONSIBLE GOVERNANCE AND STRENGTHENING BUSINESS RESILIENCE

SUSTAINABLE SUPPLY CHAIN

TNB aims to establish a sustainable supply chain ecosystem that upholds high standards of ethics, integrity and transparency. By integrating digitalisation into the procurement process and digitally transforming business processes, we hope to reduce the time spent on manual procurement systems. We support local Malaysian suppliers and understand the importance of our role in strengthening the local value chain ecosystem.

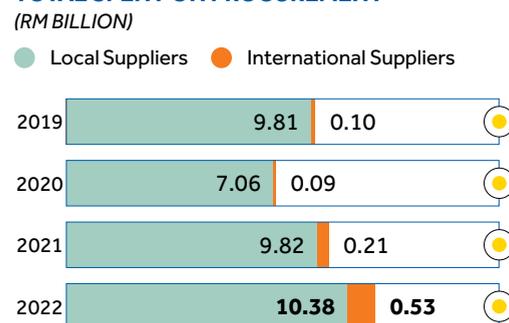
PERCENTAGE OF LOCAL SUPPLIERS (%)



TOTAL NUMBER OF SUPPLIERS (NO.)



TOTAL SPENT ON PROCUREMENT (RM BILLION)



PROCUREMENT & SUPPLY CHAIN (P&SC) 2.0

TNB has enhanced its P&SC organisational structure and operational model to support future-proofing initiatives and digital capability advancement. FY2022, P&SC has successfully completed and launched the Procurement Cycle Digitalisation (PCD) 2.0, a digital management platform that facilitates the End to End work flow in procurement and supply chain in TNB. To advance further, P&SC will upgrade the Procurement Backbone system that will position P&SC as a strategic business partner for procurement, aiding TNB in achieving its sustainability goals.

The new Procurement Backbone will improve the performance of P&SC's three functional pillars : Category Excellence (CATEX), Key Account and Service Excellence (KASE) and Supplier Excellence & Ecosystem Development (SEED). Additionally, it will increase P&SC efficiency through more accurate and holistic analysis, category management and cost/market intelligence. The Procurement Backbone will have advanced capabilities and functionalities supported by automation, analytic capabilities, Artificial Intelligence (AI) and Machine Learning (ML) which will ensure seamless operation and excellent customer experience.

Key areas of the Procurement Backbone :



CLIMATE CHANGE AND ENVIRONMENT



Related Material Matters

- Climate Change and Emission
- Energy Transition and Innovation
- Environmental Management

TNB holds a stake in offshore wind turbines owned by Blyth Offshore Demonstrator Ltd (BODL) through its wholly owned subsidiary, Vantage RE Ltd.

Feature Story 3

DECARBONISATION THROUGH INNOVATIVE SOLUTIONS : CARBON CAPTURE

Being a prominent power utility player, we acknowledge the significance of tackling climate-related risks for business resilience and addressing the interests of our stakeholders. We strive to minimise our carbon footprint as well as capitalising on decarbonisation opportunities. In line with our net zero aspiration, we have designed a holistic carbon management strategy that focuses on reducing emissions, capturing emissions and offsetting remaining emissions, net of reductions, via high-quality and credible carbon credits.

Since 2011, TNB has been extensively involved in research and development (R&D) as well as innovative projects to uncover promising initiatives and technologies through our research division, TNB Research

Sdn. Bhd. While amplifying efforts to reduce carbon emissions, in tandem, TNB has recognised carbon capture and utilisation (CCU) as a critical solution for the removal of emissions. TNB has made significant progress in the field of CCU R&D whereby our pilot plants has achieved promising results of absorbing up to 90% of carbon emissions from our coal-fired power plant flue gas. Nonetheless, we are refining the implementation of CCU technology on a larger-scale, with a focus on enhancing its economic viability and exploring its full potential. We believe that by working together with industry partners, academic institutions and government agencies, we can accelerate progress towards our commitment of SP2050.

Our CCU R&D journey thus far covers the following areas :

1. Chemical Approach

Our research focuses on optimisation of chemical-based post combustion carbon capture process to reduce the energy requirement of CCU. We have completed five (5) projects with our chemical-based R&D facilities.

Through R&D at our pilot plants, we are able to absorb 90% of carbon emissions from coal fired power plant flue gas. Reduction of energy requirement was also observed through the optimisation of capture process. We hold two (2) patents and numerous publications in relation to our completed projects.

CLIMATE CHANGE AND ENVIRONMENT

Feature Story 3

DECARBONISATION THROUGH INNOVATIVE SOLUTIONS : CARBON CAPTURE

2. Biological Approach

We have completed seven (7) projects using the direct carbon utilisation from flue gas emission through microalgae photosynthesis process, producing biomass as by-product. Our research includes monetisation of the biomass which can be cultivated and post processed for downstream applications :

First pilot algae bio-CCU technology in Malaysia

tested with actual flue gas from live coal fire power plant

Development of

Microalgae Mass Cultivation and Monitoring Training Module

for local and international participants

Four (4)

local marine species of microalgae has been identified to capture CO₂

Able to capture up to

2.3g CO₂/litre

from 4,500 litre of outdoor microalgae culture facility

3. Carbon Utilisation Approach

Carbon utilisation is the process of converting captured CO₂ into useful products such as chemicals, fuels and construction materials. We are conducting R&D on CO₂ Utilisation using Renewable Energy (CURE), where CO₂ from our thermal power plant is combined with hydrogen to produce methane as an alternative fuel. The project utilises green hydrogen which is produced using renewable energy. The products from carbon utilisation have the potential to create new revenue streams for TNB when commercialised.

FY2022

Highlight

Partnering for a Sustainable Malaysia : Spearheading New Green Technologies in Malaysia

In accelerating decarbonisation in the energy sector, TNB has signed a MoU with PETRONAS to explore new green technologies against a mutually beneficial ambition of supporting the national aspiration to be a carbon neutral nation by 2050. The first initiative under the MoU is a collaborative study on the development of green hydrogen ecosystem and CCUS leveraging on TNB's power plant assets. The collaboration seeks to develop green hydrogen fuel for power generation and intensify efforts to co-create a green hydrogen ecosystem to provide cleaner energy solutions for Malaysia and international markets.

TNB plans to invest RM6.3 billion in the rebuild of TNB's retired Sultan Ismail Power Station in Paka, Terengganu using high-efficient Combined Cycle Gas Turbine by 2029 towards cleaner energy production. Paka power plant serves as a unique pioneering



project in deploying green technologies that may be utilised in future power plants. The MoU will also include evaluating integrated onshore and offshore CO₂ facilities.

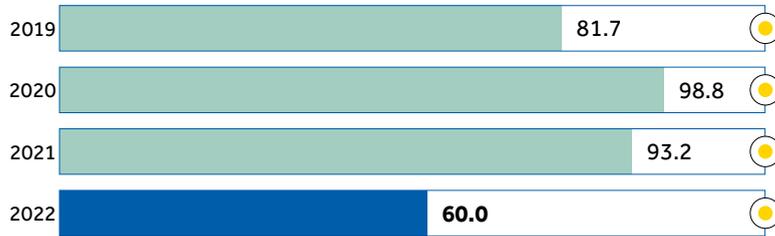
CLIMATE CHANGE AND ENVIRONMENT

ONGOING INNOVATION, RESEARCH AND DEVELOPMENT

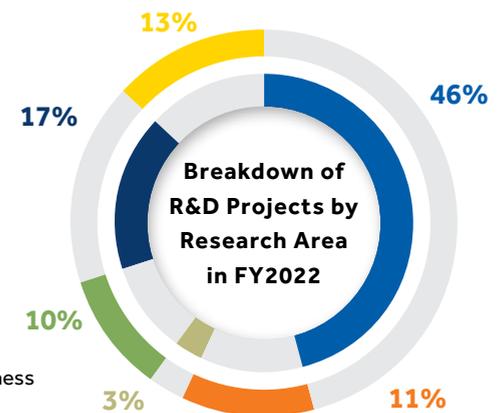
TNB has been actively investing in R&D of new technologies which can assist in climate change mitigation. Commencing this year, we have centralised our R&D, innovation and technology expenditure under TNB Technology Fund, governed by the Technology Council. This fund is responsible for managing projects that promote the Energy Transition agenda, enabling greater focus on impact of investment. Although our investment in research and development decreased in FY2022 in comparison to previous years, we have entered into several MoUs, strategic partnerships and collaborations, providing additional resources for the ET agenda. For the year 2023, we have allocated RM60 million towards research and development efforts related to the Energy Transition.

R&D INVESTMENT

(RM MIL)



- RE and Energy Storage
- Decarbonisation
- Electric Mobility
- Smart City
- Digitalisation
- Strengthening Core Business



Key Activities	Description
Renewable Energy	Solar PV Cooling Technology TNB Research Sdn Bhd (TNBR) has successfully developed two (2) types of retrofit PV cooling systems (active and passive cooling systems), which improve the energy yield of the PV system.
	Biogas production via Co-Digestion Technology using Palm Oil Mill Waste TNB has concluded research on biogas production using anaerobic co-digestion method on a combination of substrates containing Palm Oil Mill Effluent (POME), empty fruit bunch (EFB) fibres and decanter cake. The research project determined biogas potential from different combination ratio of these substrates and provided recommendations to optimise the current biogas facility.
	Biogas source from non-POME organics TNBR is collaborating with other divisions, subsidiaries and external parties to carry out feasibility study of biogas plants from non-POME organics, such as food and animal waste.
	Biodiesel Fuel for Greener and Sustainable Power Generation This research aims to develop a fully automated, large-scale biodiesel processing unit to produce biodiesel from waste cooking oil for TNB Fleet Management, as well as to assess the potential savings from using biodiesel blended diesel in TNB mobile gensets and TNB vehicles.
	Small hydropower solution TNBR collaborated with Sedania Technologies Sdn Bhd to develop small hydropower for installation at Gunung Pulai water treatment plant and Seluyut Dam.
	Melaka Smart Grid Demonstration TNBR partnered with Malaysian Industry-Government Group for High Technology (MIGHT) and Majlis Perbandaran Alor Gajah (MPAG) for rooftop solar PV System installation.
	Exploring suitable crop alternatives for biomass energy generation TNBR has developed a technology that improves the fuel properties of empty fruit bunch (EFB) for power generation.

CLIMATE CHANGE AND ENVIRONMENT

Key Activities	Description
Renewable Energy	<p>Pyrolysis of Organic and Plastic waste to Bio-oil (Waste-to-Energy)</p> <p>TNB is exploring waste to energy system which aims to divert the organic and plastic waste from the municipal solid waste (MSW) in landfills for this project. A trial of the systems is currently in progress.</p>
	<p>Green Hydrogen</p> <p>The research is in its initial stages whereby we are studying the potential use of Two Stage Anaerobic Digestion Technology (TSAD) on organic waste.</p>
	<p>Floating Solar</p> <p>TNB has also made use of its ash pool at Sultan Azlan Shah Power Station in Manjung Perak to construct its pilot floating solar plant with an installed capacity of 105.12 kWp. The 175-hectare pond which is a dumping ground for ash from the power plant, can now be potentially used as a floating solar farm to generate energy of at least 100 MW. TNB is also conducting a feasibility study on floating solar potential at hydro dams with local solar EPCC and solar float manufacturers.</p>
Decarbonisation	<p>Carbon Capture, Utilisation and Storage (CCUS)</p> <p>TNB has been conducting CCUS studies since 2021, including chemical, biological and utilisation approach.</p> <p> For more information on our CCUS R&D, please refer to Feature Story 3 : Decarbonisation Through Innovative Solutions : Carbon Capture section on pages 84-85 for more details.</p>
	<p>Developed an algorithm for palm oil plant optimisation</p> <p>TNBR partnered with Sime Darby to achieve optimum output of oil extracted from palm oil plants.</p>
	<p>Empty Fruit Bunch (EFB) Co-firing Feasibility Study</p> <p>TNBR has embarked on a collaborative effort with TNB GenCo in carrying out a feasibility study for co-firing high quality empty fruit bunch (EFB) pellets in a power plant.</p>
	<p>Ammonia-Biomass Coal Firing (ABC) Feasibility Study</p> <p>GenCo, JEP, Mitsui & Co and Chugoku collaboratively agreed to conduct a feasibility study on co-firing of biomass and ammonia in Jimah East Power Sdn. Bhd. to reduce our coal usage in tandem with efforts to reduce the emissions from plant operations. The first phase of the feasibility study has been completed in FY2022 and we are currently embarking on the second phase, which focuses primarily on small-scale ammonia, biomass and coal firing.</p>
	<p>Research Collaboration agreement for joint development of battery energy storage system</p> <p>TNBR partnered with Korean Technology Partner Research for joint development of battery energy storage system.</p>
Biodiversity	<p>Hydroelectric Dams Impact on Wildlife Diversity</p> <p>TNBR and PERHILITAN conducted a comprehensive environmental impact analysis for the impact on wildlife diversity and sustainability due to construction and impoundments of hydroelectric dams.</p>
Water Management	<p>Water Stress Assessment</p> <p>TNBR has also conducted assessment on potential water stress of its selected thermal power plants in Peninsular Malaysia. The assessment covers the water footprint and identifying various mitigation measures to reduce water consumption and achieve minimum water discharge. The outcome is to install a water reclamation plant to recycle water discharged from the thermal power plants and explore alternative water resources.</p>
Building Resilience Towards Natural Disasters	<p>Monitoring Flood Risk with the Latest Climate Technology</p> <p>TNB collaborated with Jabatan Pengaliran & Saliran (JPS) and Malaysia Meteorology Department (MetMalaysia) to introduce the Flood Analysis and Risk Assessment (FARA) as a measure to monitor and analyse rainfall and water level in operating areas, as well as weather forecast information which is subsequently sent out to our Operation Team. We utilise information gathered from JPS website and geo-spatial mapping to identify and trigger flood warning to our team.</p>

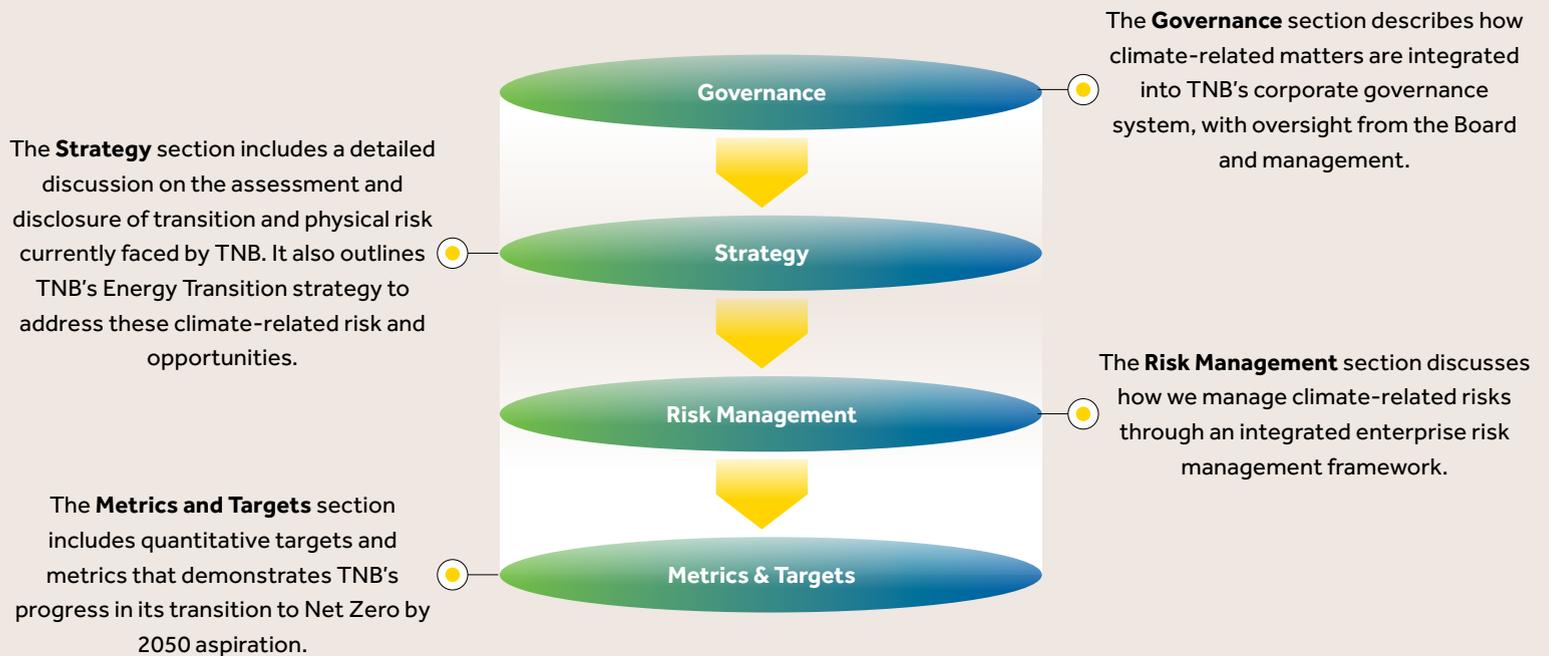
CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

As an energy utility company, we recognise the impact on climate change that we contribute, as well as the threats of climate change to our existing infrastructure as well as our business sustainability. To ensure continuous and reliable supply of electricity to the nation, we are actively transforming and decarbonising our operations.

Since 2019, TNB has voluntarily adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework to address potential climate-related physical and transition risks and opportunities on our business strategy, as well as the resulting financial impact.

Core Elements of Recommended Climate-Related Financial Disclosures



CLIMATE GOVERNANCE

The Board is committed to strategically integrate sustainability across TNB's business and advancing our sustainability efforts, including climate-related matters. They will deliberate and approve the sustainability strategy and pathway while overseeing TNB's implementation and performance on sustainability – these include the materiality assessment, Energy Transition Plans and TNB Sustainability Pathway 2050 (SP2050).

TNB's Sustainability Governance outlines clear roles and responsibilities in relation to sustainability and climate change for each level of leadership. The establishment of the Sustainability and Energy Transition Council (SETC), chaired by the CEO and composed of TNB's corporate senior management team is tasked to oversee the progress of sustainability

and energy transition development and implementation. Business Units are responsible for managing sustainability and climate risks and opportunities as well as monitoring performance of related initiatives rolled out by TNB in their respective units. Business Units are required to report their sustainability performance to SETC on a regular basis.

The Corporate Strategy and Sustainability Department is assigned as SETC secretariat and administers council meetings and ensures that decisions are clearly communicated to respective parties.

Principles to guide climate action, particularly on GHG emissions, are covered under our Environmental Policy, Environmental Management System, Sustainability Energy Management (SEM) Framework based on the ISO 50001:2011 Energy Management System, ASEAN Energy Management System (AEMAS) and Grid Green Code of Conduct.



For more information on sustainability governance, please refer to *Creating Value Through Strong Governance* section, pages 162-163.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

CLIMATE SCENARIO

Since 2021, we have conducted climate scenario analysis with reference to the IPCC RCP scenarios and Network of Central Banks and Supervisors for Greening the Financial System (NGFS) scenarios. TNB's climate change scenario analysis considers the following pathways :

Types of scenarios	Scenario Description	Temperature increase by 2100	Transition Consequence
Business-as-usual IPCC Representative Concentration Pathways (RCP) 8.5/4°C (high emission scenario)	The 'Business as usual' scenario suggests a likely outcome if society does not make concerted efforts to cut greenhouse gas emissions.	>4°C	High
Limited Mitigation IPCC Representative Concentration Pathways (RCP) 6.0/3°C (moderate emission scenario)	The scenario suggests a future in which greenhouse gas emissions continue to rise at a moderate rate but stabilised at 2070.	2.6°C	Moderate
Strong Mitigation NGFS' Nationally Determined Contributions (NDCs) scenario	The NDC scenario includes all pledged policies even if not yet implemented, based on the trajectory associated with global NDC commitments to limit the impact of climate change.	2°C to 3°C	Moderate
Aggressive Mitigation NGFS' Net Zero 2050 scenario	An ambitious scenario that limits global warming to 1.5°C through stringent climate policies and innovation, reaching net zero CO ₂ emissions around 2050.	1.5°C to 2°C	Low

With reference to the scenario pathways above, we have identified both climate-related transition and physical risks and opportunities and the potential impact on our business across our operations over short-term, medium-term and long-term horizon. Overall, TNB will have high exposure to most transition risks identified by 2050 and this will be addressed via TNB's Strategic Pillars to ensure TNB maintains its competitive edge and remains resilient.

TRANSITION RISKS AND OPPORTUNITIES

Transition risk refers to risks related to the transition to a low-carbon economy. Given Malaysia's commitment to carbon neutrality by 2050, policy and regulatory changes are expected to be key drivers of decarbonisation. Due to the nature of long asset life of our utilities, TNB is exposed to the key transition risks outlined below.

Transition Risk	Impact	Division impacted	Net Zero ¹		NDC ²		Management Approach
			2030	2050	2030	2050	
Policy and legal							
Carbon price Introduction of carbon pricing mechanisms on carbon emissions	Increase in operational expenditure Decrease in revenue	Group	●	●	●	●	TNB is minimising exposure to risks through responsible decarbonisation based on our Energy Transition strategy.  For more info, please refer to Energy Transition Pillar 1 : Future Generation Sources, pages 94-96.

Legend : ● Risk exposure is low ● Risk exposure is moderate ● Risk exposure is significant ● Risk exposure is high

1. Net Zero Scenario is aligned to commitments countries are making, going beyond NDCs to achieve Net Zero Emissions by 2050 and restrict warming to well below 2°C (i.e. Paris Accord)
2. Nationally Determined Contributions (NDCs) is based on the trajectory associated with global commitments that are aligned to current Nationally Determined Contributions (NDCs) to limit the impact of climate change.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Transition Risk	Impact	Division impacted	Net Zero ¹		NDC ²		Management Approach
			2030	2050	2030	2050	
Policy and legal							
Emissions reporting obligations Increased expectations from regulatory bodies for companies to track and publicly report on emission	Penalties for non-disclosure	GenCo and NED	●	●	●	●	TNB is reskilling talent with skills required across our Energy Transition with focus on analytics and strategy development capabilities.
Exposure to litigation Fines and judgments driven by environmental and climate activism	Increase in operational expenditure	Group	●	●	●	●	TNB is minimising exposure to risks through responsible decarbonisation based on our Energy Transition strategy. ⓘ For more info, please refer to Feature Story 6 : Prioritising People : Safeguarding Safety and Well-Being, pages 94-96.
Technology							
Low carbon technology Deployment of low emissions technology to meet decarbonisation commitments	Increase in Capital Expenditure (CAPEX)	GenCo and NED	●	●	●	●	TNB is maximising opportunities by increasing renewable energy, hydrogen-related technology and energy storage. ⓘ For more info, please refer to Energy Transition Pillar 1 : Future Generation Sources, pages 94-96.
Talent The requirement to upskill and reskill talent to navigate new and emerging technologies	Increase in operational expenditure	GenCo	●	●	●	●	TNB is reskilling our talent with skills required across our Energy Transition strategy.
Market							
Reduction in market share Changes in market demand or consumer sentiment from specific market (e.g. wholesale) which has a higher margin	Decrease in revenue	GenCo	●	●	●	●	TNB is minimising exposure to risks through responsible decarbonisation based on our Energy Transition strategy. TNB is also expanding the business beyond the meter involving the customers as prosumers in our Energy Transition journey.
Shift in customer behavior Changing customer behavior and preference for low carbon options	Decrease in revenue	Retail	●	●	●	●	ⓘ For more info, please refer to Energy Transition Pillar 3 : Winning the Customer, pages 98-100.

Legend : ● Risk exposure is low ● Risk exposure is moderate ● Risk exposure is significant ● Risk exposure is high

1. Net Zero Scenario is aligned to commitments countries are making, going beyond NDCs to achieve Net Zero Emissions by 2050 and restrict warming to well below 2°C (i.e. Paris Accord)
2. Nationally Determined Contributions (NDCs) is based on the trajectory associated with global commitments that are aligned to current Nationally Determined Contributions (NDCs) to limit the impact of climate change.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Transition Risk	Impact	Division impacted	Net Zero ¹		NDC ²		Management Approach
			2030	2050	2030	2050	
Market							
Stranded assets Assets that have suffered from unanticipated or premature write-downs or devaluation due to change of demand	Decrease in revenue	GenCo	●	●	●	●	TNB is minimising exposure to risks through responsible decarbonisation based on our Energy Transition strategy. <i>For more info, please refer to Energy Transition Pillar 1 : Future Generation Sources, pages 94-96.</i>
Divestment Increased investor scrutiny over uncertain future sustainable earnings and their commitments to responsible financing leading to investment sell-off	Increase in cost of capital	GenCo	●	●	●	●	

Legend : ● Risk exposure is low ● Risk exposure is moderate ● Risk exposure is significant ● Risk exposure is high

1. Net Zero Scenario is aligned to commitments countries are making, going beyond NDCs to achieve Net Zero Emissions by 2050 and restrict warming to well below 2°C (i.e. Paris Accord)
2. Nationally Determined Contributions (NDCs) is based on the trajectory associated with global commitments that are aligned to current Nationally Determined Contributions (NDCs) to limit the impact of climate change.

Climate change is a key risk driver for the electric utility sector. It does, however, present opportunities in the transition to a low-carbon economy.

Transition Opportunities	Impact	Division impacted	Net Zero		NDC		Management Approach
			2030	2050	2030	2050	
Products and Services							
Electrification Introduction of EV policy aimed at increasing electric vehicle uptake	Increased revenue from growth opportunities for e-Mobility services (EV charging infrastructure)	Retail	●	●	●	●	TNB is maximising opportunities through our Energy Transition strategy. <i>For more info, please refer to the 3 pillars of our Energy Transition strategy – Future Generation Sources, Grid of the Future and Winning the Customer, pages 94-100.</i>
Renewable energy growth Acceleration of renewables expansion in regional and international markets, leading to increased revenue	Increased revenue	GenCo, NED, Retail	●	●	●	●	

Legend : ● Risk exposure is low ● Risk exposure is moderate ● Risk exposure is high

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Transition Opportunities	Impact	Division impacted	Net Zero		NDC		Management Approach
			2030	2050	2030	2050	
Products and Services							
<p>Low carbon options</p> <p>Opportunities beyond the kWh solutions (EE, rooftop solar, storage) due to a shift in customer behaviour (prosumers) leading to creation of new revenue streams</p>	Creation of new revenue streams	Retail, Transmission and Distribution	●	●	●	●	<p>TNB is maximising opportunities by our Energy Transition strategy.</p> <p>i For more info, please refer to the 3 pillars of our Energy Transition strategy – Future Generation Sources, Grid of the Future and Winning the Customer, pages 94-96.</p>
<p>Diversification of business activities</p> <p>Diversifying business activities through the use of distributed generation, hydrogen, O&M as green technologies emerge (e.g. hydrogen, storage, CCU) through partnerships</p>	Creation of new revenue streams	Group	●	●	●	●	
Energy Source							
<p>Shift towards decentralisation</p> <p>Increasing system efficiencies through the reduction of peak load to reduce transmission losses and allow for the extension of generational assets</p>	Reduced operational expenditure and increased profit margins	GenCo, NED, Transmission and Distribution	●	●	●	●	<p>TNB is maximising opportunities via our Energy Transition strategy.</p> <p>i For more info, please refer to the 3 pillars of our Energy Transition strategy – Future Generation Sources, Grid of the Future and Winning the Customer, pages 94-100.</p>

Legend : ● Risk exposure is low ● Risk exposure is moderate ● Risk exposure is high

PHYSICAL RISKS

Physical risks refer to risk related to the physical impact of climate change. Physical climate scenario modelling was carried out for three (3) power plants (Manjung, SPG and Sultan Mahmud (SM)) and a selection of 100 substations in 2021. The scenario modelling analysed climate-related failure and damage risks at each grid point of the asset sites selected to identify the spatial distribution of the eight (8) climate risks across each site. The summary of the outcome of the scenario modelling for TNB's assets are as follows :

- 100 substation : Riverine flooding is the dominant hazard
- Manjung : Coastal inundation is the clear dominant hazard
- SPG : Coastal inundation is the dominant hazard. Surface water flooding is the next most significant hazard
- SM : Riverine flooding is the dominant hazard

i For more information on the above physical risk assessment and outcome, please refer to TNB Sustainability Report 2021, page 59.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Based on the physical risk assessment conducted in 2021, risks related to flood, heat, dry spells and coastal inundation presents the highest risk to TNB's plants. Floods at dam catchments increase water storage in the hydropower dams and subsequently can lead to dam overflow and structure failure. On the other hand, a prolonged dry spell will reduce the water storage of dams, leading to insufficient water for operating hydropower plants. Meanwhile, both floods and dry spells also affect the operation of thermal power plants. Dry spells will disrupt the cooling process of the plants, while floods will affect the infrastructure at the plants.

In FY2022, we delved deeper into the assessment of 21 thermal power plants and 12 hydropower plants in Peninsular Malaysia against these risks based on the RCP 6.0 rainfall projection and RCP 8.5 coastal inundation projection to comprehend the exposure of our power plants and substations to the effects of climate change.

Type of asset	Region	RCP 6.0		IPCC RCP 8.5/4°C			Potential impact
		No. of plants exposed to floods by 2100	No. of plants exposed to dryspell by 2100	No. of plants exposed to coastal inundation and floods in 2022	No. of plants exposed to coastal inundation and floods in 2050	No. of plants affected by coastal inundation and floods in 2100	
Hydropower Plants	Perak	4	4				<ul style="list-style-type: none"> • Reduced revenue from decreased production capacity • Increased operating costs • Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations • Increased capital costs (e.g., damage to facilities)
	Kelantan	1					
	Pahang	4	4				
	Coastal	3					
Thermal power plant	Kelang	1	1	1	1	1	
	Coastal	9	5	2	5	7	
Substations				4137	4991	8003	

With the high exposure of our plants to floods, coastal inundation and dry spells, we are guided by our current adaptation measures to minimise the impact of these risks. With the possibility of increased exposure and impact severity, we are committed to improve our adaptation plans.

Floods	Dry spells
Management approach	
Our current adaptation measures include : <ul style="list-style-type: none"> • An integrated catchment management policy, procedures and guidelines to regulate power supply among the catchments during floods; • Flood drills to improve the standard operating procedures, better manage critical situations and safely restore the electricity supply; • Integrated Community-Based Disaster Management (ICBDM) programme; • Prompt shutdown of affected substations through early warning systems to avoid/prevent damages; • Installation of protective measures around the substations such as flood walls, flood gates, flap gates and pumping systems to reduce the water level inside the substation area; and • Raised heights of transmission towers. 	Our current adaptation measures include : <ul style="list-style-type: none"> • Temporary storage tanks or/and alternative water sources (groundwater, treated saline water and recycled brackish groundwater and municipal wastewater) as an addition to the existing water sources and increasing storage volumes to ensure ample water supply to thermal power plants at all times.

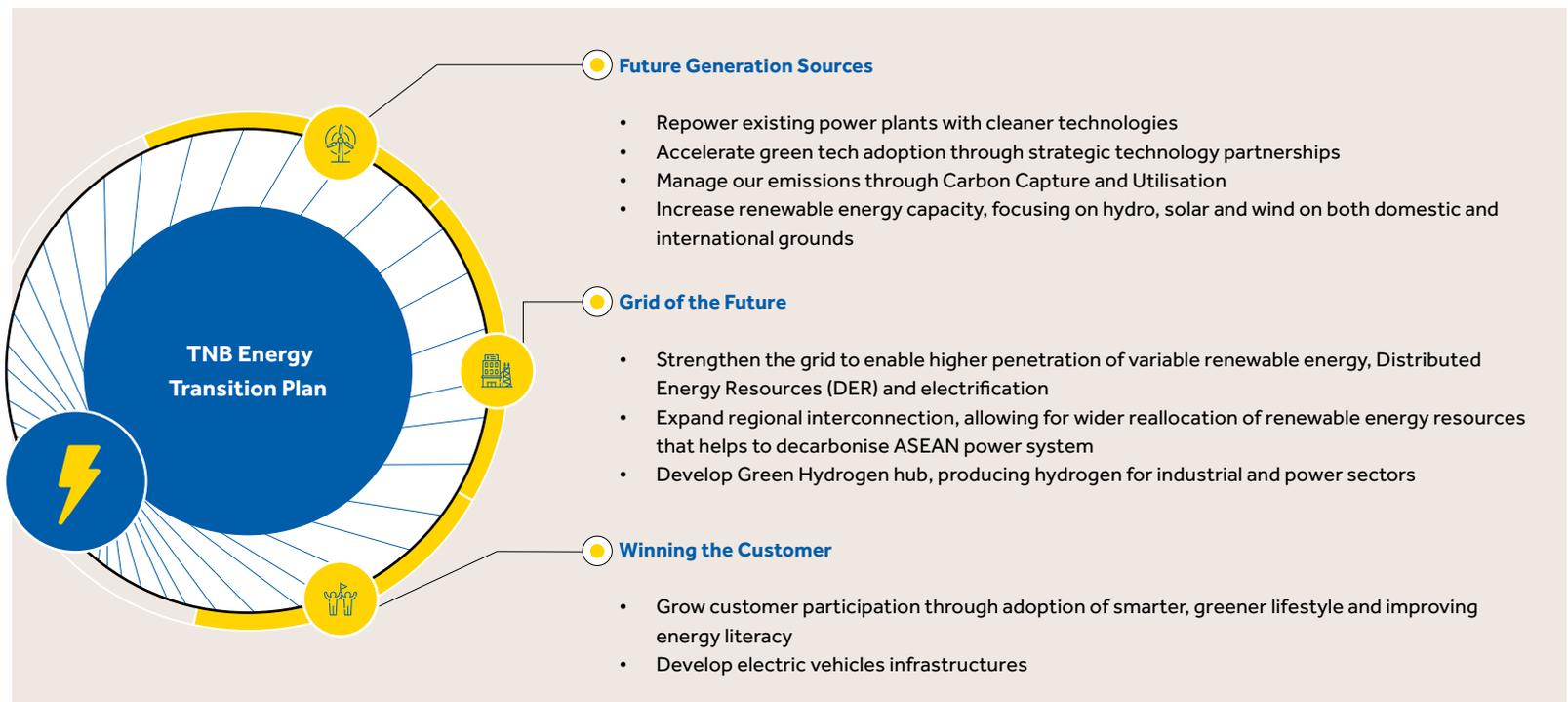
CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Floods	Dry spells
Future adaptation plans	
<p>TNB will consider potential adaptation measures for hydropower plants including :</p> <ul style="list-style-type: none"> • Incorporate climate change factors into new site assessments and adopting new design standards taking into account projected increasing flood risks; • Incorporate flood protection measures into plant design for protecting the key infrastructures such as intake structure, power house, etc.; • Increase dam height and existing spillway discharge capacity wherever permitted structurally; • Further enhance flood management plans with precision real-time monitoring and early warning systems; • Continue development of integrated reservoir inflow and flood forecasting for the downstream area; • Enhance satellite-based monitoring for hydro and thermal power plants; • Continue basin-wide management strategies that take into account the full range of downstream environmental and human water uses may prove necessary; • Restore, improve management and use of upstream catchments such as afforestation to reduce sedimentation; and • Implement Risk Informed Decision Making (RIDM) approach to ensure Sustainable Hydropower Dam Safety Management. 	<p>TNB will consider potential adaptation measures for thermal power plants including :</p> <ul style="list-style-type: none"> • Install monitoring systems on source water supplies and develop standard operating procedures for low water conditions; • Ensure proper design of cooling water intake and discharge systems; • Enlarge or retrofit cooling systems such as water-saving cooling technology to overcome water stress issues; • Diversify energy sources and/or the inclusion of supplemental technologies that are less dependent on water for cooling purposes; • Incorporate climate change factors into site assessments to avoid siting new plants in water-stressed areas; • Promote demand management and end-use energy efficiency measures.

CLIMATE STRATEGY

The Plan is supported by three (3) RT2025 key pillars outlined below.

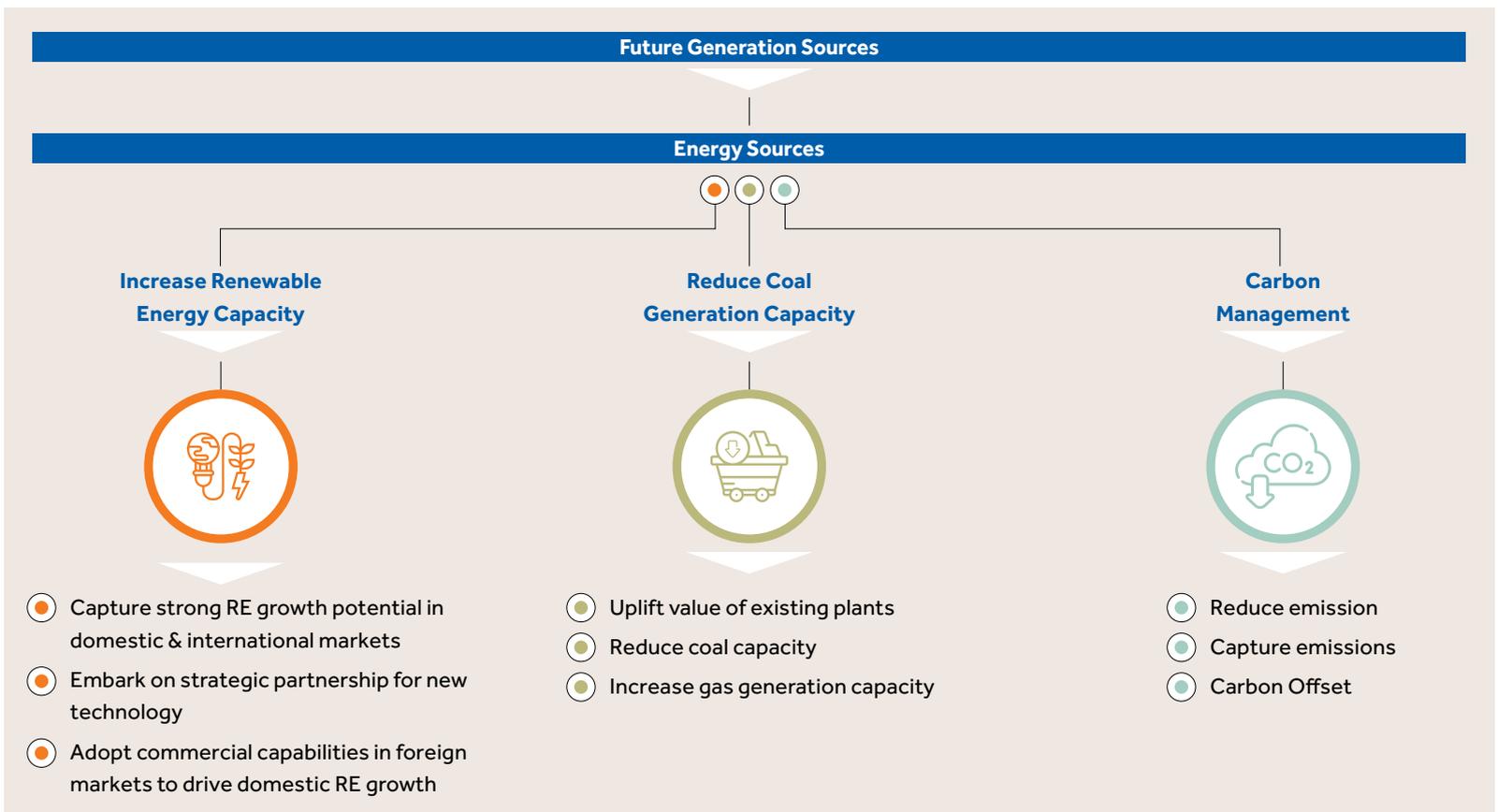


CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

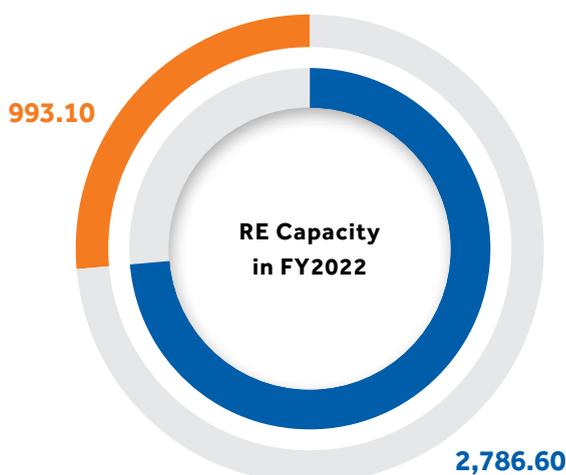


ENERGY TRANSITION PILLAR 1 : FUTURE GENERATION SOURCES

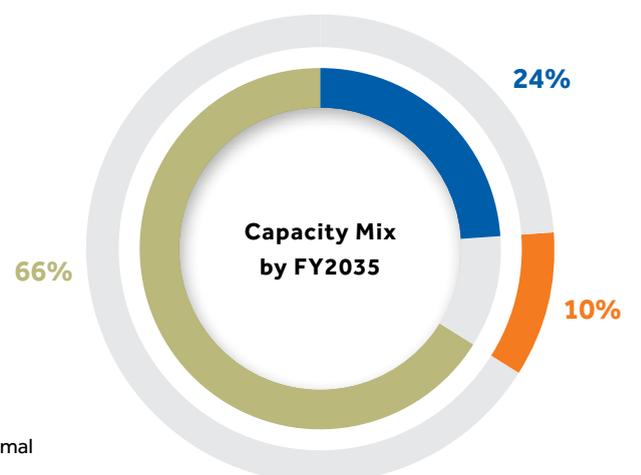


Increase Renewable Energy Capacity

In FY2022, TNB's RE capacity has reached 3,779.7 MW, a growth of 8% compared to FY2021 and we believe that we are on track to achieving our goal.



- Domestic
- International



- Non-coal thermal
- Coal
- Renewables

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Expansion of international RE asset is a top priority for TNB as a growth enabler that will help our business thrive in the long-term by significantly ramping up our RE installed capacity to capture 66% of capacity mix by 2035. Our New Energy Division (NED) is positioned to grow RE portfolio in targeted international markets through strategic partnerships. NED oversees two (2) key entities responsible to explore opportunities at different market regions; Vantage RE to focus on UK and Europe markets and TNB Renewables that focus on the domestic and Southeast Asia market. NED targets to achieve an installed capacity of renewable energy of 14.3 GW by 2050 with an estimated equity investment of RM30 billion. Additionally, our subsidiary, Sabah Electricity Sdn. Bhd, (SESB) has set a target of 110 MW of RE installed capacity by 2025 from the current capacity of 99.84 MW.

In FY2022, Vantage RE has been awarded the Right-To-Build (RTB) for the construction and commissioning of 102 MW solar farms in the UK. The project also includes an option to develop 65 MW co-located Battery Energy Storage Systems (BESS), which upon development may enhance TNB's revenue streams through participation in ancillary services and the capacity market. This investment represents a significant milestone for TNB as it broadens into RE greenfield development in the UK. The solar farms are expected to achieve Commercial Operation Date (COD) by Q1 2024 and will be built on two sites. This project will provide stable long-term revenues under a 15-year Contract-for-Difference (CfD) subsidy scheme. Upon its commissioning, it is forecasted to generate enough clean energy to meet the equivalent annual needs of over 37,000 homes and save over 46,750 tonnes of CO₂ per annum compared to fossil fuel generation. Both sites also offer opportunities for environmental initiatives to promote biodiversity net gains, supporting TNB's wider biodiversity agenda. In 2023, we will broaden our focus beyond ASEAN and explore potential projects in Asia Pacific and Oceania to pursue opportunities in achieving out 2025 RE target.

 For more information on our strategy to increase our renewable energy capacity, please refer to Sustainable Business Expansion section, pages 75-77.

Reduce Coal Generation Capacity

TNB has committed to no longer investing in greenfield coal plants. Jimah East Power Plant, which was commissioned in 2019, is the last coal plant in our generation portfolio to be commissioned. The existing coal-fired plants will be phased out upon expiry of their Power Purchase Agreements (PPA), with consideration for early retirement. For plants retiring before 2030, TNB has planned to re-power them using natural gas. We have recently received a Letter of Intent (LOI) from the Ministry of Natural Resources, Environment and Climate Change for the development of 2.1 GW combined-cycle power plant in Kapar, which is slated for a commercial operation date by 2031. Prior to that, we have received an LOI to repower the retired 1,400 MW Paka gas power plant with cleaner technology.

Beyond this, we are exploring other solutions and technologies to enable low-carbon fuel sources to be deployed at coal-fired power plants to help us decarbonise further. A key step we have taken is a joint-collaboration with PETRONAS Gas and IHI Corporation for a feasibility study on ammonia co-combustion in coal-fired power generation systems. The feasibility study was successfully completed and the outcome derived from pilot-scaled combustion testing programme at TNBR has proven the feasibility of the technology.

Carbon Management

TNB's Carbon Management approach focuses on three (3) key pillars - **Reduce Emission, Carbon Capture and Carbon Offset.**

- 1) **Reduce Emission** : TNB reduces emissions by reducing absolute emissions and emission intensity, phasing out coal capacity, increasing renewable energy capacity generation and increasing operational efficiency across the value chain.
- 2) **Carbon Capture** : We have identified carbon capture and storage (CCS) as a solution in decarbonising the power sector and we are committed to play an active role in advancing this technology. To demonstrate our commitment, TNB has inked a Memorandum of Understanding (MoU) with PETRONAS to explore the application of CCS solutions in accordance with the National Energy Policy 2022-2040. In preparation of Malaysia's carbon taxonomy, our Universiti Tenaga Nasional (UNITEN) is conducting a study on carbon market opportunities.
- 3) **Carbon Offset** : Carbon credits enable a company to offset a portion of its carbon emissions. TNB's stance is to reduce and capture emissions before looking at purchasing viable, high quality carbon credits. Additionally, TNB is exploring the development of carbon credit through removal or avoidance projects. The sale of these credits can then be used to support the energy transition at TNB.

 For more information on CCUS, please refer to Feature Story 3 : Decarbonisation Through Innovative Solutions : Carbon Capture section, pages 84-85.

CLIMATE CHANGE AND ENVIRONMENT

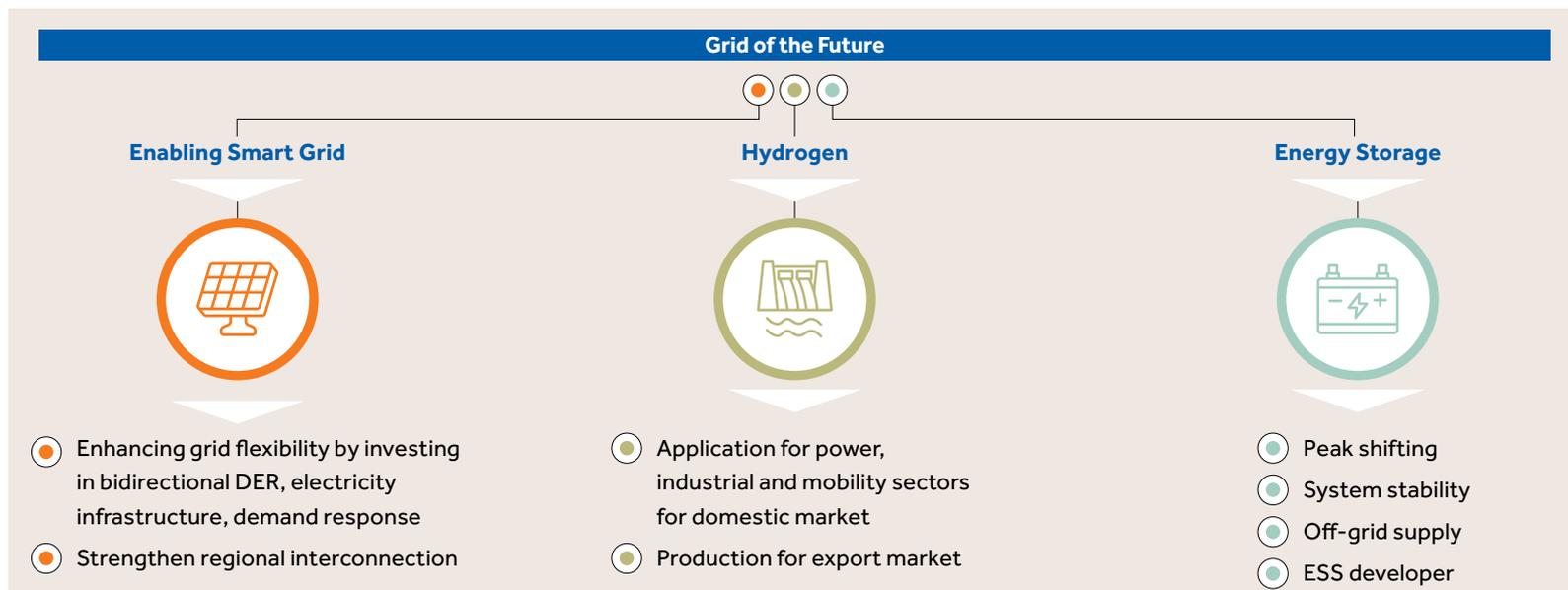
OUR RESPONSE TO CLIMATE CHANGE

TNB currently has a healthy pipeline of upcoming renewable energy and green technology projects to support the **Future Generation Sources** pillar :

Project	Description	Commercial Operation Date (COD)	Emission Avoidance (Equivalent to CO ₂ emission)	
Renewable Energy	TNB Bukit Selambau 2 (LSS@MENTARI Scheme) 50 MW	• Commencement of work has started since September 2022.	2023	0.08 million tCO ₂ e/year
	Sungai Perak Hydro Life Extension Programme 650.75 MW	• Uprate and upgrade the Sungai Perak Hydroelectric Scheme which consists of Stesen Janaelektrik (SJ) Temengor, SJ Bersia, SJ Kenering, SJ Chenderoh and SJ Sungai Piah with 18 generating units with the latest technology. • The project will commence in Q3 of year 2024.	2025	0.5 million tCO ₂ e/year
	Nenggiri Hydro Project 300 MW	• Commencement of work has started since 1 March 2022.	2027	0.3 million tCO ₂ e/year
	Solar Greenfield development, UK 102 MW	• Greenfield project with option to develop co-located battery energy storage systems.	2024	0.05 million tCO ₂ e/year
Green	New Combined Cycle Power Plant at Paka 1,400 MW	• Brownfield project to repower the retired SJSI PAKA using highly efficient CCGT by 2030.	2030	3.2 million tCO ₂ e/year
	New Combined Cycle Power Plant, Kapar 2,100 MW	• Greenfield project that is marked for combined cycle gas-fired plant for supplying cleaner electricity.	2031	4.7 million tCO ₂ e/year



ENERGY TRANSITION PILLAR 2 : GRID OF THE FUTURE



CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE



ENERGY TRANSITION PILLAR 2 : GRID OF THE FUTURE

Smart Grid Enhances Grid Flexibility

TNB will continue to prioritise investing into modernising our world class national grid into Grid of the Future – a smart grid which remains reliable, resilient, smart with digital technology and flexible in meeting the country's needs for energy transition. A smart grid is an advanced electricity network that incorporates the use of digital technologies to improve the efficiency, reliability and resilience of the grid. It allows for two-way communication between the grid and Distributed Energy Resources (DER), as well as real-time monitoring and control of the electricity flow. Expanding regional interconnection allows for a wider reallocation of RE resources that helps decarbonise the ASEAN power system.

Leveraging on the smart grid, DER can provide energy to the grid during periods of high demand and absorb excess energy during periods of low demand. Also, this helps to balance the grid and reduce the need for conventional power plants to ramp up or down production. This enables the grid to allow higher penetration rates of intermittent renewable energy sources, improve the efficiency of energy consumption while maintaining the high performance of the conventional power plants.

TNB is planning to invest a total of RM21 billion capital over a period of 3 years until 2024 in strengthening the grid and ensuring reliability of energy supply. Our grid reliability performance is exemplified by the fact that the recovery time has not surpassed our most recent approved Guaranteed Service Levels (GSL).

Hydrogen Fuel of the Future

TNB's strategy is to repower retired coal and gas plants with combined-cycle gas turbines (CCGTs) equipped with hydrogen-ready technology, as hydrogen is regarded as the fuel of the future, particularly green hydrogen produced from renewable energy sources. As such, a sustainable and economically viable supply of green hydrogen is required. TNB will undertake research on the production of green hydrogen using electrolyzers that are more efficient in an effort to reduce the levelised cost of energy for green hydrogen.

In parallel, TNB will collaborate with PETRONAS to develop the green hydrogen ecosystem by 2030. The ecosystem includes the whole value chain from the supply of green electricity, electrolyzers, compression, storage to transportation.

Energy Storage Provides Security

To support the National Energy Policy 2022-2040 and Malaysia's vision to include more renewable energy sources into our generation mix, battery storage plays a crucial role in our nation's grid reliability. By storing energy during period of low demand and releasing it during periods of high demand, battery storage can help to stabilise the grid and improve the overall efficiency of the power system.

TNBR has an ongoing pilot project for Virtual Power Plant (VPP) technology, which utilises software and energy storage to enable peer-to-peer generation among energy prosumers and demand response control for system stability in the future. TNB and South Korean companies invested USD 7 million in R&D on this project in order to better regulate the supply of electricity from renewable sources during peak demand on the national grid. The VPP project involves installation of four (4) battery energy storage systems (BESS) with a total of 2 MW capacity.

TO ACCELERATE TNB'S DIGITALIZATION JOURNEY,
FOCUSING ON ENERGY TRANSITION AND SUSTAINABILITY
between
Tenaga Nasional Berhad and Microsoft Malaysia
13 September 2022



TNB is partnering with Microsoft Corp to collaborate on discovering and validating potential opportunities through a series of projects over a period of two (2) years, to accelerate digital transformation to support TNB's Grid of the Future strategic pillar.

The MoU also covers digital skills and development initiatives for TNB employees where technical and digital competencies in using Microsoft tools and cloud services of varying complexity will be provided for both IT and non-IT roles within the Company.

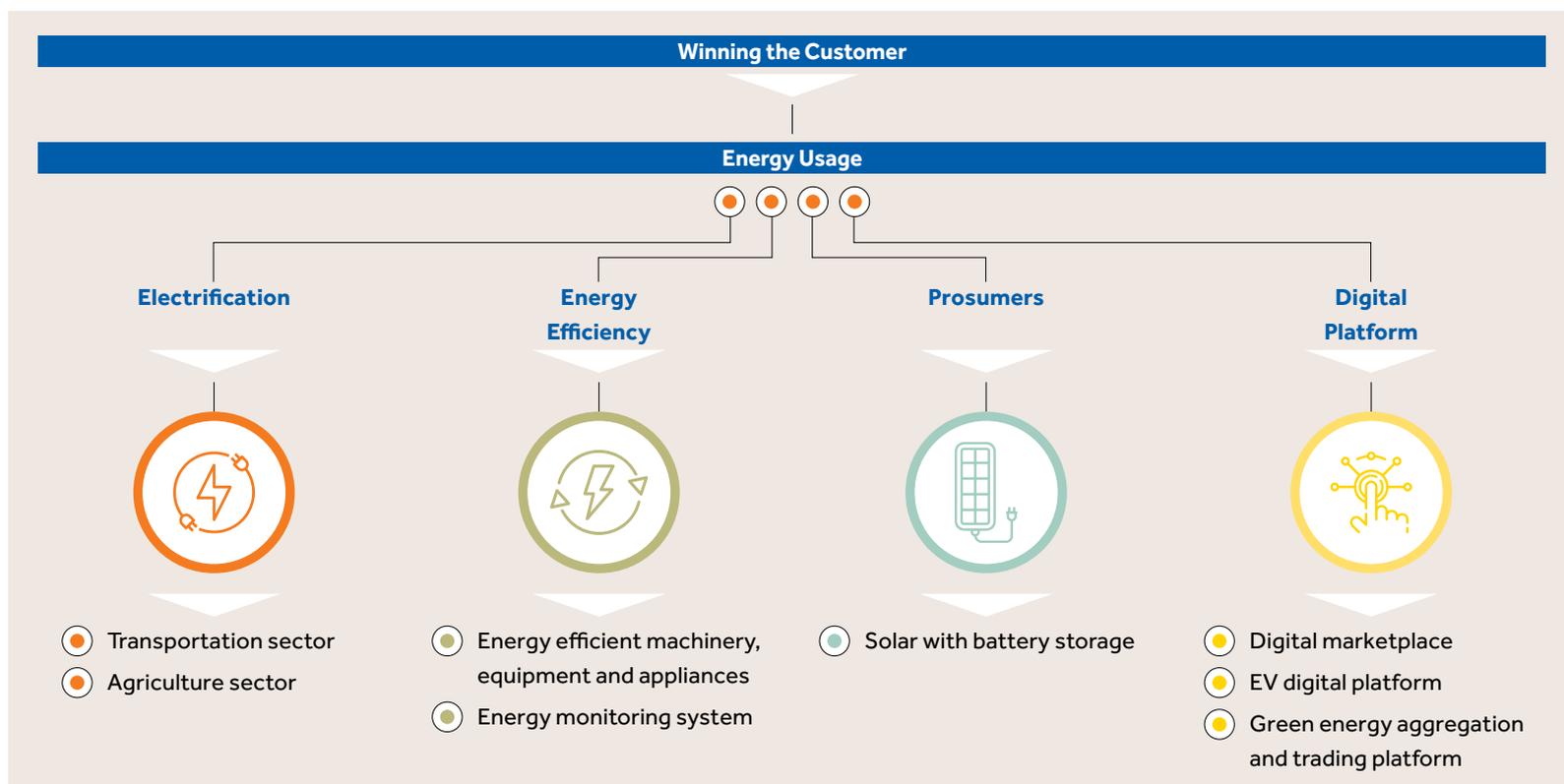
For more information on our Smart Grid initiatives, please refer to Smart Grid section, pages 73-74.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE



ENERGY TRANSITION PILLAR 3 : WINNING THE CUSTOMER



Electrification

TNB is ready to lead Malaysia's transition towards low-carbon mobility. Understanding the increasing demand for electric vehicles and the current state of EV infrastructure in Malaysia, TNB aspires to play an active role in building charging infrastructure within strategic locations and delivering the right type of charging facilities needed. TNB has made provisions for 3,300 charging points across the country by 2025 and 18,000 charging points by 2030. TNB will be investing RM22 million in 2023 and RM90 million in the span of 3 years (2022-2024) to uplift the development of the EV ecosystem in Malaysia. TNBX Sdn. Bhd. (TNBX) plays an important role to position TNB in the EV marketplace as the Charge Point Operator (CPO), while Tenaga Switchgear Sdn. Bhd. (TSG) functions as a manufacturer of equipment and charger for TNB Electron stations. In 2023, we plan to deploy EV charging stations along Peninsular Malaysia's highways and trunk roads to enable seamless travels for Battery Electric Vehicle (BEV) owners throughout Peninsular Malaysia.

In building up the EV ecosystem, we have initiated strategic discussions via various platforms to bring EV players together and collaborate towards common objectives. This includes building charging infrastructure, fostering coalitions among EV players, sponsoring EV-related studies, electrification of TNB's own fleet and reskilling of employees for the electric vehicle (EV) industry. In 2023, ILSAS has established Electric Vehicle (EV) Training Hub to provide reskilling for the EV industry, focusing on fundamental knowledge such as basic battery storage and EV technology where the training sessions are certified by International bodies.

Our ongoing and new initiatives on low carbon mobility includes :

TNB and Sime Darby Motors Malaysia to explore various initiatives to accelerate the adoption of EV

TNB and Sime Darby Motors (SDM) Malaysia, have entered into a MoU in a collaboration to support the country's low carbon mobility ambitions. The collaboration will explore various initiatives to accelerate the adoption of electric vehicles (EV) as well as ensuring a network of highly efficient EV charging infrastructure and digital platform. The collaboration also aims to identify other energy-efficient and renewable energy initiatives to optimise the cost of EV charging infrastructure and to reduce carbon emissions.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

TNB and Majlis Amanah Rakyat (MARA) collaborate for the development of EV charging infrastructure and learning

TNB and MARA entered into a strategic collaboration to install photovoltaic solar system panels for the generation of clean electricity at MARA educational institutions (IPMa) and the development of EV charging infrastructure for the operation and management of MARA Liner buses. The chargers are MARA Group's first DC fast chargers with a capacity of 120 kW for its MARA Liner pilot project in Langkawi. This electric bus project is a showcase of sustainable development agenda and is a major contribution towards realising Langkawi Low Carbon island vision. The MoU also includes the provision of telecommunication services and internet access at MARA educational institutions by TNB subsidiary, Allo Technology Sdn Bhd and the development of human capital with a target of over 30,000 students and trainees in the field of Technical and Vocational Education and Training (TVET), which will be empowered under the MARA and TNB ecosystem. The collaboration is in line with the National Renewable Energy Policy 2025 under the Sustainable Energy Development Authority (SEDA) Malaysia.

TNB MoU with Gamuda Land for EV charging infrastructure

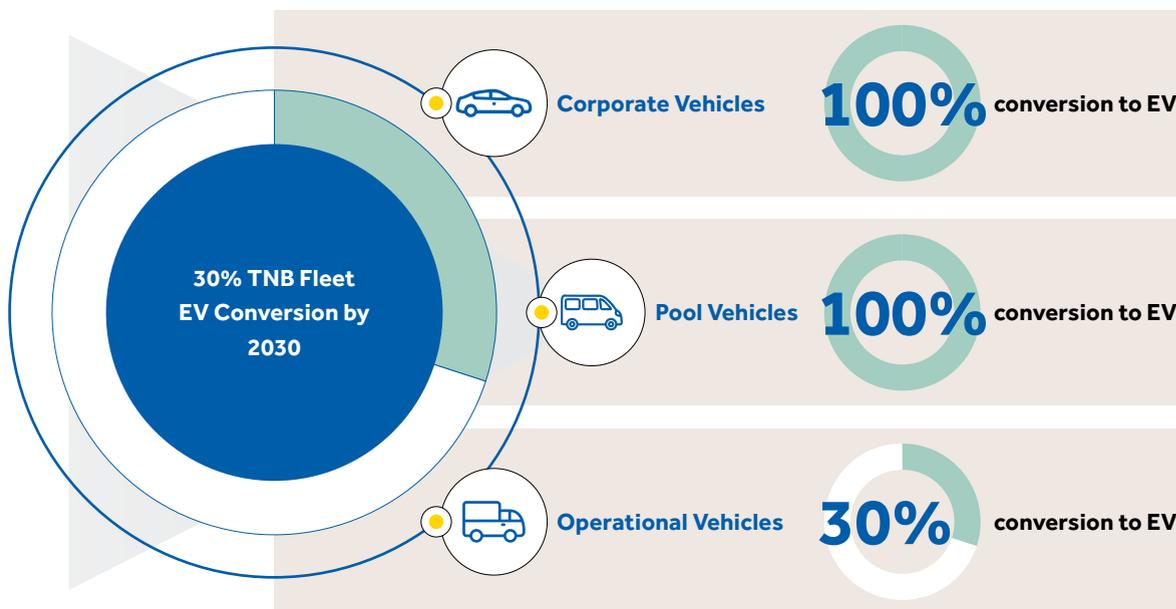
TNB has inked an MoU with Gamuda Land to build two (2) electron stations for electric vehicle (EV) charging at Gamuda Land's property development projects in Selangor. Malaysia's first electron stations will be developed at Gamuda Cove in southern Klang Valley and Gamuda Gardens in northern Klang Valley for communities in the projects and visitors to the water theme park at Gamuda Cove.

TNB collaborates with PLUS Malaysia in developing EV charging station network

TNB and PLUS Malaysia collaborated to reduce carbon emissions on PLUS highways through three sustainability initiatives – the development of charging station network, installation of energy efficiency monitoring and solar photovoltaic systems at selected R&Rs along the PLUS highway network. Fast EV charging points were installed at some RSAs along PLUS' North South Expressway (NSE) and Lebuh raya Pantai Timur 2 (LPT2). In FY2022, TNB launched three (3) EV charging stations dubbed "TNB Electron" at RSA Ayer Keroh Northbound, Tapah Northbound and Paka Eastbound which are equipped with Direct Current Fast Charger (DCFC) for pilot testing. TSG and TNBX will be involved in development and operations of the Electron stations.

TNB and Malaysia Automotive, Robotics and IOT Institute (MARii) partnership to develop the EV Ecosystem

TNB and MARii are in a Research and Development partnership to develop EV Telematics and Internet of Things (IoT) as part of the EV ecosystem. The partnership aims to set up Co-Joined Research and Reports to develop comprehensive telematics and IoT solutions related to EV ecosystem. It also focuses on the use and development of technologies to monitor and manage identified EV parameters for EV and EV Charger utilisation.



Through the Fleet Management Department (JFM), TNB set a target to replace 30% of its vehicles with electric vehicles (EV) by 2030, through three phases. Phase 1 (introducing EVs at TNB) and Phase 2 (introducing TNB operational EVs) have been implemented, with 15 vehicles from TNB fleet being replaced with EVs thus far. Currently, JFM is planning the implementation of Phase 3, to replace operational vehicles with EVs with an emphasis in strategic locations.

To facilitate the transition of EV replacement in TNB's fleet, TNB is also installing EV chargers at TNB premises, with a total of 13 installed chargers in FY2022.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Energy Efficiency

TNB actively assesses and adopts efficient technologies and ensures that all plants are properly maintained and where possible, upgraded to maintain their efficiency. To improve energy efficiency, TNB systematically assesses and adopts efficient technologies whilst pursuing operational excellence by undertaking plant-level business turnaround, improving the overall production processes, ensuring all power plants are promptly overhauled and adequately maintained and implementing technical upgrades, where possible. Increasing energy efficiency enables our power plants to conserve energy, allowing efficient use of the fuels we burn and reduces our overall emission intensity. TNB's aim has always been to harness as much energy as possible from each unit of fuel burned. This will enable us to minimise our environmental footprint and fuel costs. To deliver a sustainable low carbon future, we have been modernising our fleet by retiring inefficient and ageing Combined Cycle Gas Turbine (CCGT) plants and replacing them with best-in-class and highly efficient technologies. For example, our newest addition power plant that was commissioned in 2021, the 1,440 MW Sultan Ibrahim Power Plant in Pasir Gudang utilises the first-of-its-kind turbine technology with a net thermal efficiency of 60%, thus contributing to a lower carbon footprint.

TNB is continuously growing and expanding its energy efficiency expertise including conducting energy audits and integrating energy efficiency improvements. This service is conducted throughout TNB's assets such as buildings, fuel stations and fuel terminals and subsequently integrates energy efficiency improvements.

Prosumers

Over the years, through various RE programmes in Malaysia, we have seen an increasing shift from consumer to prosumer. An electricity prosumer refers to a consumer who also generates their own electricity, typically through the adoption of rooftop solar. This allows for a more efficient and resilient energy system, as the electricity generated by prosumers can be used to meet the needs of their own households or businesses, as well as to supply excess electricity to the grid during times of high demand.

With TNB's strategic pillar of Grid of the Future, the smart grid is expected to be able to support a higher volume of bi-directional power sources from prosumers' own distributed energy sources and renewable energy.

 For more information on our prosumers initiatives, please refer to Customer Centricity section pages 78-80.

Digital Platform

TNB complements its initiatives with digital platforms such as myTNB mobile application and TNBX EV application. These technologies are recognised as the key milestone of empowering customers towards the sustainable energy industry of the future.

 For more information on our prosumers initiatives, please refer to Empowering customers towards energy transition under the Customer Centricity section pages 80-81.

For more information on our Smart Meter initiatives, please refer to Elevating Customer Experience Through Customer Empowerment under the Customer Centricity section page 80.

CLIMATE RISK MANAGEMENT

TNB business entities are guided by the TNB Risk Assessment Process that provides a structured approach to identify, analyse, evaluate and treat risks. TNB business entities apply the process in a systematic, iterative and collaborative manner, drawing on the knowledge and views of stakeholders to develop their respective risk profiles. Climate related risks are integrated in our 10 strategic risks covering external, sustainability, market, customer, finance, capabilities and regulatory risk categories. Moreover, climate-related risks and opportunities are managed in accordance with the ISO 14001:2018 Environmental Management System.

In addition to the above, climate related risks and opportunities are assessed using scenario analysis, across short-term, medium-term and long-term horizons considering the expected lifetime of the assets or activities.

In managing the climate risks along with other business risks, the Board Risk Committee (BRC) oversees the establishment and implementation of the TNB Risk Management Framework that is embedded into the culture, processes and structures of the Group and is responsive to changes in the business environment. Sustainability and climate risks are included as part of the enterprise risk management process.

Following the TNB Risk Assessment Process, risks identified by business entities are registered and monitored through the TNB Risk Information System (TRIS), an online real-time tool and risk database that is accessible to all employees. Risks are reviewed annually by business entities with participation and eventual approval from the risk owners.

Half-year risk reports are submitted by business entities to the Risk Management Department for consolidation. Group-wide consolidated half-year risk reports, which include reports of emerging risks and climate related risks, are deliberated and endorsed by the Group Risk Management Working Committee (GRMWC) for onward internal dissemination.

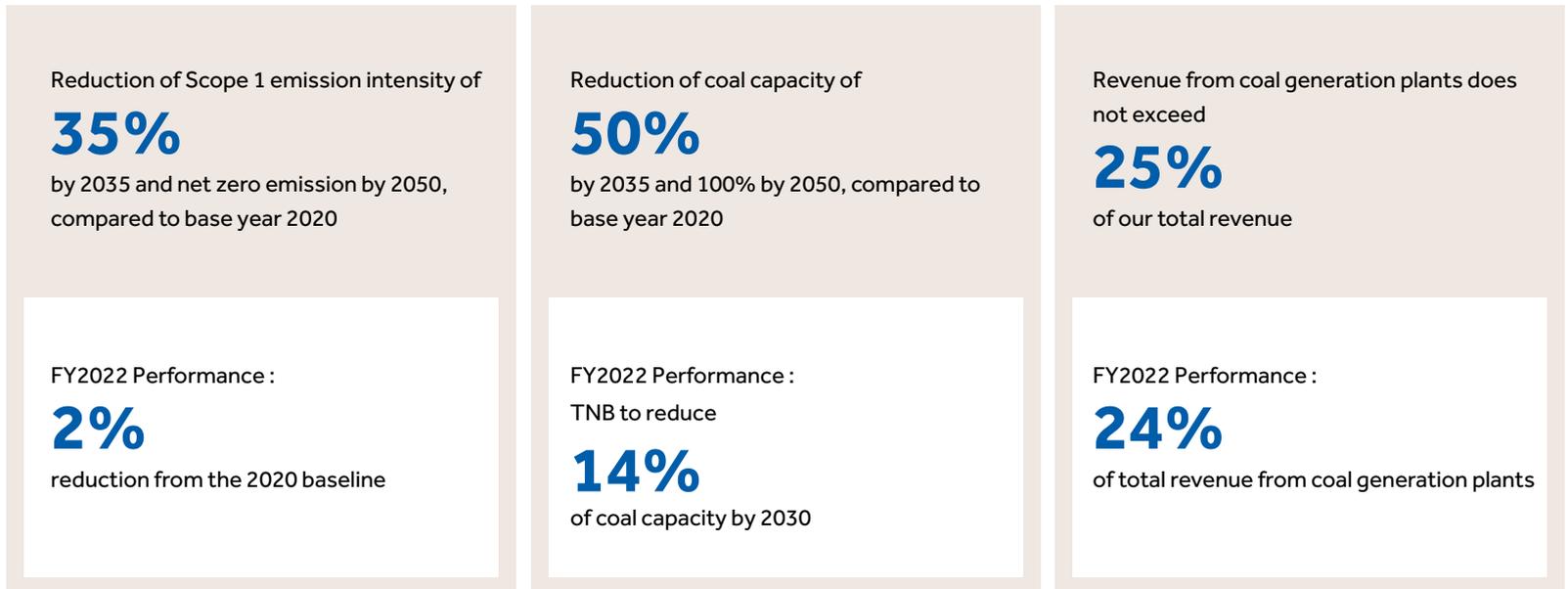
 For more information on risk management, please refer to our Statement on Risk Management and Internal Control on pages 201-207.

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

METRICS AND TARGETS

The SP2050 enabled us to establish clear climate related targets :



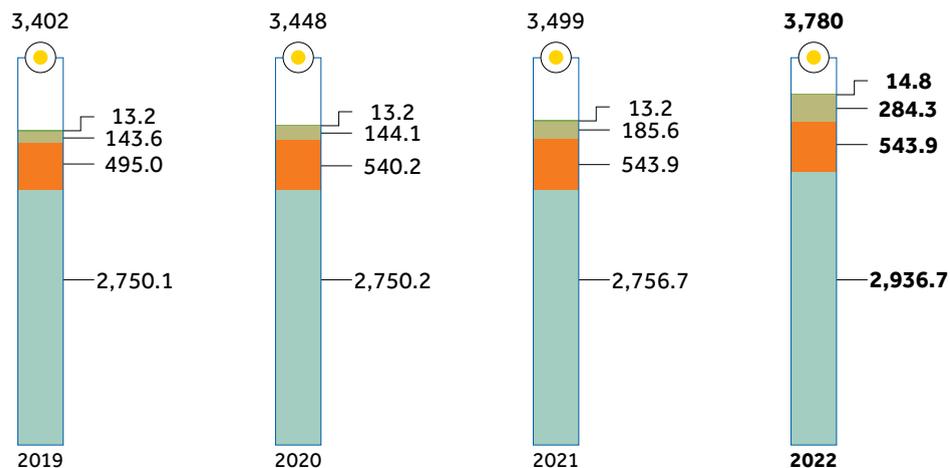
Renewable Energy Installed Capacity

In FY2022, our installed capacity for renewable energy is 3,780 MW. With NED's strategy in expanding our renewable capacity, we are on track to achieve our 2030 aspiration of 7,000 MW.

INTERNATIONAL AND DOMESTIC RENEWABLE ENERGY INSTALLED CAPACITY

(MW)

● Hydro ● Solar ● Wind ● Other (Biomass and Biogas)



CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Greenhouse Emissions

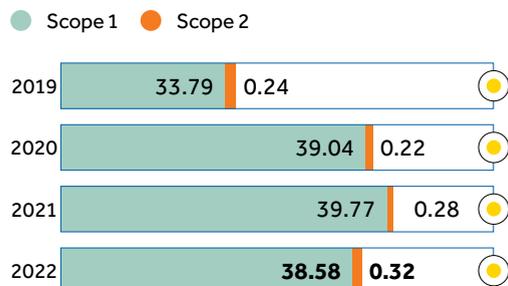
We utilise our GHG Emissions Management System (GEMS), a web-based data input and processing system for regular monitoring of Scope 1 and 2 emission data. We intend to expand the monitoring of our other environmental data via GEMS progressively.

In FY2022, our Scope 1 and Scope 2 emissions has decreased due to higher operation of our gas and hydro power plants.

We are in the process of assessing our Scope 3 emissions focusing on several categories relevant to our business. We will commence Scope 3 emission disclosures in FY2023.

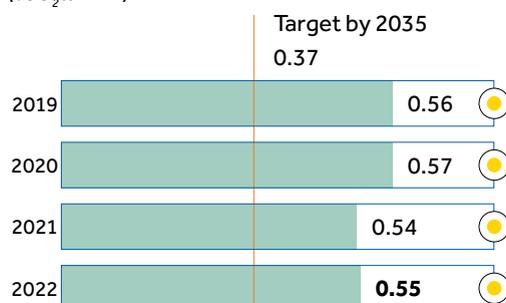
SCOPE 1 AND 2 GHG EMISSIONS

(million tCO₂e)



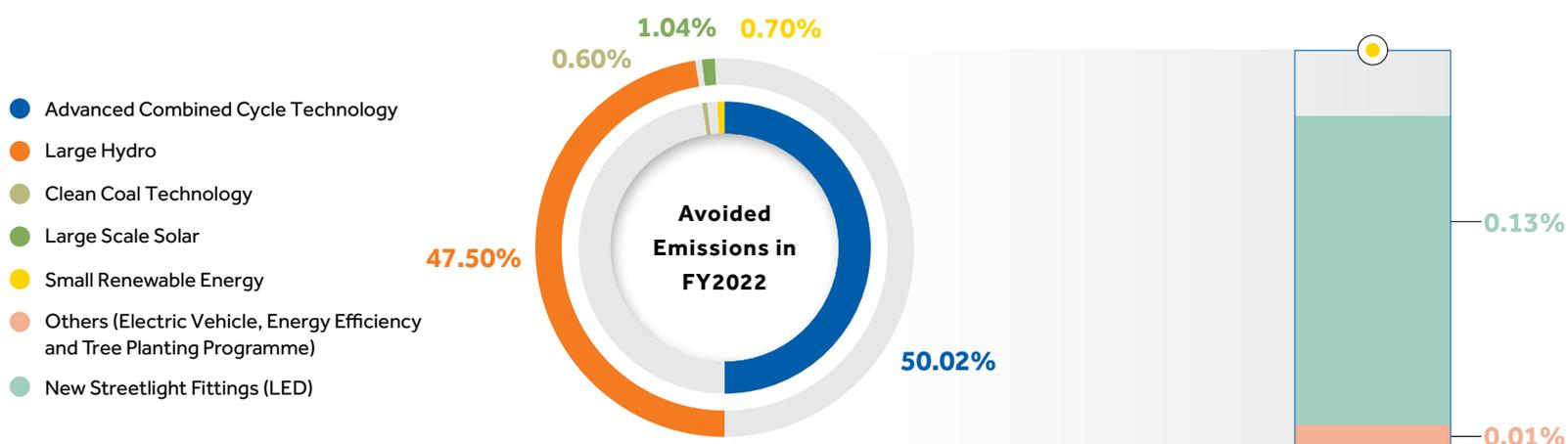
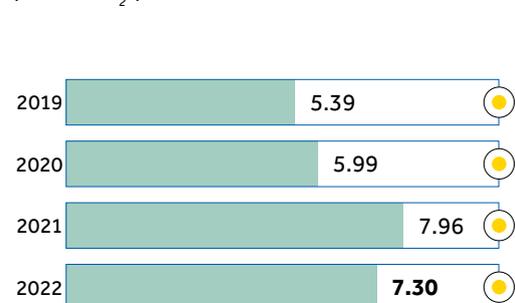
GHG EMISSIONS INTENSITY (SCOPE 1)

(tCO₂e/MWh)



AVOIDED EMISSIONS

(million tCO₂e)



The following guidelines and methodologies are utilised in preparing our GHG emissions calculation :

- GHG emissions methodologies applied were 2006 IPCC Guidelines for National Greenhouse Gas Inventories, GHG Protocol and Clean Development Mechanism (CDM).
- Consolidation of data was based on equity share approach.
- GHG emissions are assessed annually for TNB operations in Peninsular Malaysia only.

Our GHG emission assessment was subjected to a verification and assurance process based on ISO 14064-1:2018 part 1 (Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals) and part 3 (Specification with guidance for the verification and validation of greenhouse gas statements).

CLIMATE CHANGE AND ENVIRONMENT

OUR RESPONSE TO CLIMATE CHANGE

Reducing Our Coal Capacity

We are actively reducing our coal capacity through ongoing initiatives under our **Future Generation Sources** strategy and we are on track to achieving our target of reduction of coal capacity by 50% by 2035 and 100% by 2050, compared to baseline of year 2021. We continue to maintain our revenue from coal generation plants to be below 25% of our total revenue in FY2022.

GROUP REVENUE*

(%)

● Coal ● Renewable Energy ● Others**



* Total revenue includes ICPT

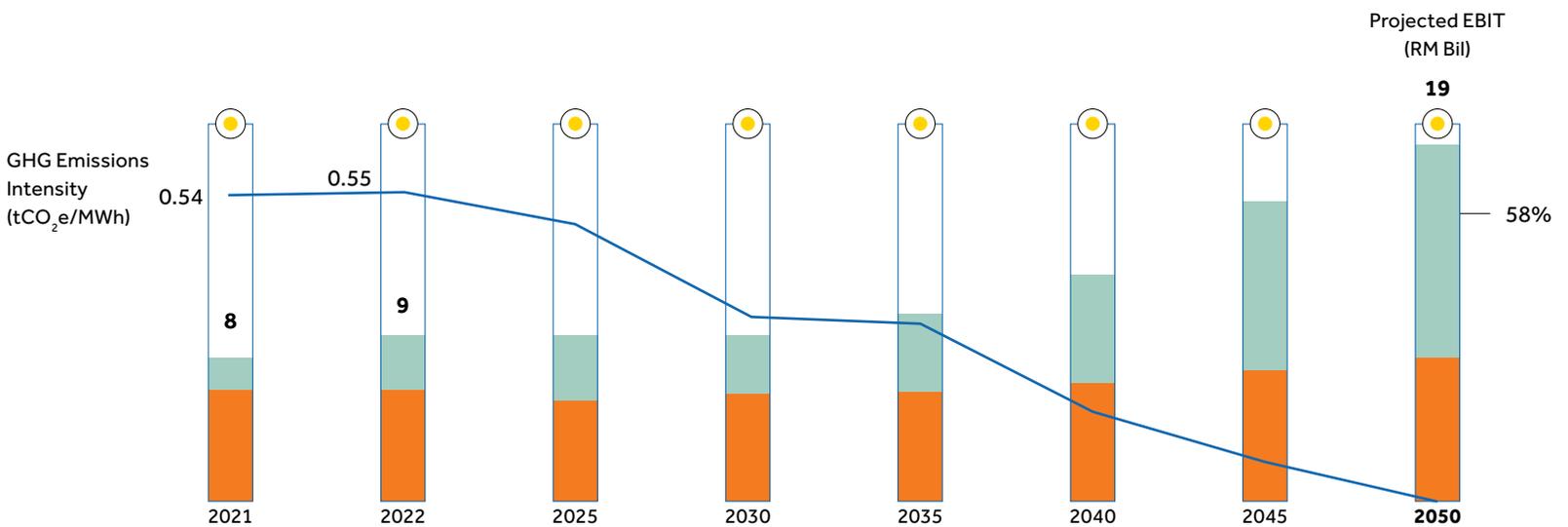
** Others include revenue from regulated business, subsidiaries and generation from gas

We recognise the importance of investing in our ET strategy to achieve our SP2050 ambition. While the transition to low carbon may require substantial investments, we believe that these investments in capitalising the low carbon economy and diversifying our revenue streams will ultimately increase our earnings in the long run. TNB's ET strategy could grow TNB's Earnings Before Interest and Taxes (EBIT) up to 140% to RM19 billion by 2050 as we decarbonise our carbon footprint at the same time.

PROJECTED EBIT (RM BIL) AND GHG EMISSION INTENSITY

(tCO₂e/MWh)

● Future Generation Sources & New Green Business ● Grid of the Future — Emission Intensity



i For more information on other climate related indicators and performance, please refer to Minimising our Environmental Impact section pages 105-110.

CLIMATE CHANGE AND ENVIRONMENT

Feature Story 4

OUR FLAGSHIP GREEN BUILDING - TNB PLATINUM CAMPUS

TNB Platinum Campus, our new headquarters located at Jalan Bangsar, Kuala Lumpur consists of four (4) Office Towers, a Convention Centre, Childcare and Pelitawanis and Central Plaza. The horizontal tower connects all four (4) offices and the convention centre. In the intersections between blocks, high-ceilinged atria in the spaces create a continuous horizontal plane that enhances the scheme's connectivity. At the lower levels of the horizontal tower, it includes link bridges, stairs and collaborative areas that emphasise its communal functions, distinct from the more specialised departmental requirements above. The central plaza with an arcing forecourt of generous landscaping and foliage consolidates the connectivity as a hub to its four (4) cascading office blocks, convention centre and ancillary buildings.

Envisioned as a sprawling campus, the design is aimed to create a contemporary and futuristic workplace that meets the requirements of the highest rating under the Green Building Index (GBI), the Platinum certification. The green features include green-roofed buildings oriented to the sun's path to reduce the amount of solar heat gain; double-glazed facades with low emissivity that not only help control heat and noise but also harvest natural daylight; and overhangs that provide shade and improve thermal comfort. This sustainable architecture is expected to bring about a transformative change in its workplace culture and workforce development.

TNB Platinum Campus is designed according to GBI principles with the following key design features :

Energy Efficiency	Responsible Material Selection	Occupant Safety & Comfort
<ul style="list-style-type: none"> • 25% less electricity consumption compared to conventional building designs. • Exceptional building envelop for both glazing and roof to reduce external heat transmissibility. 	<ul style="list-style-type: none"> • More than 10% recycled content in construction material. • More than 50% of the timber used has Forest Stewardship Council (FSC) & Malaysian Timber Certification Council (MTCC) Certified. 	<ul style="list-style-type: none"> • Excellent daylighting and external views with less obstruction to the glazing. • Reducing harmful indoor pollutants by avoiding usage of hazardous chemicals such as Volatile Organic Compound (VOC) and formaldehyde.
Water Efficiency		Innovation
<ul style="list-style-type: none"> • Usage of highly efficient water fittings throughout the building to reduce potable water consumption. • Rainwater harvesting system to be used for irrigation. 		<ul style="list-style-type: none"> • EV charging station. • Automated Waste Management System (AWCS). • Photovoltaic system with capability to cater up to 10% of the building's electricity consumption.



The new TNB Platinum buildings are environmentally friendly in design with energy efficient and water efficient features.

Additional Green Building Features

- Automation include lighting zoning control, motion sensors and daylight sensors.
- Integrated Building Management System Energy Sub-Metering System.
- At least 2% reused building materials utilised during construction.
- More than 50% of the construction material is a regional material (500km radius from project site).
- Carbon dioxide monitoring and control to avoid CO₂ level exceeding 1000ppm.
- Provides occupants thermal comfort and ease of control.
- Enables adjustments to the background noise level for occupant comfort with acoustic treatment.
- Parking guidance system for non-allocated parking.
- Energy and water usage display.
- Deployment of metering and leak detection system for domestic water supply to avoid water wastage.
- Grey water recycling system to reduce potable water consumption.

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

TNB strives to minimise the environment impacts caused by our business operations and value chains, in line with our commitment to progressively improve our environmental performance.

GOVERNING ENVIRONMENTAL MATTERS

The generation of electricity from our thermal plants inevitably leaves a large environmental impact, in the form of carbon release, water consumption for power plants and fuel consumption. Our environmental management is principally guided by TNB Environmental Policy which was reviewed in FY2021 to reflect the latest changes in environmental requirement and emerging issues.

The Health, Safety and Environmental (HSE) Council oversees the Group's environmental performance and compliance.

Six (6) divisions divisions in TNB have been certified ISO 14001:2015 compliant in Environmental Management System (EMS). We are also guided by TNB's Health Safety and Environmental Management System (HSEMS) which outlines environmental risk identification and control requirements across all divisions, departments and business units in TNB. The introduction of HSEMS has strengthened the governance of environmental management across the Group.

Since 2021, Guided Self-Regulation (GSR), the self-monitoring environmental management tool, has been implemented across all TNB divisions and subsidiaries. The GSR scoresheet has been analysed for gaps in order to continuously enhance our operations.

Our overall commitment towards reducing our environmental impact is encapsulated in our comprehensive environmental management policies and guidelines :

- TNB Environmental Policy 2021
- Environmental Impact Assessment (EIA) Guidelines 2022
- 2nd Edition of Scheduled Waste Guidelines 2021
- Polychlorinated Biphenyls (PCB) Guidelines 2021
- e-Waste Management Policy 2022
- Grid Division Green Code Conduct

In supporting our Net Zero by 2050 aspiration, the Grid Division introduced its Grid Green Code Conduct. The Green Code Conduct shows our commitment towards ESG that mirrors our efforts to create a greener future. We aim to lead as a green responsible grid owner by reducing our climate footprint and promoting sustainability through the supply chain.

Grid Division Green Code of Conduct 2021 - 2050



Align with TNB's Net Zero by 2050 aspiration

TNB Grid aims to lower its SF6 emissions by recycling and replacing SF6 gas in its assets. Additionally, TNB Grid will tackle losses through the adoption of new technologies.

▣ FY2022 Performance :

3,266 kg SF6 gas recycled



Achieve zero pollution impact on nature

Manage potential pollutants from TNB transformer operations while leveraging new environment friendly products to reduce the impact of pollution.

▣ FY2022 Performance :

100% of transformers were tested for Polychlorinated biphenyl (PCB) and no contamination was found.



Achieve 30% reduction in deforestation by 2050

To minimise the impact of deforestation in accordance with the environmental standards and promoting biodiversity.

▣ FY2022 Performance :

Continuously

conserving forests by reducing deforestation from grid development activities.

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

TNB Grid Initiatives and FY2022 key highlights are outlined below :

Grid Division Initiatives	FY2022 Highlights
<p>GHG Reduction</p> <ul style="list-style-type: none"> Gas Insulated Switchgear (GIS) refurbishment and sulphur hexafluoride (SF6) leak management to achieve <0.5% SF6 leak rate. SF6 Gas Recycling and Reconditioning Centre to promote circular economy by reusing recycled and reconditioned SF6 gas without the need to purchase new gas or dispose used and poor quality gas. Replacement of old R22 air conditioners as part of energy efficiency efforts to reduce impact to environment. Change of CO₂ firefighting system to environmentally neutral inert gas system. 	<ul style="list-style-type: none"> GIS refurbishment was at 70% completion from six (6) identified PMU. 3,266 kg SF6 gas recycled. Completed R22 air conditioner replacement at Southern Region. Completed change of CO₂ firefighting system for three (3) substations.
<p>Pollutant Management Initiatives</p> <ul style="list-style-type: none"> Replacement of Oil Impregnated Paper (OIP) to Resin Impregnated Paper (RIP) transformer bushing replacement to reduce the impact of pollution from bushing failure. Elimination of PCB content in oil-filled transformer that has dangerous impact on the environment and our health. Usage of bio-based ester oil for new transformer to be implemented in the year 2024 to reduce the impact of pollution. Transformer oil-water separation pit for better effluent management. 	<ul style="list-style-type: none"> Completed replacement of OIP in 77 transformers. 100% of transformers are tested for PCB content and no PCB contamination was found. 60% progress for implementation of transformer oil-water separation pit for identified substations.
<p>Deforestation Control Initiatives</p> <ul style="list-style-type: none"> Environment Impact Assessment (EIA) process improvement in project delivery. Tree Hyperspectral Identification System (Thysis) that will identify endangered species to ensure less impact of deforestation and preserve biodiversity and natural habitats during project development. 	<ul style="list-style-type: none"> Grid has developed the EIA handbook which has been verified by the Department of Environment (DOE).

Our Approach and Key Highlights	Our Performance in FY2022																				
<p>Water Management</p> <p>We closely monitor our water withdrawal at operational sites to minimise the risk of water overuse and contamination. In addition, we investigate any deviation from the norm in water consumption at all power plants and carry out any necessary mitigation measures and implementation plans.</p>	<p>There is a slight increase in total water withdrawal for FY2022 compared to FY2021, due to increasing business operations and office occupancy post COVID-19 pandemic.</p> <p>TOTAL WATER WITHDRAWAL ACROSS TNB'S OPERATIONS (Megalitres)</p> <p>● Peninsular Malaysia ● SESB</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Peninsular Malaysia (ML)</th> <th>SESB (ML)</th> <th>Total (ML)</th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>7,269</td> <td>785</td> <td>8,054</td> </tr> <tr> <td>2020</td> <td>7,065</td> <td>725</td> <td>7,790</td> </tr> <tr> <td>2021</td> <td>7,771</td> <td>660</td> <td>8,431</td> </tr> <tr> <td>2022</td> <td>9,821</td> <td>709</td> <td>10,530</td> </tr> </tbody> </table>	Year	Peninsular Malaysia (ML)	SESB (ML)	Total (ML)	2019	7,269	785	8,054	2020	7,065	725	7,790	2021	7,771	660	8,431	2022	9,821	709	10,530
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2022	9,821	709	10,530																		

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

Our Approach and Key Highlights

Fuel Management

TNB is committed to ensuring a sustainable, reliable and cost-effective fuel supply and consumption for power generation.

In line with SP2050, TNBF has launched an in-house sustainability framework in December 2022 to be the sustainable fuel thought leader and supplier for the regulated industry.

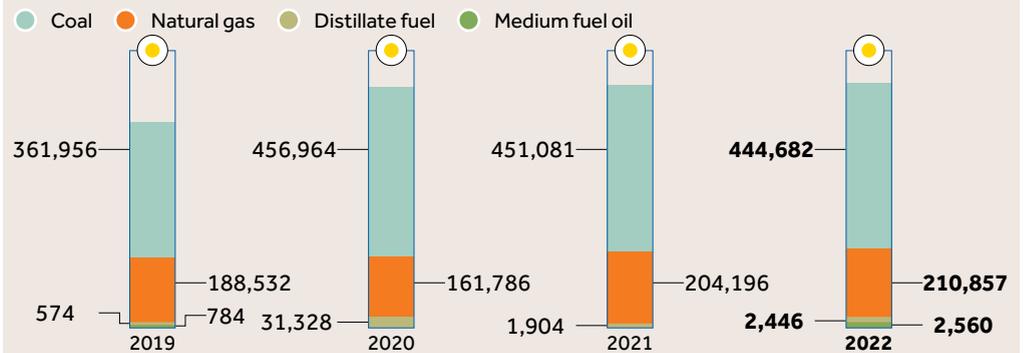
In addition, we have optimised our plants to ensure they operate at optimal efficiency.

Our Performance in FY2022

Fuel consumption from non-renewable sources to power the generation plants are shown below. In an effort to reduce coal capacity, we continue to explore the viability of increasing natural gas in our energy mix as a transition fuel while we research the commercialisation of green fuel.

TOTAL FUEL CONSUMPTION

(GJ)



Energy Management

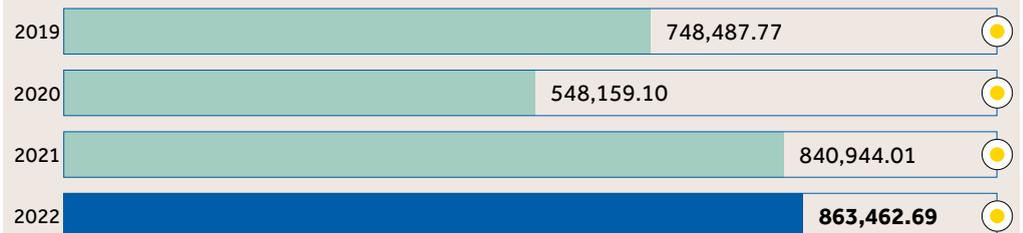
At TNB, we integrate energy efficiency initiatives and programmes across our buildings.

TNB new buildings including Balai Islam and TNB Platinum campus incorporated energy efficiency design features as an effort to reduce our energy consumption.

There is a slight increase in total energy consumption for FY2022 compared to FY2021, due to increasing business operations and office occupancy post COVID-19 pandemic.

TOTAL ENERGY CONSUMPTION

(MWh)



Waste Management

We manage all hazardous waste centrally in accordance with our Health, Safety and Environment (HSE) guidelines on Scheduled Waste Management, which are in compliance with regulatory requirements set by Department of Environment (DOE).

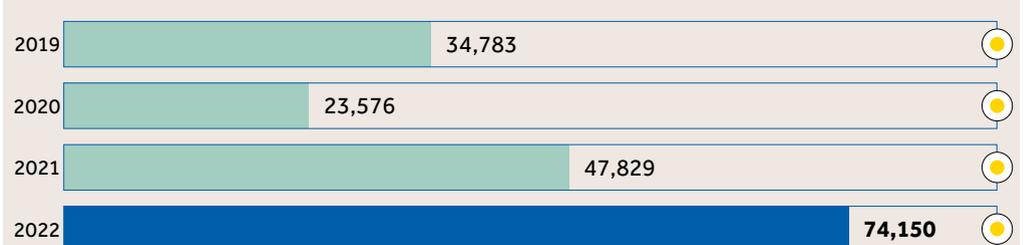
We continuously improve our waste management process through site inspection and internal audit.

In FY2022, we have developed our E-Waste Management Policy which is enforced across all TNB premises. All electronic waste categorised under SW110 will be managed and disposed in accordance with DOE guidelines. To track our progress, we are in the process of developing an online reporting system for E-Waste inventory.

TNB monitors its scheduled waste generation directed to disposal and diverted from disposal regularly. The scheduled waste are disposed responsibly through licensed waste contractors.

TOTAL SCHEDULED* WASTE GENERATED

(Metric Tonnes)



* We refer to DOE's terminology of scheduled waste which means waste that has hazardous characteristics and thus has the potential to negatively affect the environment and public health

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

Our Approach and Key Highlights

Biodiversity Management

In FY2022, we increased our efforts in conserving biodiversity surrounding our operation sites :

Nenggiri Hydroelectric Project

- TNB conducted a study on threatened flora species (based on the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species) found at the project site area.
- TNB has also developed a Wildlife Management Plan with consultation from Jabatan PERHILITAN that will outline implementation steps in monitoring and managing wildlife.

Sungai Perak Hydroelectric Station – Temenggor Dam

- TNB conducted a study on threatened flora species based on the IUCN's Red List of Threatened Species found at the Temenggor Dam.

Cameron Highlands – Jor and Ringlet Lakes

- TNB is running a Pilot Development of Habitat Rehabilitation and Restoration for Sediment Deposit Area in Cameron Highlands. This project is in collaboration with the Pahang State Forestry Department to rehabilitate and restore dredging disposal sites at Jor and Ringlet Lakes.
- The pilot development aims to identify suitable tree species and soil treatment required, as well as identification of routine practices that will enhance tree growth.

Bukit Selambau Large – Scale Solar (LSS) Plant

- TNB's study to manage human-macaque conflict through Behavioral Ecology and DNA Metabarcoding has concluded in 2022.
- The results of the study has allowed TNB to understand the daily activity, behaviour and dietary requirements of the macaques which will be utilised to reduce human-macaque conflicts.

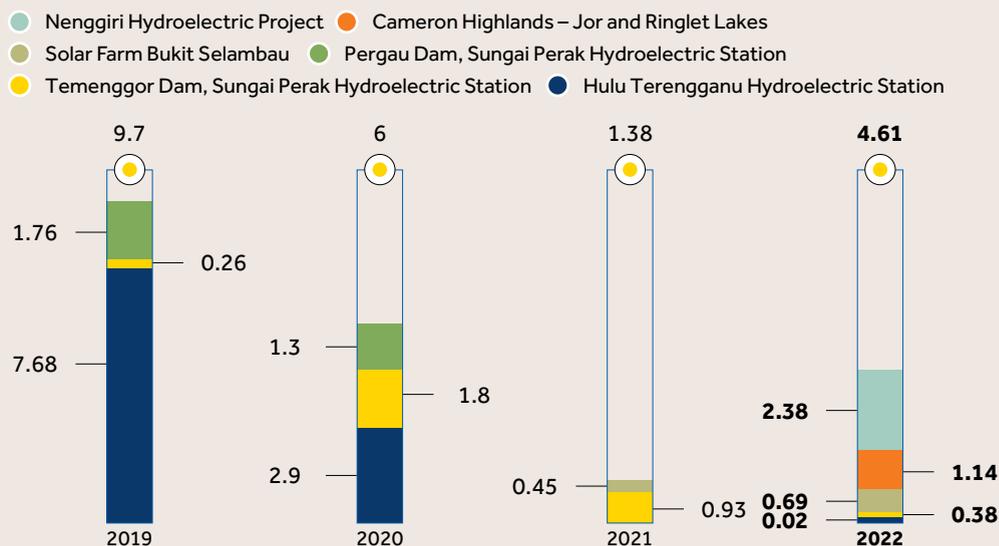
Hulu Terengganu Hydroelectric Station

- TNB conducts annual assessment on changes in aquatic life population.
- The findings from the annual assessment are important for us to understand and evaluate impacts from the station's operation to surrounding aquatic habitat.

Our Performance in FY2022

In FY2022, a total of RM4.61 million was spent on biodiversity studies at Nenggiri Hydroelectric Project, Cameron Highlands – Jor & Ringlet Lakes, Solar Farm Bukit Selambau, Temenggor Dam and Hulu Terengganu Hydroelectric Station.

TOTAL SPEND (RM MILLION) ON BIODIVERSITY STUDIES



KEY FINDINGS OF TNB'S IUCN RED LIST STUDIES AS OF FY2022

Site	Species Group	Number of Species								Total Expenditure in FY2022 (RM' mil)
		CR	CN	NT	NT	LC	DD	NE	Other	
Nenggiri Hydroelectric Project	Fish	0	1	0	0	28	4	0		2.38
	Bird	1	4	8	31	142	0	0		
	Terrestrial	6	21	7	13	95	4	4		
	Flora	1	2	3	10	137	7	658		
Cameron Highlands – Jor and Ringlet Lakes	Fish	0	0	0	0	0	0	0		1.14
	Bird	0	0	0	0	0	0	0		
	Terrestrial	0	0	0	0	0	0	0		
	Flora	0	73	168	20	533	0	0		
Bukit Selambau Large – Scale Solar (LSS) Plant	Fish	0	0	0	0	0	0	0		0.69
	Terrestrial	0	1	0	1	0	0	0		
Sungai Perak Hydroelectric Station (Temenggor Dam)	Fish	1	0	0	1	57	2	2		0.38
	Terrestrial	20	32	46	0	0	0	0		
	Flora	20	32	103	47	0	0	3339		

● Critically Endangered (CR)
 ● Endangered (CN)
 ● Vulnerable (NT)
 ● Near Threatened (NT)
 ● Least Concern (LC)
 ● Data Deficient
 ● Not Evaluated

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

Our Approach and Key Highlights

SESB conserves the forest and wildlife of Sabah through a joint partnership with the Sabah Forestry Department (SFD).

Our Performance in FY2022

SESB recognises the importance of conservation of our natural environment for future generations and is proud to contribute to organisations that share the same values and objectives. As part of the commitment, SESB has contributed RM20,000 to Sabah Wetlands Conservation Society (SWCS) to fund their operations. SWCS aims to promote the conservation of wetlands in Sabah and the variety of plants, birds and other living organisms that call these wetlands home.

In addition, SWCS is committed to raising public awareness and appreciation of wetlands, as well as encouraging public involvement in protecting them. Furthermore, SWCS manages the Kota Kinabalu Wetlands as a model wetland centre for the purpose of conservation, education, recreation, tourism and research. By demonstrating the importance of wetlands through practical examples, they hope to inspire others to take action to protect wetlands in their own communities.

SITE AND HABITAT PROTECTION

At TNB, we implement preventive and restorative measures to reduce our impact on local biodiversity, including minimising our operations within areas of high biodiversity value. However, there are several areas in which TNB conducts its activities and are home to an abundance of flora and fauna. Some species in these areas are protected under domestic and/or international declarations by public authorities.

Our current activities situated in areas of high biodiversity value has either commenced prior to the issuance of declarations of protections or after exhaustive analysis of alternatives and environment assessment with oversight from competent authorities where it was determined that there were no viable alternatives. The following table outlines the TNB facilities located within or adjacent to protected areas of high biodiversity value and our key ongoing initiatives on habitat protection and restoration :

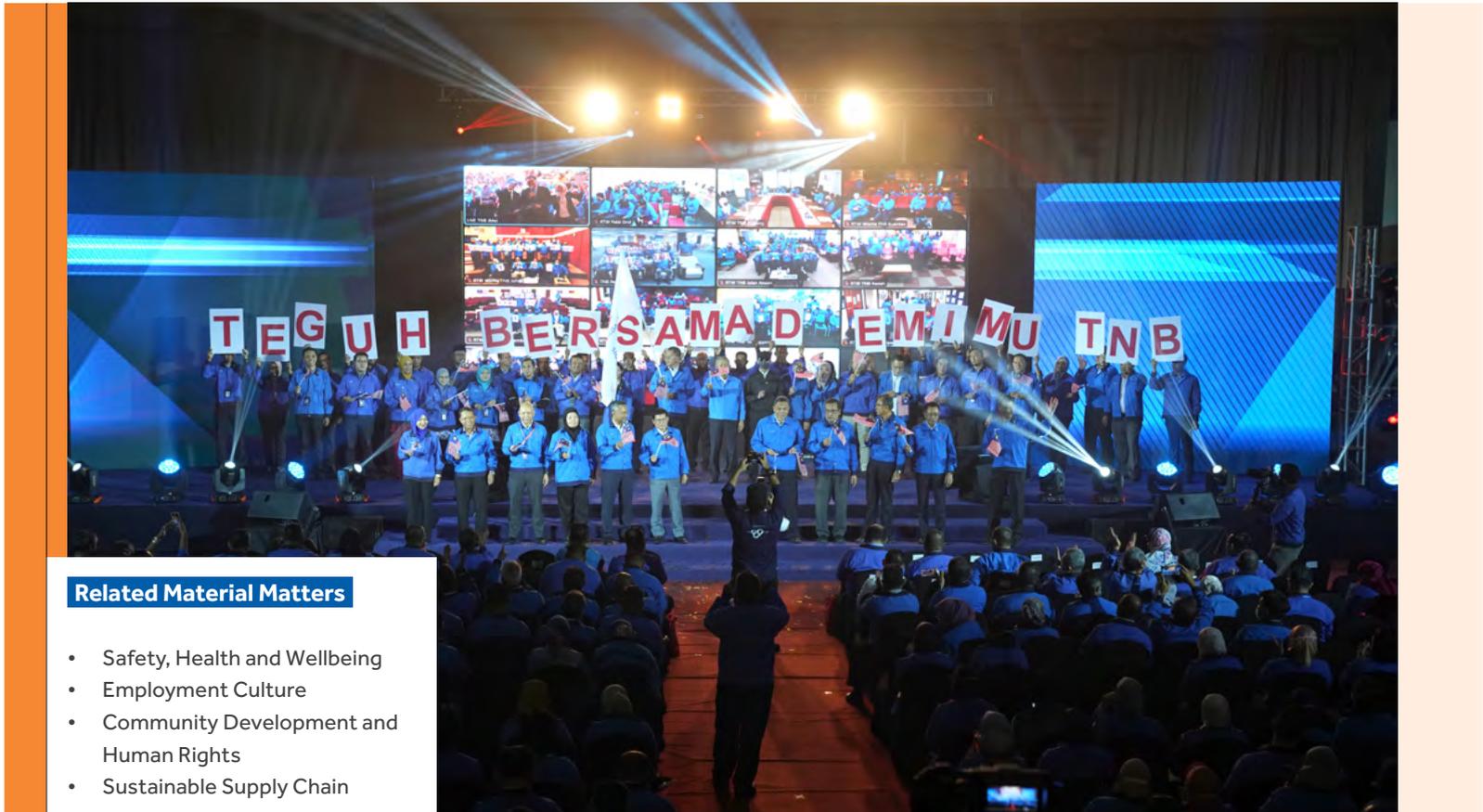
Project, Location and Area	Biodiversity Value	Methodologies	Third Party Partnerships
Fish Management & Eco – Tourism Sungai Tiang, Royal Belum State Park (12 km)	<ul style="list-style-type: none"> IUCN Red List. Aquatic freshwater fauna. Culture and tradition of Jahai Tribe. 	<ul style="list-style-type: none"> Release of fish fry at Tiang River. Quarterly fish and water quality assessment. Tourist satisfaction surveys. 	<ul style="list-style-type: none"> Perak State Parks Corporation : monitoring implementation progress. Fishery Department of Perak : provided fish fry for the sustainability efforts of the fish sanctuary. Department of Orang Asli Development Perak : provided additional funding, moral and material support such as boats, and ICT equipment for the successful implementation of this project. Malaysia Co-Operative Societies Commission : Provide skill and technical development through various training initiatives.

CLIMATE CHANGE AND ENVIRONMENT

MINIMISING OUR ENVIRONMENTAL IMPACTS

Project, Location and Area	Biodiversity Value	Methodologies	Third Party Partnerships
<p>Sediment Deposit Habitat Rehabilitation and Restoration</p> <p>Jor Lake (20.23 hectares) and Ringlet Lake (87.34 hectares), Cameron Highlands</p>	<ul style="list-style-type: none"> IUCN Red List. Tree species available within PDA3 of dumping site Jor (HS Bukit Tapah) and Cell 5 of dumping site Jasik (HSK Ringlet). 	<ul style="list-style-type: none"> Terrestrial Flora Revegetation. Biomass Estimation. Carbon sink extrapolation. Cost Benefit Analysis. 	<ul style="list-style-type: none"> Forestry Department of Pahang: commitment to rehabilitate the disposal area with Eucalyptus. Forestry Department of Pahang : TNBR to seek agreement to utilise suitable land for control plot within Cameron Highlands area as in kind contribution and support for this study.
<p>Human – Monkey Conflict Management</p> <p>Solar Farm : TNB Bukit Selambau LSS Plants Adjacent Areas (600 hectares)</p>	<ul style="list-style-type: none"> IUCN Red List. National Policy on Biological Diversity (NPBD) 2016-2025. National commitment to the Convention on Biological Diversity (CBD). 	<ul style="list-style-type: none"> Fecal sampling of existing monkey population for DNA sequencing works. Social survey to understand community's perception. Behavioural study of the monkey population. Installation of electric fence as per Energy Commission Guidelines. 	<p>Department of Wildlife and National Parks :</p> <ul style="list-style-type: none"> Collaboration to eradicate monkey population as a last option if all mitigation measures applied are unsuccessful. Inputs on Management Plan document. Supported awareness session conducted with local community.
<p>Manage and mitigate impacts on wildlife population due to project development</p> <p>Nenggiri Hydroelectric Project Site Area</p>	<ul style="list-style-type: none"> IUCN Red List. 	<ul style="list-style-type: none"> Data collection using satellite collar and camera traps. Wildlife inventory. Wildlife conflict and management. Habitat rehabilitation and wildlife corridor. 	<p>Department of Wildlife and National Parks : gathering input on Wildlife Management Plan.</p>

ENGAGING OUR PEOPLE AND CULTIVATING TALENT



Related Material Matters

- Safety, Health and Wellbeing
- Employment Culture
- Community Development and Human Rights
- Sustainable Supply Chain

EMPLOYMENT MANAGEMENT AND GROWTH

In TNB, our people stand at the core of our operations. Their efforts and diligence in contributing towards TNB's aspirations whilst upholding company values are highly appreciated. In FY2022, there has been a heightened awareness in operationalising the sustainability agenda in tandem with TNB's journey to achieve net zero emissions. This requires more proactive initiatives in building up the needed talent and right skillset for our employees. Numerous initiatives and measures have been put in place to retain and attract employees. Along with that, we aim to cultivate a strong culture of diversity, professionalism, leadership and competency in our workforce.

CREATING A CONDUCTIVE WORKPLACE

In the countries where we operate, we comply with all relevant labour laws and we support the rights of freedom of association and collective bargaining. Additionally, our executive and non-executive employees' rights are well-protected through our unions, which enable us to

provide better working conditions. We uphold human rights by treating all employees with respect and have zero tolerance for discrimination, harassment, or bigotry, ensuring fair and humane treatment of everyone.

From January until December 2022, TNB conducted a pilot phase of TNB Ways of Working (TWOw), which involved more than 8,500 people from selected departments from eight (8) divisions and subsidiaries. Depending on the nature of the job (i.e., field force, office-based or customer-facing), a suitable hybrid work arrangement encompassing options to Work In Office (WIO), Work From Home (WFH), Work Home Based (WHB). Three (3) key elements of TWOw implementation are flexible and hybrid working location (WIO & WFH), flexible and staggered working hours, as well as smart casual dress code. At the end of the pilot programme, it was approved for implementation throughout TNB effective 1 January 2023. This aligned with TNB's timeline to implement flexible working throughout the organisation and to comply with the amendment of Malaysia's Employment Act 1955 which begins in January 2023.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

HR GUIDING PRINCIPLE AND STRATEGY

We continue to execute the intended action plan guided by our HR Master Plan support and align to our Transformation Journey – Reimagining TNB (RT) through our Human Resources (HR) strategy which comprises the HR Leap 6, HR Guiding Principles and the HR Master Plan 2020 – 2025. In 2022, we revised our mission statement as part of our commitments in building up our workforce in meeting the Company’s sustainability agenda throughout the organisation. The revised mission statement is “Harnessing and Orchestrating HR capabilities to be Recognised as A Trusted Strategic Business Driver in Catalysing Business Growth, Delivering HR Excellence and Ensuring Sustainability”. We continue to create new initiatives and measures to ensure the sustainability of our workforce and operations.

HR Master Plan 2020-2025

Building blocks to deliver the desired outcomes in support of Reimagining TNB's Aspiration and Towards High Performing Culture



Mission

What HR aims and needs to support RT Refresh.

Four (4) Goals

key outcomes required by HR to deliver value to TNB.

Strategic Imperatives

Defines the building blocks needed to achieve the overall HR mission through the support of the collective outcomes.

HR Foundation

HR Operating Model, Technology as Enabler and Decisions aligned with TNB shared values & HR Guiding Principles.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Reimagining Culture (RC) was established in FY2020 to redefine our core values and culture – Integrity, Collaborative, Professionalism, Customer-centricity, Forward thinking and Mindfulness – that would drive our business transformation along with the development for high performance culture. As part of this journey, we launched our TNB Identity comprising our Purpose, Aspirations, Culture and Behaviours.

- 1 Established **Corporate and Divisional High Performance Culture Action Plan** which entails programmes and initiatives to be conducted to drive High Performance Culture in TNB throughout FY2022.
- 2 On-going communication efforts on the **TNB Identity** at Corporate and Divisional Levels via Internal Bulletins, Facebook and other platforms. We also embedded elements of TNB Identity in the TNB Appointment and Offer letters as well as People Development courses and trainings.
- 3 Organised **Majlis CEO Turun Padang & Pengiktirafan Wira Budaya** which aims to provide recognitions to employees that have demonstrated exemplary acts and contributions beyond their essential duties through their involvement towards the Company, community, country and at the international level guided by the TNB Core Values. Sessions were held at four (4) states with accumulated attendees of 1,723. During those sessions, 55 employees were awarded with the Wira Budaya award based on the specific TNB Core Values.
- 4 Organised **Majlis Anugerah Kecemerlangan TNB 2022 (ACE TNB 2022)**, an appreciation ceremony held to recognise the contribution and service of TNB employees identified from all divisions, departments and subsidiaries within TNB. Awards presented include Anugerah Wira Budaya Kebangsaan, Anugerah Kecemerlangan Pekerja, Anugerah Nampak, Dengar dan Rasa Selamat (NDRS), Anugerah TNB Performance Leaderboard, and Anugerah Khas Presiden.
- 5 Conducted **Change Engagement Circle (CEC)**, which are quarterly engagement sessions with representatives from all divisions and subsidiaries, to update and share on High Performance Culture initiatives and programmes.

TALENT RETENTION AND ATTRACTION

At TNB, we value the retention and attraction of good talent. To support employees in working as effectively and efficiently as possible in line with TNB's business strategic objectives and goals, we developed TNB Performance Management as an integrated and continuous approach. In promoting healthy and constructive relationships between immediate managers and subordinates, performance discussions are mandated throughout the management cycle. Through these discussions, employees are empowered to constantly strive for improvement, measure progress and work towards achieving better career progress.

Our approach in managing and nurturing our human resources :

Approach	Key highlights for FY2022
<p>Talent attraction, recruitment and retention is vital to build a strong workforce pipeline</p>	<p>We conducted various programmes and initiatives to retain and develop our talent pool :</p> <ul style="list-style-type: none"> • 95 employees were enrolled in Transition Leadership Programme. • 1,438 training programmes were conducted for TNB employees. • 5,800 individuals were certified as Orang Kompeten Suruhanjaya Tenaga (OKST) certification holders. • 183 employees obtained non-technical certification, such as ACCA, CPA and CIMA. • In FY2022, Distribution Network Engineering Centre (DEC) conducted DEC Executive Attachment programme, which successfully attracted 60 talents into DEC Graduates pools.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Approach	Key highlights for FY2022
<p>We offer employees a competitive benefits package to maintain employee morale and attract and retain talent</p>	<p>We have developed a compelling Employee Value Proposition (EVP) which is a competitive remuneration and benefit package that supports work-life balance as well as the mental and physical health of our employees that includes :</p> <ul style="list-style-type: none"> • Competitive benefits package. • Childcare facilities and nurseries. • Housing accommodation and quarters for employees. • Counselling services. • Sports and recreational facilities. • Career and development opportunities. • Religious facilities. • The EVP Policy was established in April 2022 for all TNB employees and serves as a guide and reference for TNB subsidiaries appointed employees.
<p>Hiring of gig workers (On Demand Free Agents)</p>	<ul style="list-style-type: none"> • TNB has started the hiring of gig workers, providing flexible short term employment opportunities since 2018. • TNB On Demand Free Agent (ODFA) guideline was developed to specify the provisions for appointment of ODFA in TNB. This guideline does not apply to TNB's subsidiaries but may be used as a reference, subject to their respective terms and conditions. • An ODFA refers to a free agent, freelancer, or gigger hired by TNB on a contract for service basis. The establishment of this contract for service is between TNB and the respective appointed ODFA individual. • An appointed ODFA is not considered as an employee and is therefore not covered under the Industrial Relations Act and Employee Act.
<p>Employee engagement for open communication and sharing of different perspectives</p>	<ul style="list-style-type: none"> • We encourage two-way communication with our employees through various engagement channels. • Grievance mechanisms are outlined in our Grievance policy which is supported by our Whistleblowing policy and channels such as the Whistleblowing Information System (WBIS). This serves as a safe platform for employees to channel their feedback and concerns. • Our extensive workforce is represented by three (3) Registered Unions and two (2) Workers Associations comprising both executives and non-executive employees. We have always maintained harmonious relations with the unions and are pleased to note that our union leaders are actively involved in all employee engagement sessions such as labs, syndications, joint meetings and technical/field trips. • Through our biannual Employee Engagement Survey (EES) and Culture Barometer, we are able to gain an understanding of our strengths and areas for improvement. Our engagement scores have been improving across all surveys conducted. The EES and Culture Barometer conducted in December 2022 received a score of 86.6% in comparison to the previous score of 85% in 2021. • In FY2022, we have maintained a low turnover rate of 3.93% which reaffirms our exemplary efforts in employee management.
<p>Using digital platforms to attract talented workforce</p>	<ul style="list-style-type: none"> • We have conducted talent and workplace showcase under Employee Branding strategy such as promotion through social media platforms and participation in industry awards events. • We also engaged with future talents through our postings on social media via Instagram@electrifyingcareers to showcase TNB's initiatives as well as to promote job openings to the public.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Feature Story 5

EMPOWERING OUR PEOPLE

We encourage our employees to embark on lifelong learning, enabling them to achieve their personal and career goals. We aspire to be a learning organisation, focused on creating, acquiring and transferring knowledge and skills that continuously evolves with new business needs and global trends. We are committed to ensure that all our employees have access to learning and development opportunities. We aim to develop our employees' capabilities and ensure they carry out their roles to meet TNB's strategic objectives primarily, considering global trends and predictions for the future. This is achieved through huge allocation and funding of various learning programmes and initiatives in various learning institutions under TNB.

Learning and Development Investment

RM 161 million

Total Learning and Development hours

1,024,777 learning hours

TNB Top Talent Development Programmes

Development programmes that aim to develop a surplus of leaders that embody TNB identities

- 130 talents were equipped with Individual Development Plan (IDP), which resulted in 97.6% critical positions that have ready successors and 86.7% succession realisation.
- 6 women from TNB successors have completed Women Leadership Accreditation Certificate Programme.

Upskilling and Reskilling Programmes

Programmes targeted to upgrade employee skills

- A total of 749 staff were enrolled in upskilling/reskilling programmes.

Reskilling employees for energy transition

Programmes targeted to upgrade employee skills especially in energy transition-related skills

- Solar technology training : 21 people.
- Smart meter training : 332 people.
- ILSAS EV Training Hub to provide reskilling training for the EV industry.

Digital Skills Training

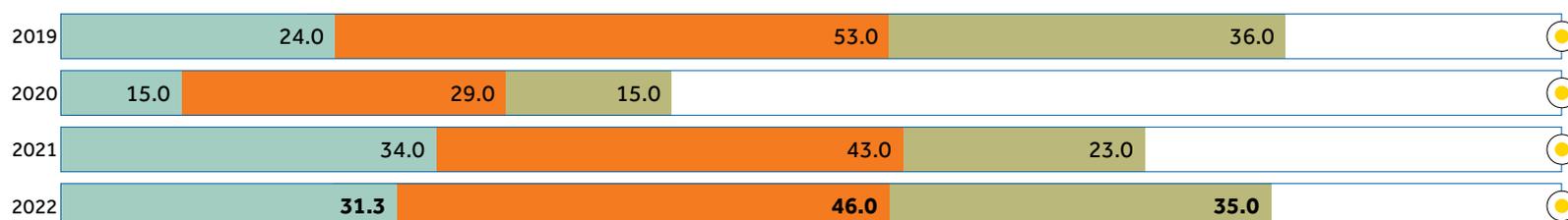
Digital learning solutions for TNB employees

- 821 sessions conducted with 15,178 participants from TNB employees.

EMPLOYMENT MANAGEMENT AND GROWTH

AVERAGE HOURS OF LEARNING BY EMPLOYEE CATEGORY (HOURS)

● Senior Management ● Executives ● Non-Executives



Our learning and development initiatives developed to enhance existing talent :

Initiative

Key highlights for FY2022

Division Academies

Participants of Academy in Business Entities

- GenCo Academy : 69 participants
- Grid Academy : 25 participants
- Distribution Network (DN) Academy : 32 participants
- Retail Academy : 3,214 participants
- HR Academy : 30 participants
- ILSAS (TOT certified) : 794 participants

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Initiative	Key highlights for FY2022
<p>Upskilling & Reskilling Programmes Programmes targeted to upgrade employee skills especially in energy transition-related skills</p>	<ul style="list-style-type: none"> A total of 749 staff were enrolled in upskilling/reskilling programmes in FY2022, namely : <ul style="list-style-type: none"> PPKK - Program Pendidikan Kemahiran Ketukangan PPKJ - Program Pendidikan Kemahiran Jurutematik PPPS - Program Pendidikan Penyelenggara Stor PPPT - Program Pendidikan Pembantu Tadbir Conversion Programme - Juruteknik Mechanical to Electrical 63 people underwent Conversion Programmes to facilitate continued employability among TNB employees. 32 employees benefitted from the Degree reimbursement programme, with a total of RM413,000 invested for partial course fee sponsorship to assist executives in their professional advancement. 55 employees participated in the Transition Leadership Programme for Executive programme with a total of RM328,000 investment, whereas 40 employees participated in the Transition Leadership Programme for Non-Executive programme with a total of RM173,000 investment. 332 people underwent reskilling programmes to train meter operators on ways to install and collect readings from smart meters, in an effort to support transition towards smart meter & digital billing. ILSAS conducted training for 21 individuals on solar technology for TNB Reskilling Programme. The newly launched ILSAS EV Training Hub is expected to provide reskilling training for the EV industry, focusing on fundamental knowledge covering basic battery storage and EV technology. This will align with the government's initiative to improve EV technology in the country.
<p>Digital Skills Training A collaboration with ILSAS to accelerate digital learning solutions for TNB employees. A wide variety of e-learning modules allows employees to pace their learning and development</p>	<ul style="list-style-type: none"> TNB aims to fulfil the demand for digital talents across TNB business entities through the development of internal talent. TNB will implement a series of development programmes for three job roles in the organisation, namely Data Scientist, Data Analyst and Data Engineer, in order to establish the Digital Academy. Many face to face (f2f) classroom activities were enhanced to provide a digital learning option, or an alternative hybrid approach combining the best of both approaches. Digital learning platform and contents employed include bite-sized learning, webinars, virtual learning and e-learning. ILSAS e-Learning Programme : 821 sessions conducted with 15,178 participants from TNB employees.
<p>TNB Leadership Development</p>	<p>TNB Leadership Competencies :</p> <ul style="list-style-type: none"> Conducted continuous leadership learning and development initiatives such as Leadership Webinar series featuring internal and external speakers on various current and future leadership topics. This year, 26,900 employees participated in the programme with a total of RM77,380 in investment. TNB conducted 68 webinars to date. 21 webinars were conducted in FY2022. Developed First-Time Manager Programme (FTM) for 55 aspiring managers to re-strategise (review) development content for 144 Young Executive Development Programme (YEDP) participants to strengthen leadership capabilities when employees transition to different roles within the organisation. Provided Informal Learning through Group Coaching in FTM. <p>TNB Leadership Development Centre</p> <ul style="list-style-type: none"> 52 talents participated in strategic management breakouts. 20 talents placed in roles along pathways leading to critical positions. 44 talents participated in strategic dialogues with Board members. 525 top management and talents participated in premium leadership webinars and training. 6 women successors have completed ASB - WLF Women Leadership Accreditation Certificate Programme, a collaboration between ASB and MIT Sloan. 100% of 130 talents were equipped with Individual Development Plan (IDP), which resulted in 97.6% critical positions with ready successors and 86.7% succession realisation. They were chosen through 10 sessions of TNB's Group-wide Succession Management Committee's deliberation.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Initiative	Key highlights for FY2022
<p>TNB Reskilling Malaysia Programme Spearheaded by ILSAS, this initiative provides job matching opportunities to unemployed members of the public as well as training of necessary skills for their new roles</p>	<ul style="list-style-type: none"> • Introduced in 2020, the programme helps empower and provide reskilling for retrenched and unemployed Malaysians. • 5,827 participants from the programme were successfully matched with employers during the year. • 5,072 participants successfully completed the training. • More than RM45 million has been allocated for the programme.
<p>Digital Learning Initiatives Utilising various platforms and content providers to conduct learning courses for TNB employees virtually</p>	<p>TNB Corporate Digital Learning Platform Experience (LXP) :</p> <ul style="list-style-type: none"> • Digital Learning experience with external content providers and platforms. • A robust strategy to ensure the success of delivery and cultivating self-directed and self-paced digital learning culture in TNB. • TNB LXP aims to provide TNB Executives with external content provider via its digital platform. • LinkedIn Learning enrolment for 1,000 executives in Pilot Phase prior to roll out for the whole company in 2023.
<p>Graduate and Apprenticeship Programme The PROTÉGÉ programme creates a pool of competent, well trained, knowledgeable and skilled graduates through industrial attachment</p>	<ul style="list-style-type: none"> • The PROTÉGÉ programme (previously known as SL1M) supports the Malaysian Government and the Ministry of Entrepreneur Development and Cooperatives (MEDAC) initiative to create a pool of skilled graduates through industrial attachments that will help them to attain relevant competencies to enhance their marketability and employability. • Since November 2011, TNB has trained about 6,110 trainees with RM143 million investment from AAIBE (RM66.5 mil) and TNB (RM76.5 mil) and the average employability rate (FY2011 - FY2021) was 73%. • TNB has trained 547 PROTÉGÉ trainees during the year. • TNB has managed to secure RM12.13 million from Akaun Amanah Industri Bekalan Elektrik (AAIBE) to fund the implementation of PROTÉGÉ Phase 8 programme. • At the end of the programme, TNB PROTÉGÉ trainees were able to acquire new skills and gain industrial exposure from both soft-skills training and On-the-Job Training throughout the 8-month period.

ADVOCATING FOR DIVERSITY AND INCLUSIVENESS

We embrace diversity and inclusivity among our employees, as part of our human rights efforts. This allows us to gain perspectives from different viewpoints, enabling our employees to feel trusted and appreciated for their ideas, presence and contributions to the organisation regardless of their age, gender, religious affiliation and disability.

Diversity and inclusion are specifically highlighted in the new TNB Identity. It is stipulated in one of the TNB Core Values which is Collaborative, where we embrace diversity and inclusivity and value outside in perspectives. This reflects its importance for TNB, now and moving forward by leveraging a greater variety of perspectives and more comprehensive viewpoints, as well as talents that enable us to have higher flexibility in adapting to dynamic markets, as well as promoting creativity and innovation. We also want to ensure our diversity and inclusivity efforts empowers our people to feel that their ideas, presence and contributions are truly valued, regardless of their position or entities in the organisation, to deliver and contribute towards TNB's greater good.

In FY2022, the Group's Human Resource Division introduced its Diversity and Inclusion Policy to further improve diversity and inclusivity within its workforce. This policy aims to address the gaps related to this matter.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

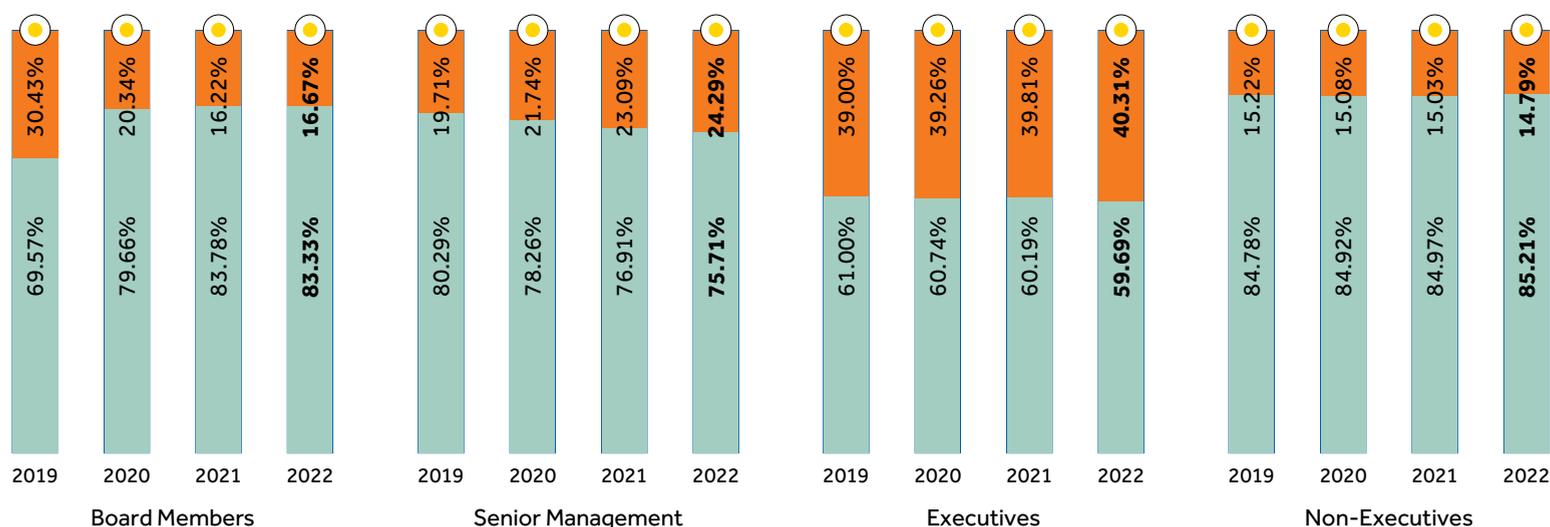
OUR PERFORMANCE FOR FY2022

	FY2019	FY2020	FY2021	FY2022
Total TNB Group Employees	36,307	35,576	34,938	34,699

GENDER DIVERSITY BY RANK

(%)

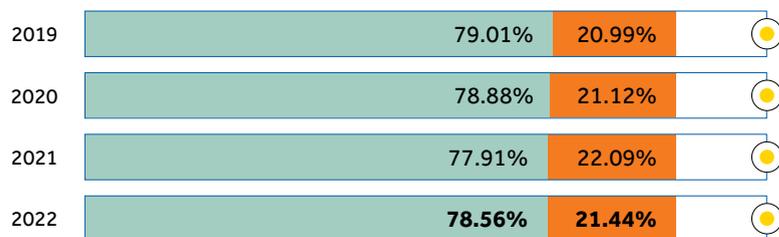
● Male ● Female



EMPLOYEE BREAKDOWN BY GENDER

(%)

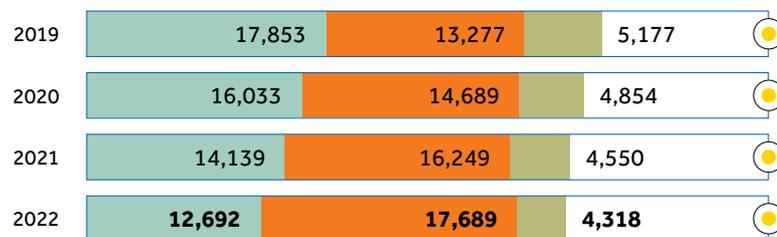
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EMPLOYEE BY AGE GROUP

(NO.)

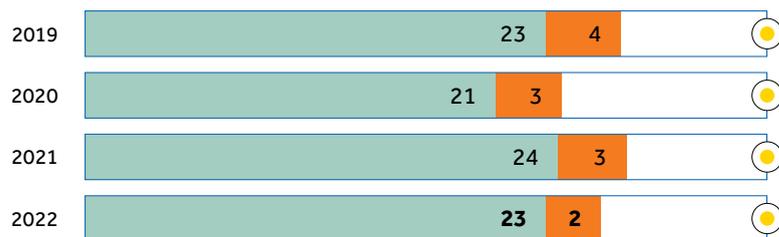
● < 35 ● 35-50 ● > 50



DIFFERENTLY ABLED EMPLOYEES BY GENDER

(NO.)

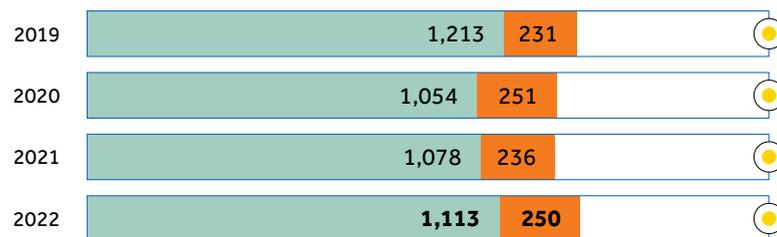
● Male ● Female



EMPLOYEE TURNOVER BY GENDER

(NO.)

● Male ● Female

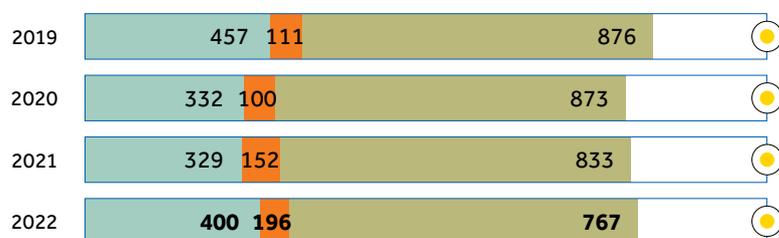


ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

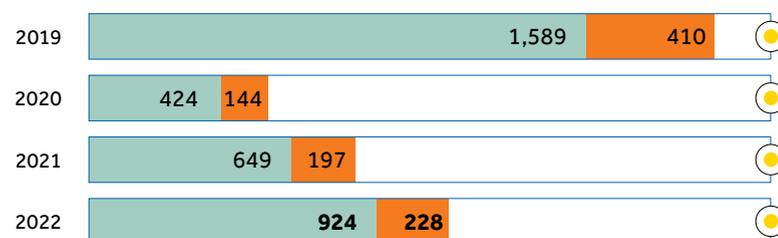
EMPLOYEE TURNOVER/ATTRITION BY AGE GROUP

(NO.)
● < 35 ● 36-50 ● > 50



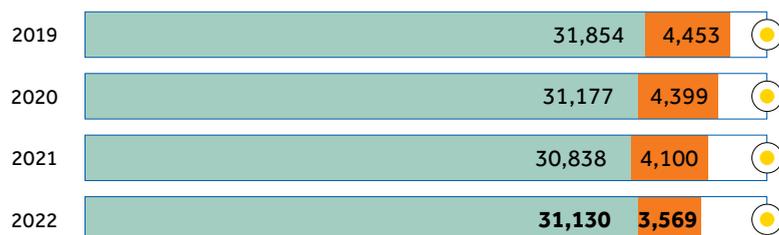
NEW HIRES BY GENDER

(NO.)
● Male ● Female



EMPLOYEE BY TYPE OF EMPLOYMENT

(NO.)
● Permanent employees ● Contract/Temporary employees



EMPLOYEE ENGAGEMENT

Employee engagement is an essential aspect that drives TNB's success. We believe that engaged employees are more motivated, productive and committed to delivering their tasks and roles. They feel appreciated and are willing to go the extra mile to perform their job and duties, resulting in improved work quality, customer service, work efficiency and performance, as well as a healthy work culture. Furthermore, engaged employees are likely to stay with the Company, reducing turnover and serving as TNB's ambassadors and advocates. Formal and informal engagement sessions are conducted across different levels of employees, supplemented by communication through various print, social media and audio-visual channels, both online and offline.

This year, we conducted TNB Employee Engagement Survey (EES) and Culture Barometer as a form of employee pulse check to assess and measure the awareness, understanding, attitude and ambassadorship amongst our employees towards the TNB Identity, which consists of TNB's Purpose, Aspiration and Core Values. This survey, which was initiated in 2020, also focused on measuring the extent of our employees' engagement with TNB. The survey also served its purpose to identify the efficacy of programmes and initiatives that have been organised to drive High Performance Culture in TNB. By soliciting feedback from the employees and taking their suggestions into account, we aim to continuously foster a culture that is more responsive to the needs and concerns of our employees.

Following the result of the survey, a workshop was conducted with representatives from each division, department and subsidiaries to look for trends and patterns in the survey results and identify areas for improvements to increase employee engagement. Based on the results of the survey and the areas identified for improvements, each representative is responsible to develop a plan to address the issues and enhance employee engagement. The plan is aligned together with the initiatives and programmes planned to drive High Performance Culture within TNB. Additionally, constant follow up and measure of progress was done to ensure initiatives and programmes were executed accordingly.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

We engaged and communicated with our employees through several platforms :

Initiative	Description
Face-to-face	Staff gatherings, outreach sessions, morning talks, online engagements, meetings.
Intranet	News from TNB Group and Divisions are channeled via respective intranet subpages to ensure effective and targeted communication.
Publications	Various bulletins from Corporate Communications and various Divisions are communicated on Tenagawan Daily (newsletter) sent via email to all staff and published on TNB's internal social media group (Facebook).
TV TNB	TV sets strategically located in office lobbies, common areas such as lift lobbies and cafeterias, etc.
Social Media	Active interactions between TNB staff and management representatives in TNB Powerfaces Facebook group.
Engagement with Employee Representatives	<ul style="list-style-type: none"> Through Unions, employees raised issues on staff benefits in the Collective Agreement negotiation platform. Engagement sessions with all TNB's Unions & Associations on the amendment of the Employment Act 1955.

Key Highlights

For FY2022

10

Women leaders were featured in TNB's Women's Day Celebration

A Board Engagement Programme was conducted focusing on women's leadership. The programme consisted of

40%

women attendees throughout the organisation

We continue to be a member of the

30% Club

which advocates for at least 30% women's representation on all boards and in top management globally

A Diversity and Inclusion (D&I) policy was launched in 2022 which explicitly details TNB's commitment to ensuring a diverse and inclusive workplace without consideration of age, gender, race, religion, nationality, background or previous experiences. This will also attract talents from diverse backgrounds. The effectiveness of the policy will be gauged on yearly surveys conducted by Group HR. Additionally, the Employee Experience Policy was established to cover the Employee Experience phase starting from Plan, Recruit, Develop, Retain, Growth and Exit, which is aligned with the six (6) pillars of HR Leap 6 to complement GHR's strategy and operating model.

PLAN	Business Driven	RETAIN	Total Motivation
RECRUIT	Agile Workforce	GROW	Adaptive Mindset
DEVELOP	Learning Organisation	EXIT	Legacy

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPLOYMENT MANAGEMENT AND GROWTH

Key Highlights

For FY2022

The D&I Policy Statement focuses on :

Membership of TNB Top Management Group

Diversity of employees in terms of background

Expatriate recruitment

Fair & equitable treatment and job opportunities for persons with disabilities (PWDs)

Employee participation in career development

Prioritising safety, health and well-being

Promoting the practice of TNB's Core Values

Creating a safe and free workplace atmosphere from any form of harassment whether verbal, physical, visual or statements in the form of discrimination

Appreciating and rewarding employees based on their contributions towards the Company

In FY2022, TNB Group saw an increase in the number of women in senior management roles from 100 people in FY2021 to

103
people

We continue to provide employment opportunities for

25

Persons With Disabilities (PWD) as at FY2022

TNB supports the right to freedom of association and collective bargaining and promotes

equal pay

for men and women based on their roles and responsibilities, as outlined in our HR manuals and Collective Agreement (CA) document. The Company maintains a basic salary and remuneration ratio of 1:1.



TNB conducted annual ethical standard training for all their employees, contractors and vendors based on the Training & Communication Plan (TCP). The progress is reported to the Board Integrity Committee (BIC) quarterly. The TCP is designed to meet the demands of Integrity Development to carry out integrity related training. This includes introducing an Integrity e-learning module for vendors. The TCP was also developed to close the gaps resulting from the IHI survey conducted by the Integrity Department. A total of 16,588 participants attended the training, accumulating 77,095 training hours.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

Feature Story 6

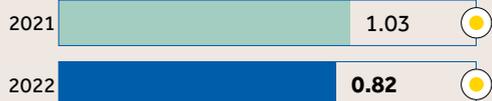
PRIORITISING PEOPLE : SAFEGUARDING SAFETY AND WELL-BEING

At TNB, we place high importance in ensuring the safety of our employees and providing them with a safe working environment. This can be seen clearly through the improvement of our HSE performance in FY2022, where we successfully achieved our target of reducing LTIF to <1.00, recording LTIF of 0.82 in FY2022 compared to 1.03 in FY2021. TNB also recorded zero (0) employee fatalities and two (2) contractor fatalities when conducting operations on sites last year. This can be attributed to the effectiveness of the many guidelines, policies and training undertaken by the Group HSE to safeguard our employees that is in line with our values in ensuring the well-being for all.



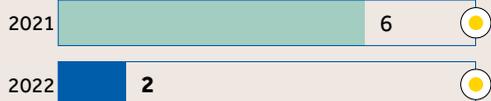
Lost Time Injuries Frequency (LTIF)

LTIF target of <1.0 has been achieved



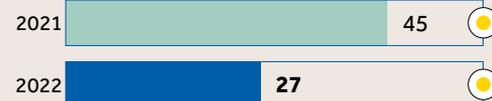
Zero Fatalities Target

Employee and contractor fatalities has reduced over the years



Reduction of LTIF of traffic incidents

Motor Vehicle Incidents reduced by 40%



In FY2022, the Intervention Stop Work (ISW) guidelines was put into effect, allowing all employees and contractors to take responsibility for their safety and trigger a stop work intervention under unsafe work conditions. The guidelines mandates employees and contractors to identify unsafe work behaviour, conditions, or activities that do not follow existing compliance requirements.

TNB introduced the HSE Wallet Application to enable easier and timely reporting of these potential incidents. A total of 263,900 reports has been lodged, indicating that awareness on employee safety and wellbeing continues to be taken seriously. These initiatives have received positive reviews from our workforce, as it has helped to keep them safe throughout their time working on sites.

To appreciate the effort of our employees in sustaining high HSE performance and driving the safety culture transformation, the *Nampak, Dengar dan Rasa Selamat* (NDRS) Awards recognition programme was implemented. Under NDRS Awards programme, we have the NDRS League Awards, Potential Incident (PI) Reporting Awards, Authorised Person (AP) & Competent Person (CP) Awards as well as the Best Safety Health Committee (SHC) Awards. This prestigious NDRS Leagues Award was presented to the league champions on 6 September 2022 during the *Hari Anugerah Kecemerlangan TNB*.

Intervention Stop Work (ISW) Guidelines

The guidelines highlight unsafe work behaviour, conditions, or activities that do not comply to safety standards for employees and contractors

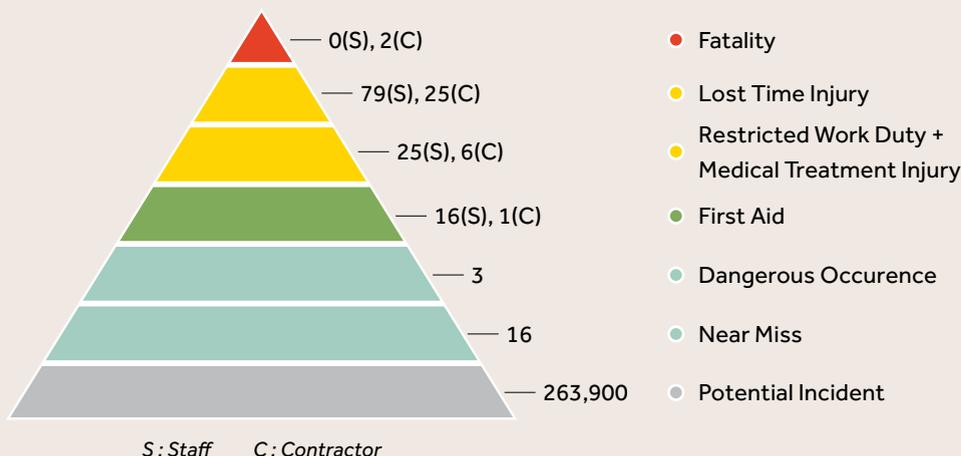
HSE Wallet Application

Digital platform that enables timely reporting for employees to report hazards and potential incidents

Nampak, Dengar dan Rasa Selamat (NDRS) Awards

To recognise our employees efforts in sustaining high HSE performance

Incidents reported according to incident categories



ENHANCING OCCUPATIONAL HEALTH AND SAFETY PRACTICES

Safeguarding the lives of both our employees and contractors through robust occupational safety and health systems and best practices is one of our top priorities. We strongly advocate and implement strong safety standards to prevent occurrence of work-related injuries and illnesses, as well as to achieve our targets of having zero fatality at the workplace and maintaining our Lost Time Injury Frequency (LTIF) rate at below 1.0. We are also well prepared in dealing with emergency situations that may cause potential impact to health, safety as well as the environment.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPHASIS ON HEALTH, SAFETY AND WELL-BEING

IMPLEMENTING SAFETY CULTURE

We believe that safety at our workplace goes beyond standards and policies and should be embedded as a culture within our organisation. In 2021, we attained our targeted Proactive Safety Culture Level whereby our Safety Culture Assessment (SCA) score was 4.02. The assessment is due every two years, with the next assessment due in year 2023, holding the aim to achieve a higher score.

FY2022 Approach

Key Highlights

Tenaga Safety Culture

We have implemented nine (9) Safety Culture Values Activation & Spiritual hour sessions in FY2022 focusing on divisions and subsidiaries that have recorded fatality cases, LTIF more than 1.0 and high numbers of compounds issued in the previous year. This is to instil and sustain the safety culture values of Nampak, Dengar & Rasa Selamat (NDRS) in the hearts and minds of employees at all times.

We have implemented, the NDRS Awards recognition program i.e NDRS League Awards, PI Reporting Awards, Authorised Person (AP) & Competent Person (CP) Awards as well as the Best Safety Health Committee (SHC) Awards to recognise the efforts and contributions of our employees in elevating HSE performance.

A new initiative introduced under the NDRS (Education) is the HSE Culture Change Agent (HSE CCA) programme which was launched by the HSE Department of TGBS in collaboration with TNB ILSAS on 20 June 2022. The objective of implementing this programme is to inculcate the HSE culture among all TNB employees and subsidiaries. The appointed HSE CCA will play a role as a liaison for interaction and communication of the HSE culture, monitor and evaluate aspects of safety in the workplace and support and encourage the implementation of HSE initiatives. A total of 51 HSE CCA were appointed. A comprehensive plan covering governance, engagements and promotion, competency, rewards and recognition were crafted with HSE CCA to ensure the sustainability and expansion of this programme in TNB.

Life Saving Rules (LSR)

TNB has established nine (9) lifesaving rules as part of injury prevention measures

Core Rules



Isolate, earth and
test before touch



Valid permit to
work mandatory



Wear arc flash suit
when switching

Supplementary Rules



Use fall
protection



Obtain
authorisation
before entering
confined space



Wear helmet/
safety belt.No
speeding



Caution.
Suspended load



No phones
while driving



No drugs.
No alcohol

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPHASIS ON HEALTH, SAFETY AND WELL-BEING

FY2022 Approach

Key Highlights

Risk Assessment

In TNB, all work-related hazards are identified, its related risks are assessed and relevant controls to eliminate hazards and reduce risks are determined. This is performed throughout the Company with reference to the Hazard Identification, Risk Assessment and Determining Control (HIRADC) procedure. To determine the controls required to eliminate hazards and reduce risks, a hierarchy of controls such as elimination, substitution, engineering control, administrative control and Personal Protective Equipment (PPE) is used. The effectiveness of the risk assessment is reviewed annually, or when there are incidents and changes in work processes. Additionally, PI reported in the digital platform also will be assessed to alleviate any potential risk.

The Hazard Identification, Risk Assessment and Risk Control (HIRARC) was developed based on the HIRARC Guideline from Malaysia's Department of Occupational Safety and Health (DOSH). Training on HIRARC was conducted periodically with employee & employer representatives. Gaps from these risk assessments were translated as input for improvement in the future. Additionally, any industrial hygiene and occupational health assessments like the CHRA, NRA and ERA are conducted by competent persons registered with DOSH.

These gaps from risk assessments are evaluated through the HSE management system (HSEMS) audit, inspection and enforcement activities. Gaps identified during the audit, inspection and enforcement activities are closely followed up using NCR online system. All these findings are presented in the quarterly DOSH meetings.

Risk assessments conducted by TNB include conducting :

- HSE Risk Assessment (HSERA), Environmental Impact Assessment (EIA), Quantitative Risk Assessment (QRA), Fire Risk Assessment (FRA) and Process Hazard Analysis (PHA) as a standard procedure.
- Chemical Health Risk Assessment (CHRA) for any work activities that relates to hazardous chemicals.
- Noise Risk Assessment (NRA) to identify work related activities with exposure to noise.
- Ergonomic Risk Assessment (ERA) to identify ergonomic related risks at the workplace.

Improvements on Ergonomic Risk Assessment (ERA)

As we have almost 20,000 employees using computers as daily, HSE has developed an e-learning module on office ergonomics in the TNB Learning Management System (LMS) to educate all TNB office workers to improve their posture when using computers at workstations. This will help TNB staff to maintain good physical health. As of 31 December 2022, 11,693 TNB staff have completed the e-learning module. In order to tighten TNB's HSE standard, new specifications for office workstations have been developed in collaboration with TNB Property Service Department (PSD) to ensure the new TNB Platinum Campus, Bangsar is provided with the highest ergonomic standard workstation.

Improvements on Chemical Health Risk Assessment (CHRA)

Completion and rolldown of Online Chemical Register is a best practised initiative in ensuring only approved chemicals are used in TNB operations. Three (3) divisions in TNB have been approved by JKKP Malaysia to implement Generic Chemical Health Risk Assessment (CHRA).

Our Approach

Key Highlights for FY2022

HSE Digitalisation (eHSE online system)

In line with greening our office practises, we continue to take strides towards digitalising our HSE practises by progressively rolling out modules in preparation for the full implementation of our eHSE online system in FY2022.

Key highlights for FY2022 include :

- Enhancement of HSE wallet platform that allows all TNB staffs to report any potential incidents (PI) at their workplace. The objective of this process is to promote intervention of any PI.
- Introduced three (3) new modules in eHSE online system consisting of Legal Compliance, Inspection Module & We Care *Kami Kisah*. The online systems are currently conducted as pilot projects at a few divisions/departments in TNB.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPHASIS ON HEALTH, SAFETY AND WELL-BEING

Our Approach

Key Highlights for FY2022

Health, Safety and Environmental Management System (HSEMS)

We are guided by TNB's Safety and Health Policy to implement our safety governance framework. The TNB Health, Safety and Environment Management System (HSEMS) has progressively been cascaded across divisions to ensure standardisation of HSE management and governance across the Group.

Since the introduction of HSEMS in year 2019, rolldown to divisions and subsidiaries are still ongoing. Along with that, HSE Corporate Audit has been conducted at a few divisions/departments to measure compliance status based on HSEMS elements.

The TNB Group HSE Council, which is supported by division-level HSE Committees, convenes quarterly to discuss safety performance, mitigation measures and the overall strategic direction for HSE management at TNB.

Key highlights for FY2022 include :

- HSE Corporate audit has been conducted for TNB divisions to measure compliance based on HSEMS elements.
- TNB Stop Work Policy has been reviewed and endorsed by our CEO on 30 August 2022.
- Three (3) TNB HSE Council was held quarterly as a form of HSE top management review platform. The 1st, 2nd and 3rd meeting was conducted on 4 February 2022, 28 April 2022 and 31 October 2022.
- Contractors under the Distribution Network Division are required to provide safety quality assurance through self-declaration of safety compliance before commencing work.

Accident reduction programmes

The TNB Safety Information System (TSIS) captures reports of incidents and near misses which are then investigated for corrective and preventive actions for improvement to be identified and taken. The Intervention Stop Work (ISW) programme was developed to ensure our workers are able to safely remove themselves from work situations that they believe could cause injury or ill health.

Key highlights for FY2022 include :

- Endorsement of Intervention Stop Work (ISW) guideline. Through this guideline, all TNB employees and contractors can rightfully issue a stop work order at any premise or workspace, given that any unsafe behaviour, unsafe conditions, or regulatory non-compliance are detected.
- *Ops Sikap* is an initiative that has been proposed during HSE Lab 2022. The purpose of implementing this initiative is among the identified quick wins to maintain LTIF performance until the end of 2022 by monitoring HSE compliance at work sites. In FY2022, 15 inspections were carried out and four (4) stop work orders were issued. The results of this initiative showed positive outcomes as the LTIF ratings in November 2022 stood at 0.86 and decreased to 0.82 in December 2022. HSE Compliance among staff has improved over time. However, there is still a lot of room for improvement for HSE compliance by contractors. All staff and contractors are encouraged to continue practicing safe work practises to reduce the risk of accidents at the work site.
- A webinar on Fatigue Management was held to educate staff on ways to manage fatigue and work stress to subsequently improve their work quality.
- SUTRa (Station Under The Radar) is a new initiative introduced to assist business units, zones and sub-zones to increase the level of compliance with legislation and Distribution Network's (DN) internal directives towards the achievement of zero fatal accidents in DN. It was carried out in key locations, namely Kelantan and Kedah. This initiative resulted in TNB receiving no compounds or lawsuits in year 2022 in these locations.

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPHASIS ON HEALTH, SAFETY AND WELL-BEING

EMERGENCY RESPONSE – FLOOD

We intensified our flood preparations as the country received warnings of flash floods across the country from the Department of Meteorology. Since July 2022, we undertook efforts to reduce water levels in hydroelectric dams, construct retaining walls at the entrance of main intake substations and raise the level of equipment platforms at identified flood prone areas. These steps will assist in preventing flood damage to TNB's operations. Machinery and assets, such as mobile and portable generators, were also put on standby and ready to be deployed when needed. Additionally, employees undergo flood response training even before the start of the monsoon season to ensure that they are able to handle unprecedented situations in case of emergency. Personnel from DN division were engaged as part of the Security Emergency Team to provide round-the-clock assistance to affected customers.

As flood levels rose in several areas of Peninsular Malaysia, we took proactive measures to shut down affected power substations, due to safety considerations. We are saddened to report that an incident involving electrocution of three (3) people occurred on 19 December 2022. This incident happened while they were wading floodwaters near their house in Tumpat, Kelantan. Members of the public are reminded to exercise caution to avert electrical hazards during floods and report to TNB for further action. We have also published flood safety guidelines on our online platform for public action.

EMERGENCY RESPONSE – EQUIPMENT FAILURE

This year, an isolated case of blackout caused by equipment failure in one of our substations had caused blackouts in several parts of the country. The blackout occurred in July and had affected our customers in several areas of Klang Valley, Negeri Sembilan, Penang, Pahang and Johor. Power was restored within 20 minutes from the occurrence of the incident. The quick restoration of power supply proved that TNB's continued improvement of the national grid supply, including our smart grid, is able to overcome problems of power supply efficiently. An investigation was carried out by Energy Commission on this incident and has confirmed that TNB was clear from any misconduct and adheres to its best practices and maintenance schedule.

EMERGENCY RESPONSE – CREW FATALITY

On 18 April 2021, a fatality incident involving Distribution Network division's field crew member occurred in Kuala Lipis, Pahang. The crew member was electrocuted while working on an electric pole. The victim was given emergency CPR rescue until paramedics arrived. The victim was rushed to the hospital for further treatment and passed away on the same day.

Measures were quickly taken to ensure no reoccurrence of a similar incident. whereby all DN division workers were ordered to stand down by Chief Distribution Network Officer (CDNO). An Incident Alert report was issued on the next day together with a stop work order also issued for all electrical work by DN division nationwide to ensure the safety of workers while tools and equipment were inspected.

The incident case has since been concluded. Contributions from Tabung Prihatin DN were channelled to the victim's family by Head of Zone Asset (HoZA) East on 29 April 2021 to assist the family.

OUR PERFORMANCE IN FY2022

We have seen an improvement in our safety performance reflected by the decrease in our Group-wide Lost Time Injury Frequency (LTIF) from 1.03 in FY2021 to 0.82 in FY2022.

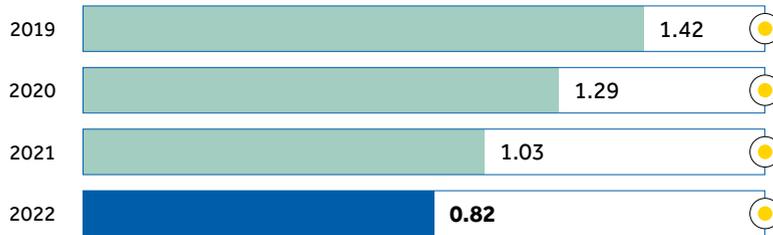
Indicators	2019	2020	2021	2022
Lost Time Injuries (LTI) Frequency Rate of employees	1.42	1.29	1.03	0.82
Fatalities of employees	2	1	2	0
Lost Days Severity Rate (per million-man hours)	153.14	93.09	87.12	16.69

ENGAGING OUR PEOPLE AND CULTIVATING TALENT

EMPHASIS ON HEALTH, SAFETY AND WELL-BEING

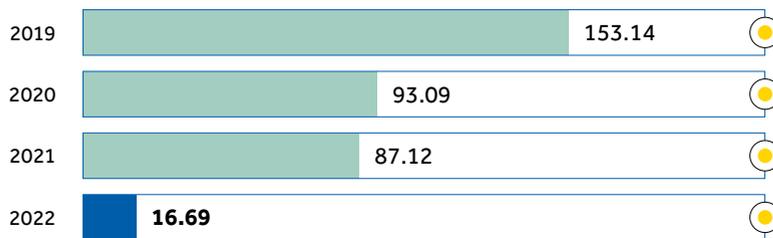
LOST TIME INJURIES (LTI) FREQUENCY RATE OF EMPLOYEES

(Per million-man hours)



LOST DAYS SEVERITY RATE OF EMPLOYEES

(per million-man hours)



Total Recordable Incident and Number of Potential Incident Reported for FY2022.

Indicators	2022
Total recordable incident	120
Number of Potential Incident Reported	263,900

In 2022, 12% (4,047) of total employees completed HSE trainings, achieving a cumulative of 27,252.5 training hours.

Training	2019	2020	2021	2022
Number of employees completed HSE training	4,539	1,027	5,943	4,047
Percentage of employee trained	16	4	22	12
Training Hours	69,190	16,813	103,225	27,253

We also reduced motor vehicle accidents from 45 cases in FY2021 to 27 cases in FY2022. Meter reading accident also reduced by 50% this year.

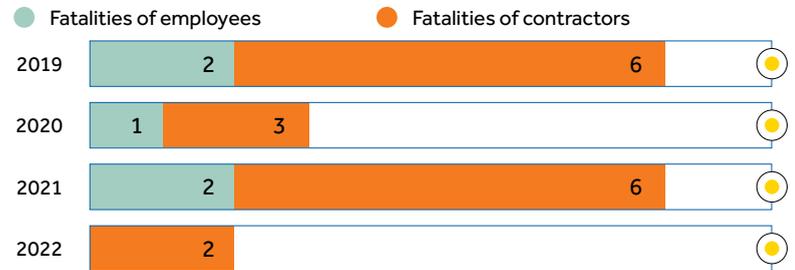
We are however deeply saddened to report that there were two (2) work-related fatalities this year involving two (2) contractors. In our efforts to mitigate these events in the future, we are enhancing our safety procedures and conducting more safety awareness and training sessions across the Group. These include :

- Enhancing safety management procedures, especially for contractors
- Strengthening competencies of contractors
- Continual improvement of our eHSE online system

SUPPORTING EMPLOYEES HEALTH AND WELLNESS

As part of our commitment towards Environmental, Social & Governance (ESG) initiatives, TNB encourages our employees to lead an active lifestyle that will nurture good health, promote work-life balance and overall well-being.

NUMBER OF FATALITIES



Various wellness initiatives conducted for our employees such as :

- Basic health screening for all our employees nationwide to monitor their health status.
- Subscription to the BookDoc mobile application to encourage employees to be active by tracking their daily steps.
- Anugerah Piala Presiden – An annual TNB-wide awards ceremony to reward top steppers in various categories.
- Wellness Wednesday programmes in collaboration with our panel hospitals on health-related topics.
- Empower Your Health programmes to encourage a healthy lifestyle among TNB employees.

In recognition of our commitment and initiatives to improve our employees' well-being, TNB has won Gold in the Activ@Work Challenge Perkeso Award for three (3) consecutive years in a row. This award is presented by the Social Security Organisation (PERKESO).

CREATING SHARED VALUES WITH COMMUNITIES

CREATING SHARED VALUES WITH COMMUNITIES

Feature Story 7

ENHANCING THE WELL-BEING OF ORANG ASLI COMMUNITIES



As part of TNB's continuous goals to build sustainable communities, we have launched a new initiative to provide scholarships to Orang Asli children. This special scholarship will provide monetary assistance to help Orang Asli children from B40 households to further their studies up to tertiary level. It is also part of TNB's commitment to improve the lives of Orang Asli settlement communities living near TNB operation centres.

The Jabatan Kemajuan Orang Asli (JAKOA) were roped in to propose potential scholarship receivers and 10 students were chosen to be enrolled into business and accounting programmes at Diploma levels in UNITEN's Sultan Haji Ahmad Shah Campus (KSHAS). Through this initiative, TNB aspire to uplift the communities through higher education and open up a more job opportunities in order to deliver improvement in socioeconomic levels, towards a better future.

In addition to our decarbonisation initiative, Nenggiri Hydroelectric Project (HEP) engaged the local communities including the Orang Asli communities residing in Gua Musang, Kelantan with the aim to positively impact these communities in our operating areas. During the development phase, we will continue to ensure that their welfare and well-being are addressed within our best capabilities. The project will address several issues that have been plaguing the area, such as reducing the impacts of floods in the state, improving irrigation systems and clean water supply, as well as better access to amenities, jobs and entrepreneurial opportunities. TNB continues to engage with stakeholders, such as local communities and regulators to ensure their interests and concerns are communicated and taken care of. This project will also align with the government's agenda of increasing green power generation from RE sources.

CONTRIBUTING TO COMMUNITY DEVELOPMENT

We believe in building the nation through provision of reliable and affordable electricity, as well as contributions that engage and develop the community. We aspire to drive progress and bring positive impact in the community through our various programmes.

In FY2022, we invested a total of RM12.20 million into community programmes which were allocated according to the four (4) focus areas of :

SOCIAL



We believe that capability, social and community development supports livability and enhances livelihood by uplifting the economic and social quality of life.

FY2022 Contributions :
RM4.27 million

ENVIRONMENT



We believe that the future of our planet and next generation depends on our responsible behaviour today.

FY2022 Contributions :
RM0.48 million

GOVERNANCE



We believe that education can transform lives of not just one individual but families and generations.

FY2022 Contributions :
RM2.27 million

SPORTS



We believe that sports play an important role to unify our community and build a healthy nation.

FY2022 Contributions :
RM5.18 million

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

ECONOMIC AND SOCIAL TRANSFORMATION

We strive to accelerate growth in local communities by conducting initiatives parallel to the needs of the people.

Community and Rural Development

Rural Electrification (BELB) Programme



TNB, with support from Ministry of Rural And Regional Development, supplies power to rural areas such as villages and Indigenous People settlements that are not within the operational area of local authorities through the Rural Electrification Programme (BELB). We connect these villages to our grid lines, where possible. For settlements too remote to be connected to our grid lines, we utilise off-grid alternatives such as solar hybrids, generator sets and mini hydro. In FY2022, we have improved connectivity of around 18 villages.

Village Street Lighting (LJK) Programme



The government introduced the Village Street Lighting (LJK) programme in 2002 with the purpose to ensure public areas in remote villages are well lit at night, facilitating community safety. Since 2002, 420,696 streetlights were successfully installed.

Sumbangan Kenderaan Terpakai

Through this initiative, TNB spent RM205,837 to acquire and donate six (6) used vehicles, consisting of one (1) pick-up truck, four (4) funeral vans, and one (1) passenger van to underprivileged communities and NGOs.

Through this initiative, TNB spent

RM205,837

to acquire and sustainability

donate

6

used vehicles

consisting of

1

pick-up truck

4

funeral vans

1

passenger van

Sumbangan Komputer Riba Terpakai

This initiative was introduced to provide laptops and tablets to students from low-income families. TNB contributed RM40,700 for this initiative.

Pos Kawalan Tempatan Kejadian (PKTK) in Lembah Bertam, Cameron Highlands

As a contribution to the local community of Lembah Bertam, Cameron Highlands, TNB allocated RM2.58 million to construct a multipurpose hall that will serve as a community centre and emergency assembly point for the local community during floods or other natural disasters. This hall includes facilities such as a covered futsal court, operations room and prayer room. The facility, which will be managed by the Cameron Highlands District Council (CHDC), was handed over in 2022. As of FY2022, RM2.41 million has been spent on the development of this project.

TNB contributed

RM40,700

for Pos Kawalan Tempatan Kejadian (PKTK) in Lembah Bertam, Cameron Highlands

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

Promoting Energy Efficiency

LED Streetlight Replacement Programme

Since 2018, we have begun replacing High-Pressure Sodium Vapour streetlights with LED lights which are more cost and energy efficient. The lower wattage from LED lights resulted in an estimated kWh and cost savings of about 30%-40%. In FY2022, this initiative was introduced in 10 more cities, with an additional 50,866 lights installed across Peninsular Malaysia, bringing the cumulative total up to 595,427 units.

The lower wattage from LED lights resulted in an estimated kWh and cost savings of about

30%-40%

Providing Homes for Community Well-Being

Home for the Needy



Through our Home for the Needy programme, we have helped refurbish and build new homes for 40 families, mainly B40 communities and hardcore poor including single parents, senior citizens and differently-able individuals. In FY2022, we spent RM1.26 million on this initiative. This programme is carried out under two (2) concurrent projects namely Program Baiti Jannati (PBJ) and Program Mesra Rakyat (PMR). To date, we have contributed more than RM31.11 million and provided 1,287 new and refurbished homes to the needy.

Better Brighter Shelter



Through this programme, we provided accommodation facilities to family members of those who have come from rural areas to receive medical treatment in the city such as dormitories and transit homes. This service is provided to the underserved communities from rural areas or the outskirts of Kuala Lumpur. We partnered with Melaka Hospital's National Welfare Foundation, the National Heart Institute (IJN) Foundation and Melaka Hospital. In FY2022, around RM245,000 was allocated for this programme, with a breakdown of RM200,000 and RM45,000 spent on IJN and Melaka Hospital respectively.

ENVIRONMENTAL SUSTENANCE PROGRAMMES WITH THE COMMUNITY

Conservation of the environment and natural resources is crucial in safeguarding both the diversity of flora and fauna, as well as the livelihoods of surrounding communities.

TNB's environmental sustenance programmes conducted are as follows :

Mangrove Planting Programme

As a part of our reforestation efforts, we conducted the second phase of mangrove planting programme which started in FY2021. The second phase involved planting 2,000 mangrove trees at Sg Limau, Manjung, Perak with a cost of RM100,062.

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

TRANSFORMING LIVES THROUGH EDUCATION

In FY2022, we continued our commitment to provide accessibility to quality education through significant investments in our key educational institutions – UNITEN, TNB ILSAS, Yayasan Tenaga Nasional (YTN).

UNITEN – THE ENERGY UNIVERSITY

The establishment of UNITEN in 1997 exemplifies TNB's unwavering commitment to provide top-notch education to the masses, aimed at producing a generation that is competitive, innovative and resilient in the long run. As part of its BOLD2025 Refresh strategic plan, UNITEN is dedicated to supporting TNB in realising this vision by offering a diverse range of academic programmes, including Engineering, Computer Science & Information Technology, Business & Accounting and Energy Economics. The university also provides cutting-edge teaching and learning facilities on campus. BOLD2025 Refresh has five (5) primary objectives – Ranking, Enrolment, Teaching, Research and Financials – and results for FY2022 show that all the five (5) goals have been accomplished.

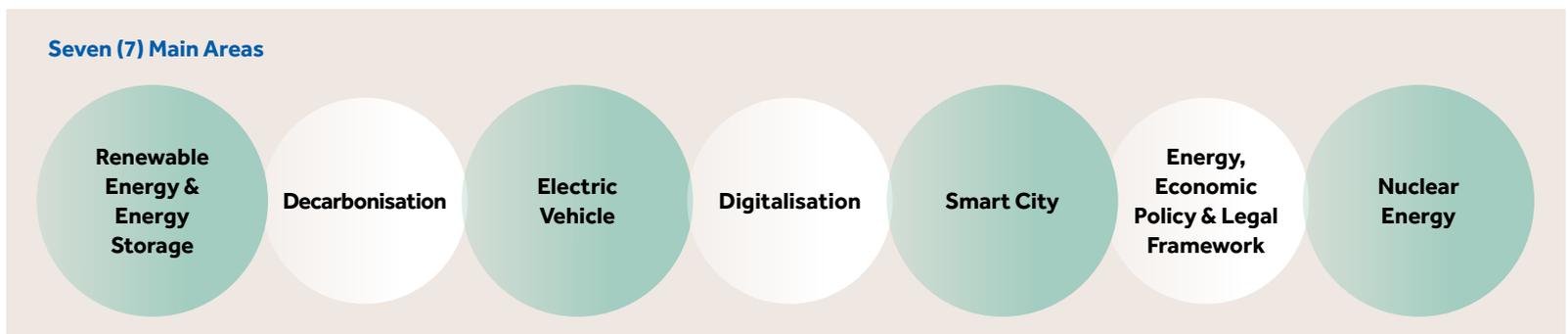
BOLD2025 Refresh is a strategic plan that comprises three strategic goals : teaching and learning excellence, research excellence and financial sustainability. Through this BOLD2025 Refresh, UNITEN contributes to TNB in aspect of :



UNITEN is also embarking on energy-related research that facilitates the solution to any operational challenges faced by TNB and the industry, as well as creating wealth from innovation. Through its financial ecosystem that involves *Yayasan Canselor UNITEN (YCU)* and *Tabung Amanah Zakat UNITEN (TAZU)*, UNITEN is able to offer various scholarships and financial assistance for students to pursue their studies at UNITEN, which addresses the nationwide issue of affordability in tertiary education.

In June 2022, UNITEN established the National Energy Excellence Centre (NEC) to strengthen energy transition. This centre of excellence aims to cover issues of climate change, sustainable development and renewable energy (RE) at the national and global levels. NEC will play a strategic role in strengthening Malaysia's commitment to make the country carbon

neutral as early as 2050 and meet TNB's aspirations of achieving net zero emissions by 2050. NEC as National Key Labs will form a Strategic National Energy Framework with the target of Malaysia as an energy hub and industry players having the opportunity to become strategic partners by opening a branch or satellite incubator laboratory. Currently, UNITEN has five (5) centres of excellence namely; Institute of Sustainable Energy (ISE), Institute of Power Engineering (IPE), Institute of Energy Infrastructure (IEI), Institute of Energy Policy & Research (IEPre) and Institute of Informatics & Computing in Energy (IICE). These centres will be incorporated in the National Key Labs which will encompass other universities, local and abroad, with HICoE standard or equivalent. NEC will be focusing on seven (7) main areas :



CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

This year, UNITEN awarded RM6.81 million to a total of 1,361 recipients, a decrease from the RM6.79 million awarded to 1,766 students last year.

UNITEN FUNDING AND SCHOLARSHIPS

UNITEN BRIGHT Scholarship	UNITEN BRIGHT B40 Scholarship	UNITEN Merit 50% KSHAS Scholarship	Dana Pendidikan UNITEN	Projek Perintis APEL MBA UNITEN
UNITEN BRIGHT/MERIT-Dato Low Tuck Kwong Scholarship	Dermaiswa Yayasan Canselor UNITEN (YCU)	Biasiswa Pelajaran Tabung Amanah Zakat UNITEN (TAZU) (B40)	Biasiswa Pelajaran *TAZU (YPPB)	Biasiswa Pelajaran TAZU (BPT)
Dermaiswa B40 JPA in cooperation with YCU	Biasiswa UNITEN (Postgraduate) Master Talent	Biasiswa UNITEN (Postgraduate) PhD Talent	Biasiswa UNITEN (Postgraduate) Master Excellence	Biasiswa UNITEN (Postgraduate) PhD Excellence

**Danasiswa Pensijilan Tahfiz TAZU (MARA)
(Formerly known as Dermaiswa Pelajar Cemerlang)*

UNITEN PERFORMANCE IN FY2022

1,570

graduates from UNITEN

144th

in the QS Asia University Rankings 2023

96.78%

employability rate

U.S. News & World Report

Best Global Universities

for Engineering 2022 #189
(2021 edition : #227)

Among

top 1%

Nine (9) UNITEN researchers ranked in the top 1% by citations for fields and publication year in the Web of Science %TM

Four (4) UNITEN researchers ranked

Top 2%

Scientists Worldwide 2022 by Elsevier

Ranked

#751-800

among universities around the world by QS World University Rankings 2023

Ranked

#2

among ASEAN universities by Applied HE Private University Rankings 2023

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

Key Activities	FY2022 Key Highlights
TNB Corporate Integrity Health Index (IHI) 2.0	<ul style="list-style-type: none"> The Integrity Health Index (IHI) Dashboard was first developed in 2021 as a systematic method for information gathering to assess and ascertain TNB's standings on integrity issues. The second revamped version aims to broaden the scope of IHI to include other TNB stakeholders.
Student Information Management System (SIMS)	<ul style="list-style-type: none"> The Student Information Management System (SIMS) was developed for YTN. The system integrated the functionality that previously required the use of three separate systems - Microsoft Great Plains (MSGP), MicroPac and Legal Management System (LMS).
Blueprint for Electrifying Public Transportation (Studies For Ministry Of Transport As Part Of TNB's EV Advocacy Programme)	<ul style="list-style-type: none"> The aim of this project is to develop a blueprint for electrifying public transportation. This includes conducting benchmarking studies on best practices of EV infrastructure development and electricity pricing. The study will encompass the evaluation towards social, economic and technological aspects of EV adoption in Malaysia. It also provides policy recommendation related to the economic viability of electrifying TNB's fleet of vehicles.
Power Studies For the Construction and Completion of LRT3 from Bandar Utama to Johan Setia	<ul style="list-style-type: none"> This project aims to provide design services for the power supply and distribution system of LRT3. The main scope and responsibility of this project is to perform simulation studies and analysis in the power supply and distribution system which includes, Alternating Current (AC) simulation, harmonics, protection coordination, insulation coordination, substation earthing/touch potential, lightning protection and electromagnetic compatibility studies.

TNB INTEGRATED LEARNING SOLUTION SDN. BHD. (ILSAS)

TNB ILSAS is a premier training institution for professionals in the wider power and utility industry and the official training institute for Tenaga Nasional Berhad (TNB). All of the technical capability development programmes conducted by ILSAS are in line with the Malaysia standard requirements. The training modules in ILSAS are also accredited by City & Guilds UK (for technical programmes) and Institute Leadership & Management (ILM) UK (for leadership & management training modules).

The ILSAS International Conference on Learning & Development 2022 (ICLAD2022) is an initiative designed to support the ASEAN Sustainability Pathways 2050 and serves as platform to spread awareness of ESG for a sustainable future. ICLAD aims to be the leading platform for people from various vocations to learn, discuss, present and build network with subject matters experts around the world. The 6th ICLAD conference was held on from 29 November to 1 December 2022 with the theme "Towards Energy Transition : Harmonizing With The New Norm".

The main objectives of ICLAD2022 are :

1. To support the ASEAN Sustainability Pathway 2050 and awareness of ESG for a sustainable future.
2. To equip participants with the relevant knowledge and chance to listen to different points of view, learn new ideas and trends in ESG matters from other organisations.
3. To encourage leaders and participants from other organisations to meet and establish collaboration early through networking and exchanging of ideas.
4. To elevate the motivation amongst participants to build in confidence to lead and contribute towards organisation to become a global company.
5. To provide participants with the necessary skills such as research, public speaking, critical thinking, creative thinking, system/apps development to be able to compete in the modern labour market.

2,071 participants attended the conference, with 15 keynote guests presenting at the event. The event is designed with the main objective to support the ASEAN Sustainability Pathways 2050 and an awareness of ESG for a sustainable future. We are delighted with the collaboration with PT Perusahaan Listrik Negara to co-organise the event in which strengthened the relationship between the two national utility companies.

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

Key Highlights

In FY2022

6th

ILSAS International Conference on Learning and Development (ICLAD) was conducted under a hybrid mode and received commendable feedback from participants

Received

Malaysia's Best Technical & Vocational Education & Training (TVET) Institution (Sustainability) 2022 Award

by Education & TVET Asia

Won the Malaysia Education & TVET Awards (META) 2022 for

Malaysia Best TVET Institution (Sustainability) category

288

employees with

133

trainers

50,912

individuals trained

Received the Energy Institute Awards 2022 for

Talent Development & Learning Category

by Energy Institute (UK)

8th Annual International Smart Grid Action Network (ISGAN) Awards (USA) Excellence in Smart Grid Workforce Development (Honorable Mention)

3rd place

TNB Reskilling Malaysia – In Supporting AIMI Workshop Development Programme

Intelligent Cloud Base VR LMS Technical Competency Assessment Solution

Selangor R&D and Innovation Expo (SRIE) 2022 Award

YAYASAN TENAGA NASIONAL (YTN)

Yayasan Tenaga Nasional (YTN) was established with the mission to transform lives through excellent education opportunities. Since its inception in 1993, YTN has been governed by a Board of Trustees and an organisation committee to provide financial assistance through the award of scholarships and study loans to suitable candidates based on merit to pursue higher education locally and abroad. To date, we have invested over RM1.80 billion in and helped over 20,500 students achieve their dreams.

The My Brighter Future (MyBF) Program is one of the initiatives set up under YTN which aims to provide opportunities to marginalised youth and families in the B40 bracket to pursue tertiary education in Science, Technology, Engineering & Mathematics (STEM) and TVET at any of seven (7) selected public universities, community colleges and polytechnic institutions in Malaysia. The MyBF Program covers tuition fees, boarding and living expenses of recipients pursuing tertiary education.

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

Key Highlights

In FY2022

RM45.90 million

in financial aid provided to MyBF scholars

4,354

students benefitted from MyBF scholarships

YTN provided a total of **RM101 million** to **5,753 recipients**

through financial aid and scholarship

Initiated a new student development program named

PRIME (Professional, Reliable, Innovative, Marbel and Edge)

under the MyBF Student Development Program. The objective of this programme is to build up competencies based on actual experience by students in doing social business, CSR and digital marketing.

Scholarship for Orang Asli children

was established to provide financial assistance in education.

Support for Education and Sports



Program Ceria ke Sekolah Programme

Every year, TNB holds the *Ceria Ke Sekolah* Programme to provide the primary school students from low-income families with adequate school supplies such as school uniform, shoes, socks, school bag and stationeries. In FY2022, 4,874 students benefitted from RM1 million channelled by TNB into this programme.



PINTAR School Adoption Programme

The PINTAR School Adoption Programme was continued in FY2022 with 11 primary schools adopted across Peninsular Malaysia. TNB allocated RM315,000 for three (3) years (until FY2023) under this programme. This year, we allocated RM318,000 for the programme, involving 150 students from standard four (4) class.



TNB Prime Scholarship

This education fund was established to sponsor high academic achievers regardless of household income group to further study overseas, in UNITEN and in public universities, benefitting 128 students.

CREATING SHARED VALUES WITH COMMUNITIES

CONTRIBUTING TO COMMUNITY DEVELOPMENT

Support for Education and Sports



TNB Shine Sponsorship

This programme provides education loan assistance for average academic achievers regardless of household income group to study in UNITEN, public universities and polytechnics around the country, benefitting 783 students.



Biasiswa Khas TNB for Orang Asli Children

This scholarship serves as a contribution from TNB to the local indigenous communities, especially for Orang Asli communities living in settlement locations near TNB's operational centres such as power stations and others. 10 students were sponsored to further their studies in business and accounting fields at Diploma level.



National Hockey Development and Thunderbolts Programme

Through this programme, TNB employees who were former national hockey players volunteered to coach promising students from *Sekolah Sukan Bukit Jalil in Kuala Lumpur, Sekolah Sukan Tunku Mahkota Ismail in Johor, Sekolah Menengah Kebangsaan Seberang in Temerloh, Pahang, Sekolah Menengah Kebangsaan Anderson in Perak and Sekolah Menengah Kebangsaan Pengkalan Permatang in Kuala Selangor, Selangor*. Since its inception in 2006, this programme has successfully nurtured several national hockey players and in FY2022, we contributed RM5.18 million.

ENGAGING INDIGENOUS PEOPLE

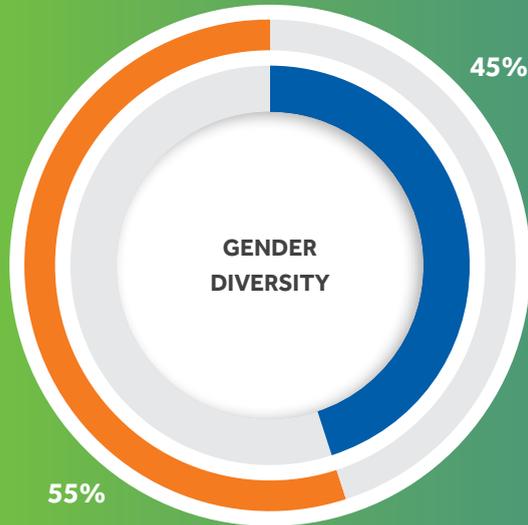
Engaging with the communities we serve, including Indigenous Peoples or Orang Asli communities, is a fundamental commitment of TNB.

INITIATIVES TO ENGAGE INDIGENOUS COMMUNITIES

We actively engage communities, including the Orang Asli communities, who live near our operation sites and roll out initiatives with the purpose of protecting their well-being and generating socioeconomic benefits. To provide educational assistance to them, TNB has also set up a new scholarship fund to be distributed to underprivileged Orang Asli children. This makes education accessible to the Orang Asli and thereby providing an opportunity to alleviate their living standards and pursue ambitious academic and career goals.



OUR BOARD AT A GLANCE



● Male ● Female

BOARD COMMITTEES

■ Chairman of Respective Committee

A Board Audit Committee

F Board Finance and Investment Committee

T Board Tender Committee

NR Board Nomination and Remuneration Committee

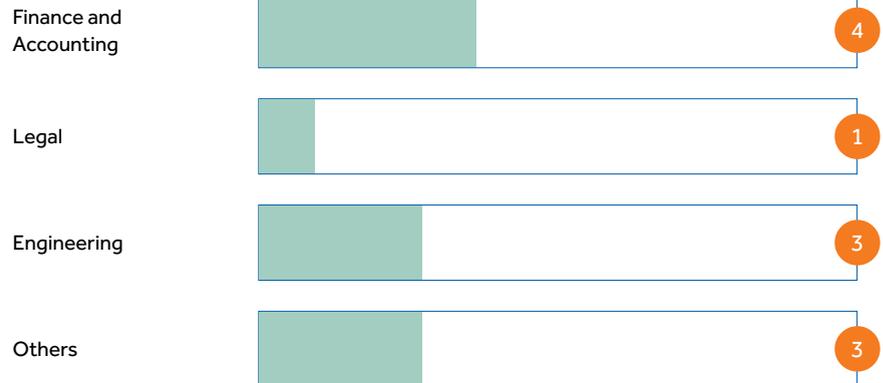
R Board Risk Committee

L Board Long Term Incentive Plan Committee

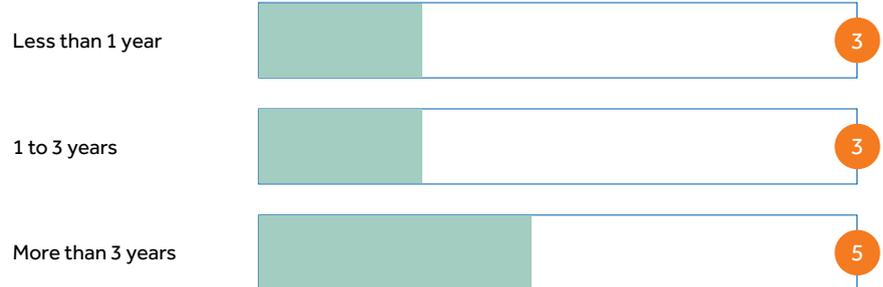
I Board Integrity Committee

Note :
The above information disclosed represents the number of Directors, excluding Alternate Director.

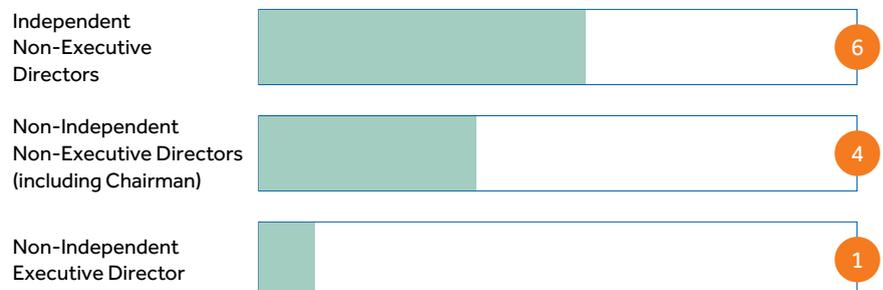
SKILLS AND EXPERIENCE MATRIX



BOARD TENURE



BOARD COMPOSITION



AGE DIVERSITY



BOARD OF DIRECTORS' PROFILE



DATO' ABDUL RAZAK BIN ABDUL MAJID

Chairman, Non-Independent Non-Executive Director
Appointed Director by Minister of Finance (Incorporated) (MoF Inc.),
the Special Shareholder of TNB

● Nationality : Malaysian	● Age : 72	● Gender : Male
● Date of Appointment : 27 March 2023	● Year(s) of Directorship : Less than one (1) year	
● Date of Last Re-Election : Nil	● Board Committee(s) : Nil	
● Board meetings attended in the Financial Year :		N/A

Academic/Professional Qualification(s) :

- Masters Degree in Business Administration, Ohio University, United States of America
- Bachelor of Electrical Engineering, Brighton University, United Kingdom

Skills, Experience and Expertise :

- Chairman of two (2) Energy Commission Committees (Supply Chain and Licensing) (2022 - Present)
- Member of Action Committee for the establishment of National Energy Centre (2022 - Present)
- Member of the Independent Advisory Panel, Malaysian Petroleum Resources Corporation (2021 - Present)
- Senior Independent Non-Executive Director (February 2023 - March 2023) and Independent Non-Executive Director (2018 - 2023) of PETRONAS Gas Berhad
- Chief Executive Officer, MyPOWER Corporation (2nd term) (2018 - 2020)
- Chairman, Energy Commission of Malaysia (2014 - 2018)
- Chief Executive Officer, MyPOWER Corporation (1st term) (2009 - 2014)
- Senior Vice President (Corporate Affairs), Tenaga Nasional Berhad (TNB) (2008 - 2009)
- Vice President (Generation), TNB (2004 - 2008)
- Has served Lembaga Letrik Negara/TNB for 36 years since 1973, where his career achievements in TNB included assignments in Planning, Construction and Operations in all three (3) core divisions of Generation, Transmission and Distribution of TNB
- Seconded to the Economic Planning Unit, Prime Minister's Department (1998 - 2001)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



DATO' INDERA IR. BAHARIN BIN DIN

President/Chief Executive Officer,
Non-Independent Executive Director
Appointed Director by MoF Inc., the Special Shareholder of TNB

● Nationality : Malaysian	● Age : 59	● Gender : Male
● Date of Appointment : 1 March 2021	● Year(s) of Directorship : Two (2) years	
● Date of Last Re-Election : 10 May 2021	● Board Committee(s) : Attends Board Committees' Meetings (By Invitation)	
● Board meetings attended in the Financial Year :		15/16

Academic/Professional Qualification(s) :

- Master of Business Administration - joint MBA programme between Universiti Tenaga Nasional, Malaysia and Bond University, Australia
- Bachelor of Science (Electrical Engineering), Syracuse University, New York, United States of America
- Certified Professional Engineer of the Board of Engineers (BEM), Malaysia
- Member of the Institution of Engineers, Malaysia
- Qualified Competent Engineer (up to 33kV)
- Qualified Service Engineer (up to 33kV)

Skills, Experience and Expertise :

- President/Chief Executive Officer, TNB (2021 - Present)
- Chief Distribution Network Officer, TNB (2018 - 2021)
- Vice President (Distribution), TNB (2012 - 2018)
- Senior General Manager (Customer Service and Metering), Distribution Division, TNB (2011 - 2012)
- Managing Director, Sabah Electricity Sdn. Bhd. (2007 - 2011)
- Seconded to the Ministry of Energy, Green Technology and Water (KeTTHA), for two (2) and a half years, where he served as the Deputy Director for the Electrical Inspectorate Department in Sabah. He then became the Director for the Electrical Inspectorate Department in Pahang
- Built his career in TNB where he had served in various engineering and managerial positions within the Company, including Business Development, Network Maintenance, Network Planning, Construction Services, Metering Service and Engineering Services

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Malaysian Industry-Government Group For High Technology

BOARD OF DIRECTORS' PROFILE



DATIN RASHIDAH BINTI MOHD SIES

Non-Independent Non-Executive Director

Appointed Director by the MoF Inc., the Special Shareholder of TNB

● Nationality : Malaysian	● Age : 59	● Gender : Female
● Date of Appointment : 10 April 2023	● Year(s) of Directorship : Less than one (1) year	
● Date of Last Re-Election : Nil	● Board Committee(s) : Nil	
● Board meetings attended in the Financial Year :		N/A

Academic/Professional Qualification(s) :

- Masters in Business Administration, US International University California, United States of America
- Bachelor in Business Administration, Idaho State University, United States of America
- Diploma in Public Administration, National Institute of Public Administration (INTAN), Malaysia

Skills, Experience and Expertise :

- Deputy Secretary General of Treasury (Management), Ministry of Finance (22 March 2021 - Present)
- Under-Secretary, Government Investment Companies Division, Ministry of Finance (1 April 2018 - 2021)
- Deputy Under-Secretary, Commercial Sector, Government Investment Companies Division, Ministry of Finance (2016 - 2018)
- Head of Commercial Unit, Government Investment Companies Division, Ministry of Finance (2009 - 2016)
- Principal Assistant Secretary of Investment, Finance Division, Minister of Finance (Incorporated) (2003 - 2016)
- Assistant Secretary, Investment Section, Finance Division, Ministry of Finance (1989 - 1997) and Privatisation Section, Finance Division, Ministry of Finance (1998 - 2003)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Technology Depository Agency Berhad
- Uda Holdings Berhad
- Danainfra Nasional Berhad
- Bank Pembangunan Malaysia Berhad
- Syarikat Jaminan Kredit Perumahan Bhd.
- Syarikat Jaminan Pembiayaan Perniagaan Berhad

BOARD OF DIRECTORS' PROFILE



DATUK AMRAN HAFIZ BIN AFFIFUDIN

Non-Independent Non-Executive Director
Representing Khazanah Nasional Berhad, a Major Shareholder of TNB

● Nationality : Malaysian	● Age : 48	● Gender : Male
● Date of Appointment : 22 June 2017	● Year(s) of Directorship : Five (5) years	
● Date of Last Re-Election : 2 June 2022	● Board Committee(s) : F T NR L I	
● Board meetings attended in the Financial Year :		16/16

Academic/Professional Qualification(s) :

- Bachelor of Science in Commerce (Majoring in Accounting and Finance), the McIntire School of Commerce, University of Virginia, Charlottesville, United States of America
- Attended executive/professional courses at Harvard Business School and London Business School

Skills, Experience and Expertise :

- Executive Director, Head, Malaysian Investments, Khazanah Nasional Berhad (2023 - Present)
- Executive Director, Investments, Head of Energy, Iskandar, Leisure and Tourism, Khazanah Nasional Berhad (2022)
- Executive Director, Head of Energy and Infrastructure, Khazanah Nasional Berhad (2020 - 2021)
- Executive Director, Investments, Khazanah Nasional Berhad (2018 - 2020)
- Director, Investments, Khazanah Nasional Berhad (2013 - 2018)
- Senior Vice President, Investments (Property/Healthcare), Khazanah Nasional Berhad (2011 - 2013)
- Investment Manager, Ethos Capital Sdn. Bhd. (2009 - 2011)
- Principal Consultant/Advisor, Nusa Capital Sdn. Bhd. (2006 - 2009)
- Director, Juwana Group of Companies (2005 - 2006)
- Senior Vice President, Namirah Ventures Pte. Ltd. (2000 - 2005)
- Analyst, Equities Investment, Petroliam Nasional Berhad (PETRONAS) (1998 - 2000)
- Corporate Finance Executive, Group Finance Division, PETRONAS (1997 - 1998)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Iskandar Investment Berhad
- Malaysia Programme Office for Power Electricity Reform Corporation
- UEM Group Berhad
- Yayasan Hijau Malaysia

BOARD OF DIRECTORS' PROFILE



ROHAYA BINTI MOHAMMAD YUSOF

Non-Independent Non-Executive Director

Representing Employees Provident Fund, a Major Shareholder of TNB

● Nationality : Malaysian	● Age : 57	● Gender : Female
● Date of Appointment : 20 March 2023	● Year(s) of Directorship : Less than one (1) year	
● Board Committee(s) : Nil		
● Board meetings attended in the Financial Year :	<div style="border: 1px solid black; width: 100%; height: 15px; background-color: #ccc;"></div> N/A	

Academic/Professional Qualification(s) :

- Bachelor of Commerce (Accountancy), Australian National University, Canberra, Australia
- Associate Member of CPA, Australia

Skills, Experience and Expertise :

- Chief Investment Officer, Employees Provident Fund (EPF) (2020 - Present)
- Head of Private Market, Investment Division, EPF (2017 - 2020)
 - managed global investments in private equity, infrastructure and real estates
- Head of Capital Market Department, EPF (2011 - 2017)
 - oversaw global and domestic fixed income
- Head of Corporate Finance, Investment Division, EPF (2008 - 2010)
- Executive Vice President, Corporate Investment Banking, Maybank Investment Bank (2005 - 2008)
- Held various positions in Corporate Investment Banking, Maybank Investment Bank (previously known as Aseambankers Malaysia Berhad) (1990 - 2005)
- Senior Financial Consultant, Audit Division, Arthur Andersen & Co. (1988 - 1990)

Other Directorship(s) :

Listed Issuers :

- Malaysia Airports Holdings Berhad
- United Plantations Berhad
- Yinson Holdings Berhad

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



ONG AI LIN

Senior Independent Non-Executive Director

● Nationality : Malaysian	● Age : 67	● Gender : Female
● Date of Appointment :		
<ul style="list-style-type: none"> • 30 September 2022 (Redesignated as Senior Independent Non-Executive Director) • 1 August 2018 (Independent Non-Executive Director) 		
● Year(s) of Directorship : Four (4) years		
● Date of Last Re-Election : 2 June 2022	● Board Committee(s) : R A I	
● Board meetings attended in the Financial Year :		
<div style="background-color: #ccc; width: 100%; height: 10px;"></div>		16/16

Academic/Professional Qualification(s) :

- Bachelor of Arts (Hons) in Economics, University of Leeds, United Kingdom
- Associate of the Institute of Chartered Accountants in England and Wales (ICAEW)
- Member of the Malaysian Institute of Accountants (MIA)
- Past President of Information Systems Audit and Control Association (ISACA), Malaysia

Skills, Experience and Expertise :

- Held various positions in PricewaterhouseCoopers Malaysia :
 - Partner/Senior Executive Director (1993 - 2016)
 - Senior Manager (1991 - 1992)
- Kassim Chan & Co. (DH&S Malaysia) and DH&S Singapore (1986 - 1991)
- Deloitte Haskins & Sells (DH&S), London, United Kingdom (1978 - 1986)

Other Directorship(s) :

Listed Issuers :

- IHH Healthcare Berhad
- RHB Bank Berhad

Public Companies :

- RHB Islamic Bank Berhad

BOARD OF DIRECTORS' PROFILE



**JUNIWATI
RAHMAT HUSSIN**

Independent Non-Executive Director

● Nationality : Malaysian	● Age : 64	● Gender : Female
● Date of Appointment : 1 June 2017	● Year(s) of Directorship : Five (5) years	
● Date of Last Re-Election : 10 May 2021	● Board Committee(s) : I A T R	
● Board meetings attended in the Financial Year :		16/16

Academic/Professional Qualification(s) :

- Bachelor of Science (Hons.) in Chemistry, University of Kent, Canterbury, United Kingdom
- Certificate in International Management, GE
- Attended the INSEAD Senior Management Development Programme and Advanced Management Programme
- Attended the Henley Business School Advanced Management Programme, United Kingdom

Skills, Experience and Expertise :

- Vice President and Venture Director, Pengerang Integrated Complex and Chief Executive Officer, PETRONAS Refinery and Petrochemical Corporation Sdn. Bhd. (2013 - 2016)
- Vice President, Human Resource Management Division, PETRONAS (2010 - 2012)
- Vice President, Education Division, PETRONAS (2009 - 2010)
- Chief Executive Officer, Malaysian Philharmonic Orchestra & Dewan Filharmonik PETRONAS (2005 - 2009)
- General Manager (Marketing and Trading-Chemicals), MITCO Sdn. Bhd. (2003 - 2005)
- Senior Manager (Marketing and Trading-Chemicals), MITCO Sdn. Bhd. (2001 - 2003)
- Manager, Human Resource Management, PETRONAS (1997 - 2001)
- Manager, Petrochemicals Business Planning Unit, Petrochemical Division and Manager, Business Evaluation Department, Corporate Planning Division, PETRONAS (1994 - 1997)
- Executive (Analyst), Refining and Marketing Planning Unit, PETRONAS (1991 - 1994)
- Executive (Refinery), PETRONAS Penapisan (Melaka) Sdn. Bhd. (1991)
- Production Planner (Refinery), PETRONAS Penapisan (Terengganu) Sdn. Bhd. (1988 - 1990)
- Chemist, Process Engineering and Technical, PETRONAS Penapisan (Terengganu) Sdn. Bhd. (1982 - 1987)
- Chemist, Laboratory Services, PETRONAS (1981 - 1982)
- She has a wide range of hands-on experience in Refinery Operations, Project Management, Corporate Planning, Human Resource and Marketing and Trading

Other Directorship(s) :

Listed Issuers :

- Dialog Group Berhad

Public Companies :

- Malaysia Petroleum Resources Corporation

BOARD OF DIRECTORS' PROFILE



**GOPALA KRISHNAN
K.SUNDARAM**

Independent Non-Executive Director

Nationality :
Malaysian
 Age :
68
 Gender :
Male

Date of Appointment :
4 July 2018
 Year(s) of Directorship :
Four (4) years

Date of Last Re-Election :
10 May 2021
 Board Committee(s) :
T
A
F
R

Board meetings attended in the Financial Year :

16/16

Academic/Professional Qualification(s) :

- Bachelor in Law LL.B. (Hons.), Universiti Malaya, Malaysia
- Advocate and Solicitor of the High Court of Malaya

Skills, Experience and Expertise :

- Partner, Abdullah Chan & Co., Advocates & Solicitors (2012 - Present)
- Consultant, Asian Development Bank (2018 - 2021)
- Leading adviser on the Financial Services Act 2013 and the Islamic Financial Services Act 2013
- Independent International Consultant, World Bank (2017 - 2018)
- Director, Kuwait Finance House (Malaysia) Berhad (2012 - 2016)
- Held various positions in Bank Negara Malaysia (Central Bank of Malaysia) (1982 - 2012) :
 - Project Advisor (2011 - 2012)
 - Assistant Governor (2006 - 2011)
 - Assistant Manager/Deputy Director/Director, Legal Department (1990 - 2006)
 - Senior Executive/Assistant Manager, Secretary's Department (1985 - 1990)
 - Senior Executive, Banking Department (1982 - 1985)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



DATO' ROSLINA BINTI ZAINAL

Independent Non-Executive Director

Nationality : Malaysian **Age :** 60 **Gender :** Female

Date of Appointment :

- 28 April 2020 (Redesignated as Independent Non-Executive Director)
- 15 March 2019 (Non-Independent Non-Executive Director)

Year(s) of Directorship : Four (4) years

Date of Last Re-Election : 2 June 2022

Board Committee(s) :

NR L F T

Board meetings attended in the Financial Year :

16/16

Academic/Professional Qualification(s) :

- Master of Business Administration, University of New England, New South Wales, Australia
- Bachelor of Electrical Engineering, Lakehead University, Canada

Skills, Experience and Expertise :

- Member of Tan Sri Leo Moggie Distinguished Chair in Energy Informatics, Universiti Tenaga Nasional, Malaysia (UNITEN) (2021 - Present)
- Advocate, 30% Club, Malaysian Chapter (2021 - Present)
- Director, Universiti Teknikal Malaysia Melaka (UTeM) (2019 - 2020)
- Director, Sapura Energy Berhad (2019 - 2020)
- Senior Fellow, Khazanah Research & Investment Strategy, Khazanah Nasional Berhad (2018 - 2019)
- Adjunct Professor, College of Business, Universiti Tenaga Nasional, Malaysia (2016 - 2018)
- Held various positions in TNB :
 - Vice President (Regulatory Economics and Planning) (2015 - 2018)
 - Vice President (Planning) (2009 - 2015)
 - General Manager (VPP/Energy Procurement), Planning Division (2008 - 2009)
- Has served Lembaga Letrik Negara/TNB for 33 years in various divisions, such as Distribution, Planning, Business Strategy, Regulations, Transmission and Corporate Planning
- Seconded to the Economic Planning Unit of the Prime Minister's Department (1990 - 1992)

Other Directorship(s) :

Listed Issuers :

- Malaysia Smelting Corporation Berhad

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



**DATUK RAWISANDRAN
A/L NARAYANAN**

Independent Non-Executive Director

● Nationality : Malaysian	● Age : 59	● Gender : Male
● Date of Appointment : 16 October 2020	● Year(s) of Directorship : Two (2) years	
● Date of Last Re-Election : 10 May 2021	● Board Committee(s) : A R L I	
● Board meetings attended in the Financial Year :		16/16

Academic/Professional Qualification(s) :

- Professional Diploma in Business Management, Asian Management Development Academy PLT, Malaysia (Oxford Business College, United Kingdom)
- Diploma in Business Management, Asian Management Development Academy PLT, Malaysia (Oxford Business College, United Kingdom)

Skills, Experience and Expertise :

- Director, National Land Finance Co-Operative Society Limited (2021 - Present)
- Director (Business Development), CSEM Sri Meru Sdn. Bhd. (2010 - Present)
- Secretary of Malaysian Indian Congress (MIC), Selangor (2016 - 2018)
- Senator (2007 - 2010)
- Member of Kajang Municipal Council (2003 - 2008)
- Member of Sepang District Council (1997 - 2003)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



DATO' MERINA BINTI ABU TAHIR

Independent Non-Executive Director

Nationality : Malaysian	Age : 57	Gender : Female
Date of Appointment : 1 February 2022	Year(s) of Directorship : One (1) year	
Date of Last Re-Election : 2 June 2022	Board Committee(s) : A F NR	
Board meetings attended in the Financial Year :		
<div style="display: flex; align-items: center;"> <div style="flex-grow: 1; border: 1px solid black; background-color: #ccc; margin-bottom: 2px;"></div> <div style="border: 1px solid black; border-radius: 50%; padding: 2px 5px; background-color: #007bff; color: white; margin-left: 5px;">14/14</div> </div> <p>(since appointment date)</p>		

Academic/Professional Qualification(s) :

- Fellow Member of the Association of Chartered Certified Accountants (ACCA), FCCA (UK)
- Member of the Malaysian Institute of Certified Public Accountants (MICPA), CPA
- Member of the Malaysian Institute of Accountants (MIA), CA (M)
- Member of the ASEAN Chartered Professional Accountant (ASEAN CPA)
- Professional Member of the Institute of Internal Auditors Malaysia (IIAM), CMIIA

Skills, Experience and Expertise :

- Global Council Member, ACCA (2022 - Present)
- Director, Lembaga Tabung Haji Property Holdings Ltd Group of Companies (2020 - 2021)
- Chief Financial Officer, Lembaga Tabung Haji (2020 - 2021)
- Chairman, ACCA Malaysia Advisory Committee (2017 - 2019)
- Council Member, MIA (2016 - 2019)
- Malaysia Airlines Berhad/Malaysian Airline System Berhad (2004 - 2020) :
 - Chief Internal Auditor (2011 - 2014, 2015 - 2020)
 - Director, Corporate Services (2014 - 2015)
 - Senior Vice President, Commercial Office (2011)
 - Regional Senior Vice President, Middle East, Africa and South America (MEASA) (2008 - 2011)
 - General Manager, Finance Support Services (2004 - 2007)
- Head, Group Finance, IT and Property, Amanah Capital Partners Berhad (1997 - 2004)
- Sime Darby Berhad (1991 - 1997) :
 - Business Development Manager (1996 - 1997)
 - Finance and Administration Manager, Sime Darby Travel Sdn. Bhd. and Sime Holidays Sdn. Bhd. (1994 - 1996)
 - Assistant Audit Manager (1991 - 1993)
- Audit Semi-Senior, Messrs Price Waterhouse (now known as Messrs PricewaterhouseCoopers) (1991)
- Audit Senior, Messrs Ivor Barry & Co., England (1988 - 1991)
- Reconciliation Analyst, IBM (UK) Ltd., England (1987)

Other Directorship(s) :

Listed Issuers :

- S P Setia Berhad

Public Companies :

- Nil

BOARD OF DIRECTORS' PROFILE



ELAINE ONG YEE LYNN

Alternate Director to YBhg. Datuk Amran Hafiz bin Affifudin

● Nationality : Malaysian	● Age : 39	● Gender : Female
● Date of Appointment : 20 March 2023	● Year(s) of Directorship : Less than one (1) year	
● Board Committee(s) : Nil		
● Board meetings attended in the Financial Year :		
<div style="border: 1px solid black; width: 100%; height: 15px; background-color: #ccc;"></div> <div style="float: right; background-color: #0070c0; color: white; border-radius: 50%; padding: 2px 5px;">N/A</div>		

Academic/Professional Qualification(s) :

- BSc (Honours) in Accounting and Finance, University of Warwick, United Kingdom
- Associate Chartered Accountant (ACA) of the Institute of Chartered Accountants in England and Wales (ICAEW)

Skills, Experience and Expertise :

- Senior Vice President, Investments, Khazanah Nasional Berhad (2018 - Present)
- Director of Southrop Sdn. Bhd. (2015 - 2018)
- Assistant Vice President, Investments, Khazanah Nasional Berhad (2010 - 2015)
- Assistant Manager, Assurance - Financial Services, PricewaterhouseCoopers, Malaysia (2006 - 2010)

Other Directorship(s) :**Listed Issuers :**

- Nil

Public Companies :

- Cenergi SEA Berhad

Declaration by the Board :**Family relationship with any Director and/or major shareholder of TNB :**

- None of the Directors has any family relationship with any Director and/or major shareholder of TNB.

Conflict of interest with TNB :

- Save as disclosed above, none of the Directors has any conflict of interest with TNB.

Other than traffic offences, any conviction for offences within the past five (5) years and any public sanction or penalty imposed by the relevant regulatory bodies during the Financial Year under review :

- Other than traffic offences, none of the Directors has been convicted for any offences within the past five (5) years nor has been imposed of any public sanction or penalty by the relevant regulatory bodies during the Financial Year under review

COMPANY SECRETARY'S PROFILE



NORAZNI BINTI MOHD ISA

Company Secretary

● **Nationality :** Malaysian
 ● **Age :** 59
 ● **Gender :** Female

● **Date of Appointment :**
31 May 2012

● **Academic/Professional Qualification(s) :**

- Master of Laws, Universiti Malaya, Malaysia
- Advanced Diploma in Law, Institut Teknologi MARA, (now Universiti Teknologi MARA), Malaysia
- Diploma in Law, Institut Teknologi MARA, (now Universiti Teknologi MARA), Malaysia

Skills, Experience and Expertise :

- More than 30 years of experience within TNB where she has served in various positions, specifically in legal services, tender and contract management and regulatory management
- Deputy Company Secretary and Joint Company Secretary, TNB (2011 - 2012)
- Head of Tender Management Unit, Procurement Division, TNB (2006 - 2011)
- Manager of Licensing and Compliance Unit, Corporate Communications Department, TNB (2003 - 2006)
- Manager of Contract Management, Procurement Division, TNB (2002 - 2003)
- Legal Executive, Legal Services Department, Company Secretary's Office, TNB (1990 - 2001)

Other Directorship(s) :

Listed Issuers :

- Nil

Public Companies :

- Nil

Additional Information :

Family relationship with any Director and/or major shareholder of TNB :

- Nil

Conflict of interest with TNB :

- Nil

Other than traffic offences, any conviction for offences within the past five (5) years and any public sanction or penalty imposed by the relevant regulatory bodies during the Financial Year under review :

- Nil

SENIOR MANAGEMENT PROFILE



Nationality: Malaysian
 Age: 59
 Gender: Male

Date of Appointment:
1 March 2021

Management Committee(s):
GEMC GPC GMTC
COMPEC IEC

DATO' INDERA IR. BAHARIN BIN DIN

President/Chief Executive Officer

Qualification(s) :

- Master of Business Administration – joint MBA programme between Universiti Tenaga Nasional, Malaysia and Bond University, Australia
- Bachelor of Science (Electrical Engineering), Syracuse University, New York, United States of America
- Certified Professional Engineer of the Board of Engineers (BEM), Malaysia
- Member of the Institution of Engineers, Malaysia
- Qualified Competent Engineer (Up to 33kV)
- Qualified Service Engineer (Up to 33kV)

Working Experience :

- Dato' Indera Ir. Baharin bin Din built his career in TNB serving in various engineering and managerial positions within the Company, including Business Development, Network Maintenance, Network Planning, Construction Services, Metering Service and Engineering Services.
- He was seconded to the Ministry of Energy, Green Technology and Water (KeTTHA), for two (2) and a half years, where he served as the Deputy Director for the Electrical Inspectorate Department in Sabah. He then became the Director for the Electrical Inspectorate Department in Pahang.
- He was the Managing Director of Sabah Electricity Sdn. Bhd. from 2007 to 2011 and was promoted to Senior General Manager (Customer Service and Metering) of TNB in December 2011.
- Dato' Indera Ir. Baharin was made Vice President, Distribution, in January 2012 until July 2018 and was re-designated as Chief Distribution Network Officer from 1 August 2018.
- He was appointed as President/Chief Executive Officer of TNB on 1 March 2021.

Directorships In Public Companies and Listed Issuers :

- Nil



Nationality: Malaysian
 Age: 62
 Gender: Male

Date of Appointment:
1 October 2020

Management Committee(s):
GEMC GPC COMPEC IEC

DATO' NOR AZMAN BIN MUFTI

Managing Director, TNB Power Generation Sdn. Bhd.

Qualification(s) :

- Master of Engineering Management, Universiti Tenaga Nasional, Malaysia
- Bachelor of Engineering (Mechanical), University of Strathclyde, Glasgow, Scotland, United Kingdom
- Diploma in Mechanical Engineering, Universiti Teknologi Malaysia

Working Experience :

- Dato' Nor Azman bin Mufti has served for 42 years in TNB, holding various positions in Power Generation portfolios namely Managing Director of TNB REMACO Sdn. Bhd. and Vice President of the Energy Ventures Division.
- Prior to his current appointment, he was the Chief Power Generation Officer of the Power Generation Division, TNB.
- As the Managing Director of TNB Power Generation Sdn. Bhd., he is responsible for leading and driving GenCo journey towards sustainability with focus on new growth, increased efficiencies and business synergies and greater business development.

Directorships In Public Companies and Listed Issuers :

- Nil

SENIOR MANAGEMENT PROFILE



● **Nationality :** Malaysian
● **Age :** 58
● **Gender :** Male

● **Date of Appointment :**
 1 January 2023

● **Management Committee(s) :**
 GEMC GPC GMTC

IR. DEV ANANDAN A/L M.S. ANANDAN

Chief Grid Officer

Qualification(s) :

- Master of Engineering (MEng) in Engineering Management, Universiti Tenaga Nasional (UNITEN)
- Bachelor of Science (Bsc) in Electrical Engineering, Universiti Teknologi Malaysia (UTM)

Working Experience :

- Ir. Dev Anandan has served for more than 34 years in TNB, holding various positions in Transmission Division, now known as Grid Division.
- As the Chief Grid Officer, he is responsible for the overall performance of TNB's transmission business, which focuses on transporting electricity, managing the Division's existing assets as well and delivering new projects for Grid reliably and safely, within constraints of time and cost.
- Ir. Dev Anandan is also responsible for ensuring the long-term sustainable growth and profitability of the Division through effective management and optimisation of resources. He plays a major role in realising the ASEAN Power Grid and driving the Energy Transition agenda.

Directorships In Public Companies and Listed Issuers :

- Nil



● **Nationality :** Malaysian
● **Age :** 59
● **Gender :** Male

● **Date of Appointment :**
 1 March 2021

● **Management Committee(s) :**
 GEMC GPC GMTC

WAN NAZMY BIN WAN MAHMOOD

Chief Distribution Network Officer

Qualification(s) :

- Master of Engineering (M.Eng.), Universiti Tenaga Nasional, Malaysia
- Bachelor of Science, Rensselaer Polytechnic Institute, United States of America

Working Experience :

- Wan Nazmy has served for more than 37 years in TNB in various engineering and managerial positions. These positions include Assistant Engineer, Assistant District Engineer, District Manager, Principal Engineer, General Manager and Senior General Manager. He has served in various capacities, including in Business Development, Network Maintenance and Planning, Construction Services, Engineering Services, Distribution Network Operations and Asset Management.
- He was appointed to lead TNB's Business Global Solutions Division as the Chief Global Business Solutions, prior to his current appointment as the Chief Distribution Network Officer (CDNO).
- Wan Nazmy aspires to take the Distribution Network Division to greater heights in its business and operational performance.
- To align with the national agenda of reaching net zero by 2050, Wan Nazmy is also committed to realising the Distribution Network Division's Smart Utility 2025 target.

Directorships In Public Companies and Listed Issuers :

- Nil

SENIOR MANAGEMENT PROFILE



KAMAL ARIFIN A RAHMAN

Chief Retail Officer

Qualification(s) :

- Master of Business Administration, University of Athens, Ohio, United States
- Bachelor of Science in Electrical Engineering, University of Texas at El Paso (UTEP), United States
- Member of CIRED Malaysia

Working Experience :

- Kamal Arifin has served more than 32 years, holding various portfolios in TNB, namely Special Officer in the offices of TNB Chairman and Senior Vice President, Chief Operating Officer of Malaysia Transformer Manufacturing and State General Manager (Negeri Sembilan), TNB Distribution.
- Prior to his current appointment as Chief Retail Officer, he was the Head of Centralised Operations and Centre of Excellence in Retail Division.
- As the Chief Retail Officer of TNB, he is responsible for delivering TNB's aspirational vision of becoming a leading Retail company of the future.
- Among his main tasks are to enable the growth of TNB's new retail business, covering both core business on the kWh and new products and services beyond energy and to deliver quality customer experience by expanding TNB digital services.

Directorships In Public Companies and Listed Issuers :

- Nil

● Nationality : Malaysian
● Age : 56
● Gender : Male
● Date of Appointment : 3 October 2022
● Management Committee(s) :
GEMC GPC GMTC IEC



NAZMI BIN OTHMAN

Chief Financial Officer

Qualification(s) :

- Fellow of the Certified Practising Accountants (CPA Australia)
- Certified Public Accountant of the Malaysian Institute of Certified Public Accountants (MICPA)
- Chartered Accountant of the Malaysian Institute of Accountants (MIA)
- Bachelor of Commerce (Accounting), University of Wollongong, Australia

Working Experience :

- Nazmi has served for more than 25 years in various positions before becoming the Chief Investment Management Officer in 2014.
- He was appointed as Chief Financial Officer, Group Finance with effect from 1 August 2018. Some of his tasks include monitoring finance-related activities and advising the CEO and the Board of Directors on key financial decisions.
- Prior to joining TNB, Nazmi served in various positions in other companies such as Island & Peninsular Berhad and MRCB as the Financial Controller of Port Dickson Power Sdn. Bhd., an independent power producer.
- He leads Group Finance as an active strategic financial partner in driving TNB's business aspirations and achieving the Group's objectives. He also ensures continuous improvement and review in key financial areas such as finance policies and procedures, system efficiency and processes, strategic financial risks and staff competency.

Directorships In Public Companies and Listed Issuers :

- Nil

● Nationality : Malaysian
● Age : 59
● Gender : Male
● Date of Appointment : 1 August 2018
● Management Committee(s) :
GEMC GPC GMTC
COMPEC IEC

SENIOR MANAGEMENT PROFILE



DATUK TS. SHAMSUL BIN AHMAD

Chief Regulatory & Stakeholder Management Officer

Qualification(s) :

- Bachelor of Science in Mechanical Engineering, North Carolina A&T State University, United States of America
- Master of Business Administration, Universiti Tenaga Nasional, Malaysia
- Professional Technologists, Malaysia Board of Technologists (MBOT)

Working Experience :

- Datuk Ts. Shamsul bin Ahmad has served TNB for more than 34 years with and has extensive experience and has held numerous portfolios, including being the former Managing Director of TNB Janamanjung Sdn. Bhd. (TNBJ) for 10 years.
- Prior to his current appointment, he was the Managing Director of TNB Fuel Sdn. Bhd.
- As a Chief Regulatory & Stakeholder Management Officer, he is responsible for shaping the industry's future and regulatory landscape while driving high stakeholders' trust towards achieving TNB's aspirations and vision.
- He is currently the Country Coordinator for the Heads of ASEAN Power Utilities/Authorities (HAPUA).

Directorships In Public Companies and Listed Issuers :

- Nil

● **Nationality :** Malaysian
● **Age :** 57
● **Gender :** Male

● **Date of Appointment :**
 12 December 2022

● **Management Committee(s) :**

GEMC

GPC

COMPEC

IEC



DATUK IR. MEGAT JALALUDDIN BIN MEGAT HASSAN

Chief Strategy & Ventures Officer

Qualification(s) :

- Member of the Institution of Engineers, Malaysia
- Certified Professional Engineer of the Board of Engineers (BEM), Malaysia
- Bachelor of Engineering (Hons) (Electrical Engineering), University of Wollongong, Sydney, Australia

Working Experience :

- Datuk Ir. Megat Jalaluddin bin Megat Hassan has served in various positions in TNB.
- He was the Chief Strategy Officer for six years, starting in 2012, and was the Chief Retail Officer for four years, where he successfully delivered quality digital customer service experience and growth of the TNB Retail business.
- As the Chief Strategy & Ventures Officer, he leads the development and implementation of TNB's corporate and business strategy, incorporating Energy Transition trends and the Environmental, Social and Governance (ESG) agenda. His responsibility includes searching for, identifying and evaluating new businesses in the energy industry and adjacent industries. He also guides and promotes innovation, research and development in fields relevant to TNB's current and prospective business.

Directorships In Public Companies and Listed Issuers :

- Nil

● **Nationality :** Malaysian
● **Age :** 57
● **Gender :** Male

● **Date of Appointment :**
 3 October 2022

● **Management Committee(s) :**

GEMC

GPC

IEC

SENIOR MANAGEMENT PROFILE



● **Nationality :** Malaysian
● **Age :** 58
● **Gender :** Male

● **Date of Appointment :**
 1 April 2021

● **Management Committee(s) :**

GEMC GPC

WAHIZAN BIN ABD RAHMAN

Chief People Officer

Qualification(s) :

- Bachelor of Science (Electrical & Electronic), George Washington University, Washington DC, United States of America
- Masters in Business Administration, Universiti Tenaga Nasional, Malaysia

Working Experience :

- Wahizan bin Abd Rahman has served in various positions in TNB in the past 35 years. He started his career at Generation Power Plants before moving to the Distribution Division where he had stints at the Distribution Engineering Department and managing business operations in Kuala Lumpur.
- He was the General Manager for Distribution – Putrajaya and Cyberjaya before shifting to TNB Headquarters to continue his career in Human Resource Management.
- His experience in Human Resources include serving as the General Manager for Human Resource Planning and Staffing, Senior General Manager for Human Resource Planning and Development and Senior General Manager for Human Resource Strategy and Transformation.
- Prior to his appointment as Chief People Officer, he was the Head of People Strategy and Organisation Effectiveness of the Group Human Resource Division.

Directorships In Public Companies and Listed Issuers :

- Nil



● **Nationality :** Malaysian
● **Age :** 46
● **Gender :** Male

● **Date of Appointment :**
 12 January 2022

● **Management Committee(s) :**

GEMC GPC GMTC

MOHD ZARIHI MOHD HASHIM

Chief New Energy Officer

Qualification(s) :

- MBA from INSEAD
- Bachelor of Engineering (Hons) in Electrical and Electronic Engineering from University College London

Working Experience :

- Zarihi's role as part of the New Energy Division is to expand Tenaga Nasional Berhad's renewable energy business in domestic and international markets.
- Prior to joining Tenaga Nasional Berhad, Zarihi held senior roles with investment and private equity firms. He also has experience in management and IT consulting with local and international consulting companies.
- Early in his career, he was an engineer at a leading semiconductor company.

Directorships In Public Companies and Listed Issuers :

- Nil

SENIOR MANAGEMENT PROFILE



Nationality : Malaysian
 Age : 52
 Gender : Male

Date of Appointment :
 18 July 2022

Management Committee(s) :
 GEMC GPC GMTC

AZLAN BIN AHMAD

Chief Information Officer

Qualification(s) :

- Master of Business Administration, International Islamic University Malaysia (IIUM), Malaysia
- Bachelor of Science (Computation), University of Manchester Institute of Science and Technology (UMIST), United Kingdom
- BTEC National Diploma in Computer Studies, Coventry Technical College, United Kingdom

Working Experience :

- Azlan Ahmad has served for more than 28 years in TNB, holding various positions in the ICT Division with extensive IT management and technical experience.
- Prior to his current appointment, he was appointed to lead the ICT delivery and operation arm as the Senior General Manager of Center of Delivery and Operation Services.
- As Chief Information Officer, he leads TNB's IT strategy and operations across the IT value chain, which includes IT infrastructure, network telecommunication, application and cybersecurity.
- He is also responsible for deploying holistic, secure and sustainable technology solutions across the organisation as well as driving the corporate digitalisation agenda.
- Azlan Ahmad currently serves on the Board of Directors of TNB-IT Sdn. Bhd. and Allo Technology Sdn. Bhd., both wholly-owned subsidiaries of TNB.

Directorships In Public Companies and Listed Issuers :

- Nil



Nationality : Malaysian
 Age : 56
 Gender : Male

Date of Appointment :
 1 January 2020

Management Committee(s) :
 GEMC GPC GMTC COMPEC

AMIR MAHMOD BIN ABDULLAH

Chief Procurement Officer

Qualification(s) :

- MSc In Engineering Business Management (Integrated Graduate Development Scheme, IGDS), University of Warwick, United Kingdom/University of Technology, Malaysia
- BEng (Hons) in Electrical and Electronic Engineering, Brighton Polytechnic, United Kingdom
- Post Graduate Diploma In Engineering Business Management (Integrated Manager Development Scheme, IMDS), University of Warwick, United Kingdom/University of Technology, Malaysia
- Other learning exposure and experiences includes attachment at Melbourne Business School (Australia), National University of Singapore and Disney University, Florida, United States of America

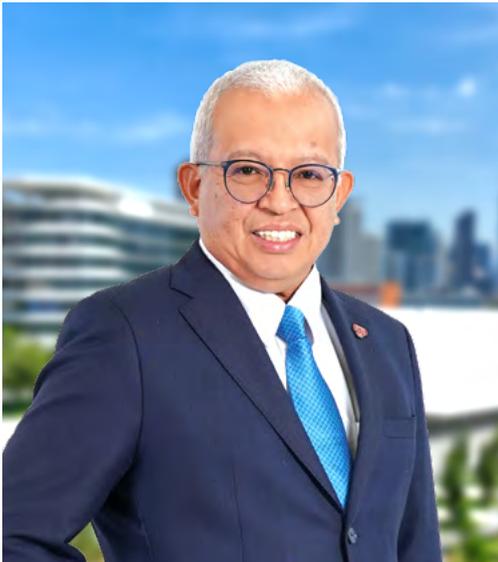
Working Experience :

- Amir Mahmod Abdullah started his career in 1988 with LLN/TNB. He has vast experience in Customer Service, Maintenance, Planning and Construction, and was the Head of several Cost and Profit Centres.
- Among the special projects led by Amir were the development of online application systems such as the Competency Based Performance Management System, Online Employee Feedback and Integrated Development of Proton City.
- In 2009, Amir served as the Head of TNB Metering and Revenue Management and later, in 2014, he was appointed as the first Programme Director of TNB's Smart Meter under Advanced Metering Infrastructure (AMI), which is part of Connected Grid of the Future.
- In 2016, Amir was assigned to Tenaga Cable Industries Sdn. Bhd. a subsidiary of TNB to transform the loss-making cable company into a more profitable and sustainable company.
- In 2018, Amir served as a Program Director of Procurement Hub Functions and was later appointed as Chief Procurement Officer in January 2020.
- Amir was one of the first participants of TNB's Leadership Drive programme and is now an accredited trainer in several business areas.

Directorships In Public Companies and Listed Issuers :

- Nil

SENIOR MANAGEMENT PROFILE



AHMAD HUSHAIRI BIN IBRAHIM

Chief Global Business Solutions Officer

Qualification(s) :

- Bachelor of Science (Electrical Engineering), Syracuse University, New York

Working Experience :

- Ahmad Hushairi bin Ibrahim has held various critical positions within TNB, including Head (Retail Operations) and Head of Strategy for the Retail Division in his 36 years of service in TNB.
- He was appointed as Chief Global Business Solutions Officer in 2021 and is responsible for the provision of shared services solutions for TNB and its subsidiaries. TNB shared services solutions comprise Service Delivery, Security Services, Property Services, Fleet Management, Health Care, Corporate Affairs and Health, Safety and Environment.
- The provision of centralised shared services will result in higher quality services and cost-effectiveness, enabling the business entities within the TNB Group to focus on their core businesses. He aims to further TBGS's digitally enhanced and augmented platform and provide excellent employee-led experience solutions and value-for-money services to customers.

Directorships In Public Companies and Listed Issuers :

- Nil

● Nationality : Malaysian
● Age : 59
● Gender : Male
● Date of Appointment : 15 November 2021
● Management Committee(s) :
GEMC GPC GMTC



NORAZNI BINTI MOHD ISA

Company Secretary

Norazni's profile is set out in Company Secretary's Profile on page 150 of the Integrated Annual Report.

Additional Information on Our Management Team :

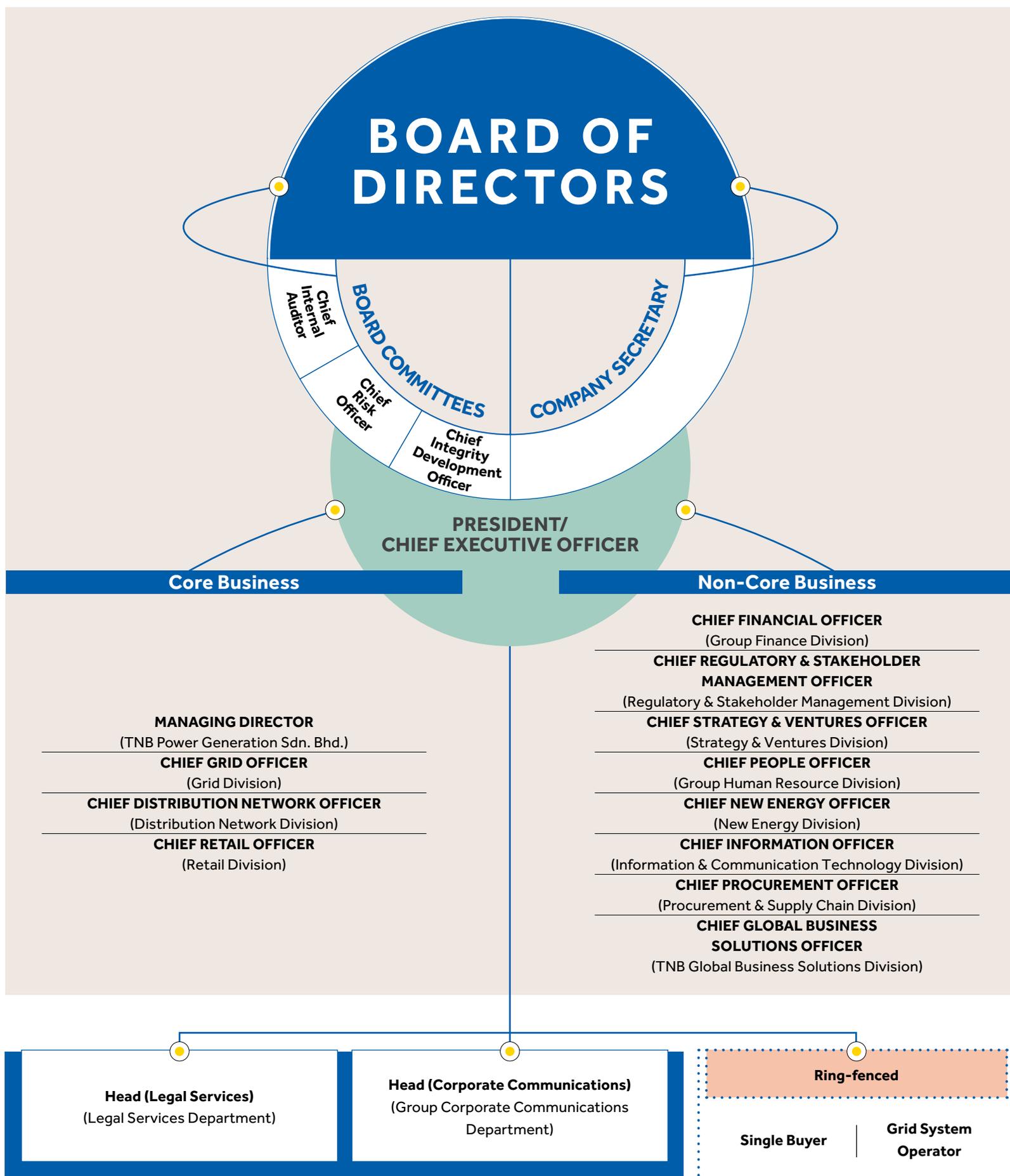
- (i) None of our Management Team has any family relationship with any Director and/or major shareholder of TNB.
- (ii) None of our Management Team has any conflict of interest with TNB.
- (iii) None of our Management Team has been convicted of any offences (save for minor traffic offences) within the past five (5) years, nor has been imposed any public sanction or penalty by the relevant regulatory bodies during the Financial Year under review.

MEMBERSHIP KEY

GEMC	Group Executive Management Committee
GPC	Group People Committee
COMPEC	Commodity Procurement Executive Committee
GMTC	Group Management Tender Committee
IEC	Investment Executive Committee

● Nationality : Malaysian
● Age : 59
● Gender : Female
● Date of Appointment : 31 May 2012
● Management Committee(s) :
GEMC GPC

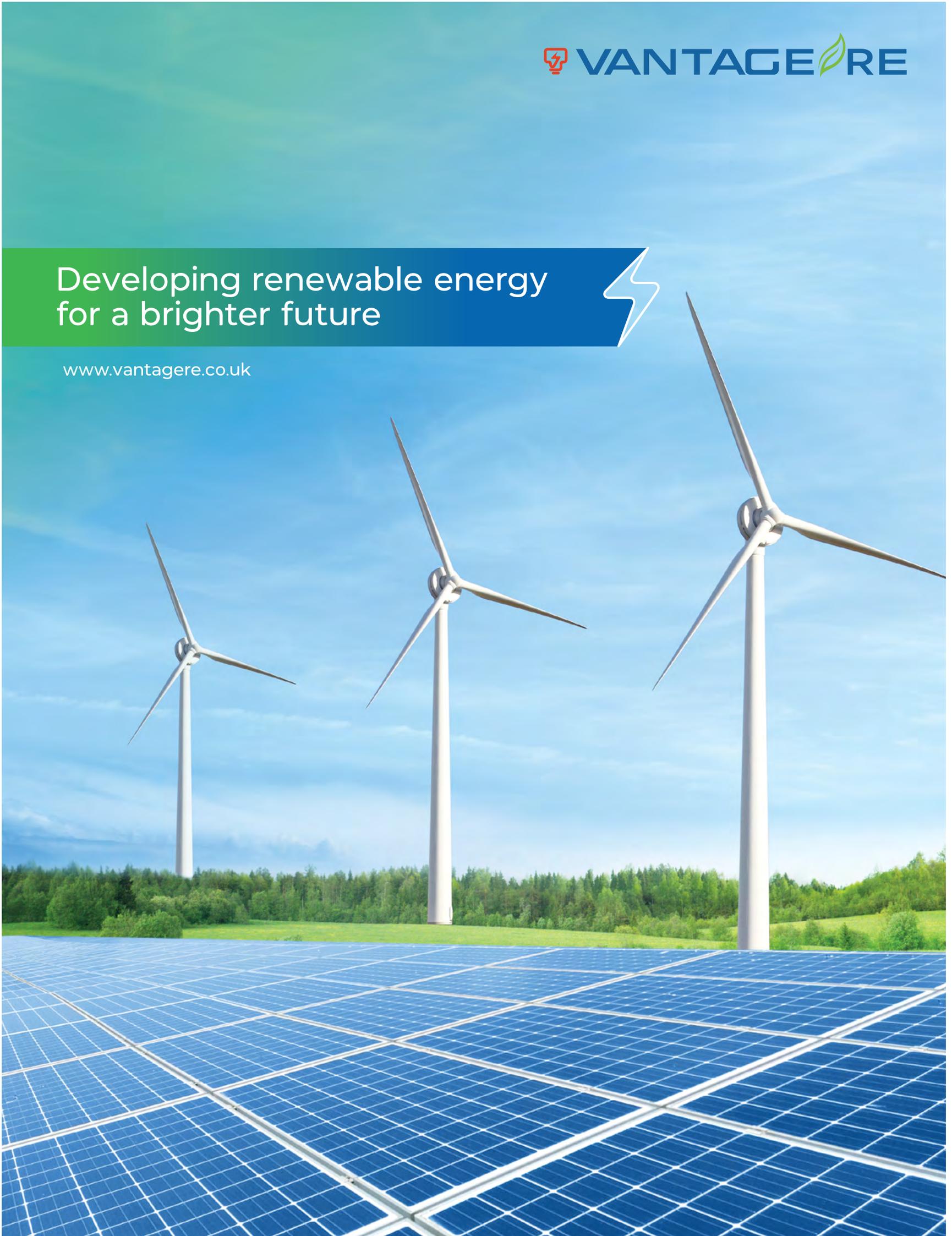
ORGANISATIONAL STRUCTURE



Developing renewable energy
for a brighter future



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CHAIRMAN'S INTRODUCTION TO CORPORATE GOVERNANCE

Dear Shareholders,

I am pleased to present the Corporate Governance Overview Statement for 2022.

Together with our Corporate Governance Report, which is available on our corporate website, these statements explain how we as a Board have assessed the Group's operating environment and taken informed decisions to secure a sustainable and leading position on behalf of our key stakeholders, all underpinned by a long-standing and deeply embedded commitment to high standards of corporate governance. The strength of the Board's leadership is assessed through the clarity of the actions we take and transparency surrounding the standards, processes and culture we ultimately set.

ENGAGING AND RECONNECTING

Throughout the pandemic, virtual channels worked well and are continued to be used in the Company as we responded to employee feedback on the benefits of our hybrid approach to work, enabled by technology.

We have resumed hybrid meetings for the Board in 2022 and for many of our shareholder engagements. The 2023 Annual General Meeting (AGM) will be held virtually and I look forward to meeting those of you who are able to attend and answering questions from those of you who join us virtually.

The Board takes very seriously the views of employees, shareholders and wider stakeholders to ensure we are pursuing actions that are acceptable to those we work with. This is evidenced across this Integrated Annual Report – the network in which we gather relevant insights is extensive. At Board level, we enhance our understanding of views through work which complements the daily contact our businesses have.

The Board agenda further includes a stakeholder assessment of our strategy, an annual update on supply chains, confirmation of sustainability priorities and an annual report of key stakeholder work. Specifically, in 2022, we considered the development of our Energy Transition Plan, the Board of Directors' Fit and

Proper Policy and the wider issue of energy affordability, to name just a few examples.

DRIVING SUSTAINABILITY

Our commitment to Environmental, Social and Governance (ESG), on which there has been considerable focus during the year, continues to be central to the way we operate. In particular, ESG targets are now included as a measure within our performance targets by way of an ESG scorecard. We have endeavoured to further enhance our reporting in this area and have now aligned our reporting with the Global Reporting Initiative (GRI) index in addition to the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. Further details of the Company's approach to ESG and activity during the year are included in the section of this report entitled "Sustainability Statement" on pages 65-136 and in our separate Sustainability Report.

EFFECTIVENESS

As Chairman, I am responsible for providing leadership to ensure that the Board operates effectively. I have been supported in this by all the Directors. The annual reviews of Board effectiveness help the Board to consider how it operates and how its operations can be improved. This year, the review was undertaken internally and the findings of this review have provided us with ideas to further improve the manner in which the Board operates. This review, together with progress against recommendations from evaluations undertaken in 2021, are set out on page 178.

BOARD CHANGES

The Board continuously seeks to ensure it has an appropriate mix of diversity, skills, experience and expertise to enable it to discharge its responsibilities effectively and to be well equipped in assisting the Company in navigating the range of opportunities and challenges ahead.

In view of the need to ensure that there are proper processes to manage succession issues at the Board level, an appropriate process for the selection, nomination and appointment of suitable candidates to the Board has been put in place.

The Board Nomination and Remuneration Committee (BNRC) is entrusted with the

responsibility of assessing and considering the capabilities, commitment and qualities of candidates to be appointed as Board Members and Committee Members, taking into account the diversity, required mix of skills, fit and proper assessment, background, experience/expertise/knowledge relevant to the Company's business, existing commitment and potential conflict of interest prior to recommending candidates to the Board.

The Board may appoint a new Director either to fill a casual vacancy or to add to the existing Directors. The Minister of Finance (Incorporated) (MoF Inc.), being the Special Shareholder of TNB, possesses the right to appoint up to six (6) Directors. The Company's Constitution provides that the Company must have at least two (2) Directors but not more than 12 Directors.

Currently, there are 11 members on the Board, excluding the Alternate Director; one (1) Executive Director and 10 Non-Executive Directors, six (6) of whom are Independent Directors.

These Independent Directors are considered by the Board to be independent of Management and free of any business or other relationship or circumstance that could materially interfere with the exercise of objective, unfettered or independent judgement. The Board has continued to reshape its membership through the right balance of experience, expertise and fresh thinking.

To date, there are several movements of the Board. The Board welcomed Dato' Abdul Razak bin Abdul Majid who was appointed as Chairman/Non-Independent Non-Executive Director, with the concurrence of MoF Inc., with effect from 27 March 2023 in place of Dato' Sri Hasan bin Arifin who had ceased office with effect from 1 January 2023.

With 36 years of working experience in TNB, his understanding and knowledge of the Company's operations and the industry will facilitate effective decision-making by the Board. Further to that, his qualifications and experience fills the gap identified through the Board Skills Matrix, of having a Director with technical experience on the Board. His extensive knowledge, experience and reputation in the energy-related industry is incomparable and the Board believes that he will not only continue the great work of his predecessors but also

CHAIRMAN'S INTRODUCTION TO CORPORATE GOVERNANCE

maintain the practice of good governance, transparency and accountability. His wealth of knowledge will be instrumental in the ongoing initiatives of the TNB Energy Transition Plan.

Prior to that, the Board on 20 March 2023 approved the appointment of Rohaya binti Mohammad Yusof as a Non-Independent Non-Executive Director, representing the Employees Provident Fund (EPF), a major shareholder of TNB.

She is the Chief Investment Officer of EPF and has a wealth of experience in areas of corporate finance, investment banking, capital markets and private markets, both domestic and global. She is an Associate Member of CPA, Australia and also sits on the boards of Malaysia Airports Holdings Berhad, United Plantations Berhad and Yinson Holdings Berhad.

The Board on 10 April 2023 had approved on the appointment of Datin Rashidah binti Mohd Sies, with the concurrence of MoF Inc. as Non-Independent Non-Executive Director of TNB. She is the Deputy Secretary General of Treasury (Management) Ministry of Finance.

The cessation of office of Datuk Seri Asri bin Hamidin @ Hamidon as an Appointed Director/Non-Independent Non-Executive Director of TNB took effect from 5 January 2023. Concurrently, he also ceased as the Chairman of Board Tender Committee (BTC) and a member of the BNRC and Board Long Term Incentive Plan Committee (BLTIP) on the same day. Faisal @ Pisal bin Abdul Ghani, his Alternate Director, had ceased office in accordance with Clause 61(2) of the Company's Constitution with effect from 5 January 2023.

In addition to the above, Datuk Lau Beng Wei, an Independent Non-Executive Director, had resigned with effect from 6 March 2023.

The Board of Directors of TNB would like to express its appreciation to Dato' Sri Hasan bin Arifin, Datuk Seri Asri bin Hamidin @ Hamidon, Datuk Lau Beng Wei and Faisal @ Pisal bin Abdul Ghani for their contribution and services rendered to the Company during their tenure as Company Directors. With deep regret we report the demise of Dato' Ir. Nawawi bin Ahmad, an Independent Non-Executive Director, on 28 November 2022. The Board of Directors expresses its gratitude and appreciation for the guidance and contribution given by the late Dato' Ir. Nawawi bin Ahmad to the Board during

his tenure as a Director. He was the Chairman of Board Integrity Committee (BIC) and Member of BTC, BNRC and BLTIP. His stewardship, integrity and wisdom will be deeply missed.

The Board fulfils Practice 5.2 of the Malaysian Code of Corporate Governance 2021 (MCCG) for Large Companies having a majority of Independent Directors, with the number exceeding the minimum requirement as prescribed by the Main Market Listing Requirements of Bursa Malaysia Securities Berhad (MMLR).

The Board/BNRC continuously reviews the Board Skills Matrix, which serves to identify the skills, knowledge, experience and capabilities desired of the Board to enable it to meet both current and future challenges to the Company. It reflects the appropriate mix of skills, expertise and experience required to address existing and emerging business and governance issues, to enable Directors to effectively review Management's performance.

The Board approved the BNRC's recommendation that in order to strengthen the Board's composition to be more dynamic, the skills and gaps that have been identified as critical and need to be filled are technical experience, international business experience and customer centricity. The Board agreed that all Directors appointed during the Financial Year under review had met the required skills.

The Board believes that it presently has an appropriate balance of skills, experience, knowledge and independence to deliver the Group's strategy, to enable the Non-Executive Directors to effectively challenge the views of Management and to satisfy the requirements of good governance.

DIVERSITY

The Board is committed in ensuring the diversity of the Company's senior management and annually reviews its recommendations on diversity for senior management roles. It recognises that there is more to do, not just at the Board level, but also at the Senior Leadership level.

While the women representation on the Board had increased, culminating, to date, with six (6) members of the Board or 55%, we recognise we still have more to do, not least with regard to other areas of diversity at the Board level.

Women now comprise 21% of the organisation. While our gender balance differs based on specific roles, geographies and bands, we are pleased that female representation in our leadership has increased to 26% compared to 21% in the previous Financial Year.

While good progress is being made across the Group in many aspects of diversity and inclusion, sustainable change requires a long-term perspective and this continues to be a key focus for the Company. The Board will continue to address diversity and inclusion when considering refreshment of the Board.

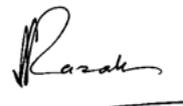
FOCUSED ON THE FUTURE

In August 2021, the Group announced its net zero ambitions, representing the optimum growth pathway identified by the Board to capitalise on the opportunities across the value chain in which TNB participates. In all our deliberations, we focused on long-term success, financial resilience and shareholder value and ensured thorough debate based on robust inputs which capture all of the available information.

The Board Committees' support has been strong and provided in multiple ways. The BNRC has overseen proposed updates to Remuneration Policy to align with our growth ambitions, in addition to championing talent and capability across our most important asset, people. The Board Risk Committee (BRC) has monitored the development of our risk and opportunity reporting under the TCFD framework. As indicated last year, the Sustainability and Energy Transition Council (SETC) has progressed in its ESG role, deepening its focus on performance across ESG indices and reviewing climate resilience and adaptation plans.

LOOKING FORWARD

The Board will continue to focus on the key issues, challenge the Group's leadership and collectively seek to make informed decisions. In an ever-changing world, we pledge to you that whatever lies ahead, we have the best interests of the Company, its customers and its people central to our deliberations.



DATO' ABDUL RAZAK BIN ABDUL MAJID
Chairman

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

THE BOARD AND ITS GOVERNANCE FRAMEWORK

The purpose of the Board is to provide leadership and direction to the Group's Management within a framework of controls which enable risk to be adequately assessed and managed. The Board is responsible and accountable to shareholders for the sustainable long-term success of the Company.

The Company's governance framework underpins the Company's operations. In addition to the seven (7) Board Committees detailed below, the Board is supported by the Group Executive Management Committee (GEMC), which comprises the Top Management.



The Terms of References (TORs) of the BAC and BNRC are available at www.tnb.com.my.

SUPPORTS EFFECTIVE DECISION-MAKING AND THE DELIVERY OF OUR STRATEGY

Total Hours of Board Meetings
31.58

Overall Percentage of Board Meetings Attended by Directors
96.88%

Total Hours of Board and Board Committees Meetings
152.75

All Directors have complied with the minimum attendance stipulated in the MMLR, of which being present not less than 50% of the Board meetings held during the Financial Year.

THE BOARD

Key Roles and Responsibilities

- Provides leadership to the Company and direction for Management.
- Has collective responsibility and accountability to shareholders for the long-term success of the Group.
- Reviews the performance of Management and the operating and financial performance of the Group.
- Sets strategy.
- Determines risk appetite.
- Ensures good governance.
- Deliberates and approves the sustainability strategy and pathway while overseeing TNB's implementation and performance on sustainability.

Chairman

- Leads the Board
- Ensures an effective Board, including contributions and challenges from the Directors.
- Ensures that the Group maintains effective communication with its shareholders.

President/CEO

- Has day-to-day responsibility for running the Group's operations.
- Makes recommendations to the Board and implements Group strategy.
- Applies Group policies.
- Promotes TNB's culture and standards.
- Ensures the Directors are properly informed and that sufficient information is provided to the Board to enable the Directors to form appropriate judgements.

The roles of Chairman and President/CEO are held by two (2) separate individuals.

Board of Directors	Dato' Sri Hasan bin Arifin	Dato' Indera Ir. Baharin bin Din	Datuk Seri Asri bin Hamidin @ Hamidon	Datuk Amran Hafiz bin Affudin	Ong Ai Lin	Juniwati Rahmat Hussin
Total Board Meetings Attended for Financial Year 2022	15/16 94%	15/16 94%	12/16 75%	16/16 100%	16/16 100%	16/16 100%

TNB BOARD COMMITTEES

Board Audit Committee (BAC)	Board Finance and Investment Committee (FIC)	Board Tender Committee (BTC)
Total 33.07 meeting hours Chairman Dato' Merina binti Abu Tahir ¹ Attendance 12/12* (100%) Members Ong Ai Lin Attendance 11/12 (92%) Gopala Krishnan K.Sundaram Attendance 12/12 (100%) Datuk Rawisandran a/I Narayanan Attendance 12/12 (100%) Juniwati Rahmat Hussin Attendance 12/12 (100%) Datuk Lau Beng Wei Attendance 10/12 (83%)	Total 19.58 meeting hours Chairman Datuk Amran Hafiz bin Affudin Attendance 10/11 (91%) Members Dato' Roslina binti Zainal Attendance 11/11 (100%) Gopala Krishnan K.Sundaram Attendance 11/11 (100%) Datuk Lau Beng Wei Attendance 9/11 (82%) Dato' Merina binti Abu Tahir ¹ Attendance 9/10* (90%)	Total 23.30 meeting hours Chairman Datuk Seri Asri bin Hamidin @ Hamidon Attendance 8/13 (62%) Members Dato' Roslina binti Zainal Attendance 13/13 (100%) Juniwati Rahmat Hussin Attendance 12/13 (92%) Dato' Ir. Nawawi bin Ahmad ² Attendance 13/13* (100%) Faisal @ Pital bin Abdul Ghani ³ Attendance 3/11* (27%) Azmin bin Ishak ⁴ Attendance 0/1* (0%)

Key Roles and Responsibilities

To oversee the integrity of the financial statements in compliance with legal and regulatory requirements and applicable accounting standards.

To assess the effectiveness of the Group's internal control framework as well as internal and external audit functions.

To review and recommend to the Board for approval and to approve investment/divestment proposals recommended by Management balancing strategic, financial and risk and return.

To review and approve investment risks and risk treatment proposed by Management for new investment/divestment proposals for investment of value up to RM200.0 million per transaction.

To review and recommend to the Board for approval investment risks and risk treatments proposed by Management for new investment/divestment proposals for investment of value above RM200.0 million per transaction.

To review, monitor and make recommendations to the Board for approval in matters pertaining to finance, including but not limited to budgets and funding activities.

To establish the framework of TNB's Procurement & Supply Chain Policy and Procedures.

To advise the Board regarding the details and implementation of TNB's Procurement & Supply Chain Policy and Procedures framework.

To assist the Board in regulating the compliance of Top Management and Executive Directors with TNB's Procurement & Supply Chain Policy and Procedures.

To ensure TNB complies with the applicable laws, regulations, rules and guidelines to achieve best business practices in its procurement of equipment, materials, works and services.

AUDIT AND FINANCIAL GOVERNANCE

Internal Audit
External Audit
Financial Controls

BOARD RESERVED AUTHORITIES

DELEGATED AUTHORITY TO MANAGEMENT

PRESIDENT/CHIEF EXECUTIVE OFFICER (President/CEO)

GROUP EXECUTIVE MANAGEMENT COMMITTEE (GEMC)

APPROVAL COMMITTEES

GPC
Group People Committee

GMTC
Group Management Tender Committee

CONSULTATIVE COUNCILS

RC
Regulatory Council

TC
Technology Council

Notes :

1 Appointed as Director, Chairman of BAC and member of FIC & BNRC w.e.f. 1 February 2022.

2 Ceased as Chairman of BIC and member of BTC, BNRC & BLTIP on 28 November 2022 upon his demise.

3 Appointed as Alternate Director to Datuk Seri Asri bin Hamidin @ Hamidon w.e.f. 1 March 2022.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

Senior Independent Non-Executive Director (SID)

- Provides a sounding board for the Chairman.
- Acts, if necessary, as a focal point and intermediary for the other Directors.
- Ensures that any key issues not addressed by the Chairman or the Executive Management are taken up.
- Is available to shareholders should they have concerns.

Non-Executive Directors

- Constructively challenge the Management in all areas.
- Scrutinise Management's performance.
- Help develop proposals on strategy.
- Satisfy themselves on the integrity of financial information and on the effectiveness of financial controls and risk management systems.
- Determine appropriate level of remuneration for Senior Management.

Chief Financial Officer

- Has day-to-day responsibility for the management of the finance function.
- Leads the Group's finance activities, risks and controls.
- Represents TNB externally to stakeholders, shareholders, customers, suppliers, regulatory and government authorities and the community.

Company Secretary

- Advises the Board on corporate disclosures and compliance with the Companies Act 2016, securities regulations and the MMLR.
- Together with the Chairman, keeps the effectiveness of the Company's and the Board's governance processes under review.
- Provides advice on corporate governance issues.
- Facilitates the orientation of new Directors and assists the Directors' training and development.

Gopala Krishnan K.Sundaram

16/16
100%

Dato' Roslina binti Zainal

16/16
100%

Datuk Rawisandran a/l Narayanan

16/16
100%

Datuk Lau Beng Wei

15/16
94%

Dato' Merina binti Abu Tahir¹

14/14
100%

Dato' Ir. Nawawi bin Ahmad²

15/15
100%

Faisal @ Pisal bin Abdul Ghani
(Alternate Director to Datuk Seri Asri bin Hamidin @ Hamidon)³

1/1
100%

Azmin bin Ishak
(Alternate Director to Datuk Seri Asri bin Hamidin @ Hamidon)⁴

1/1
100%

Board Nomination and Remuneration Committee (BNRC)

Chairman

Dato' Roslina binti Zainal
Attendance 7/7 (100%)

Members

Datuk Seri Asri bin Hamidin @ Hamidon
Attendance 1/7 (14%)

Datuk Amran Hafiz bin Affifudin
Attendance 6/7 (86%)

Dato' Ir. Nawawi bin Ahmad²
Attendance 7/7* (100%)

Dato' Merina binti Abu Tahir¹
Attendance 6/6* (100%)

Azmin bin Ishak⁴
Attendance 1/1 (100%)

Faisal @ Pisal bin Abdul Ghani³
Attendance 4/5* (80%)

Total
11.25
meeting hours

Board Risk Committee (BRC)

Chairman

Ong Ai Lin
Attendance 7/7 (100%)

Members

Juniwati Rahmat Hussin
Attendance 7/7 (100%)

Gopala Krishnan K.Sundaram
Attendance 7/7 (100%)

Datuk Rawisandran a/l Narayanan
Attendance 7/7 (100%)

Total
22.67
meeting hours

Board Long Term Incentive Plan Committee (BLTIP)

Chairman

Dato' Roslina binti Zainal
Attendance 4/4 (100%)

Members

Datuk Seri Asri bin Hamidin @ Hamidon
Attendance 2/4 (50%)

Datuk Amran Hafiz bin Affifudin
Attendance 4/4 (100%)

Dato' Ir. Nawawi bin Ahmad²
Attendance 4/4 (100%)

Datuk Rawisandran a/l Narayanan
Attendance 4/4 (100%)

Faisal @ Pisal bin Abdul Ghani
Attendance 2/4 (50%)

Total
2.25
meeting hours

Board Integrity Committee (BIC)

Chairman

Dato' Ir. Nawawi bin Ahmad²
Attendance 5/5 (100%)

Members

Datuk Amran Hafiz bin Affifudin
Attendance 3/5 (60%)

Juniwati Rahmat Hussin
Attendance 5/5 (100%)

Ong Ai Lin
Attendance 5/5 (100%)

Total
9.05
meeting hours

Key Roles and Responsibilities

To identify and recommend new nominees to the Board, Board Committees and Boards of TNB Group.

To consider/review the Executive Director and Top Management's succession planning.

To review the Board's required mix of skills, experience and other qualities, including core competencies which Non-Executive Directors should bring to the Board.

To implement the process formulated by the Board to assess the effectiveness of the Board, Board Committees, Self and Peers.

To determine and recommend to the Board the remuneration packages of Non-Executive Directors/Executive Directors/Top Management.

To align the Board and Top Management reward/remuneration with the Key Performance Indicators (KPIs).

To oversee the establishment and implementation of the risk management framework that is embedded into the culture, processes and structures of the Group and is responsive to changes in the business environment.

To approve the Risk Management Framework and policies on behalf of the Board.

To ensure the principles and requirements of managing risk are consistently communicated and adopted throughout the Company.

To inform business strategy based on the impact of identified sustainability risks and opportunities.

To consider sustainability risks as part of the enterprise risk management process.

To oversee the administration of TNB LTIP and the shares granted (LTIP Shares) subject to the by-laws.

To approve and determine the manner in which the LTIP Shares are granted and subsequently vested to the selected employees in accordance with the by-laws, including inter alia, the determination of eligibility, grant level, terms of acceptance of offers, terms of vesting of shares, performance conditions and any other terms and conditions imposed at the discretion of the BLTIP.

To oversee and conduct disciplinary matters for TNB personnel, including acting on the advice of the Management, hearing and deciding on appeals and enforcing disciplinary proceedings against staff convicted of misconduct.

To review and make recommendations to the Board of Directors on steps to be taken to establish a culture of integrity and honesty in all of the Company's business dealings.

Integrity

Risk Management

Strategy

Sustainability

COMPEC

Commodity Procurement Executive Committee

IEC

Investment Executive Committee

ICTGC

Information & Communication Technology (ICT) Governance Committee

ESC

Energy Supply Committee

SETC

Sustainability and Energy Transition Council

EVC

Electric Vehicle Council

SMC

Smart Meter Council

HSEC

Health, Safety & Environment Council

ISC

Integrity Steering Council

⁴ Cessation of office as Alternate Director to Datuk Seri Asri bin Hamidin @ Hamidon w.e.f. 10 February 2022.

[^] Reflects the number of meetings attended during the time the Director held office/was Chairman/member of committee(s).

* Reflects the number of meetings since his/her respective appointment to the Board/relevant Board Committee(s).

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUSTAINABILITY GOVERNANCE

A strong sustainability governance and leadership structure are vital to spearhead our sustainability agenda and provide us with clear and definitive guidance to achieve our net zero aspirations. Our sustainability governance is an expansion of TNB's Governance Model that is aligned with the principles of the MCCG.

We believe that a robust sustainability governance framework underpinned by a supportive leadership structure are key components to ensure our sustainability agenda can be materialised through informative and comprehensive decision-making. Our sustainability governance is an essential part of TNB Group Governance Platform, which is the framework of TNB management committees and subcommittees.

Our sustainability governance framework was reformed in Financial Year (FY) 2022 through the formation of the Sustainability and Energy Transition Council (SETC), with the objective of deliberating on energy transition initiatives to coordinate and oversee TNB's Energy Transition Plan and providing a platform for discussion on the sustainability agenda, development and implementation. This includes the energy transition direction and climate-related matters. The SETC has combined the roles of the former Sustainability Development Council (SDC) and the former TNB Energy Transition Steering Committee (TEXC).

SETC key roles include :

- Determining sustainability visions, targets and commitments that align with and support TNB's overarching sustainability pillars as well as coordinating and integrating the organisation's sustainability commitments.
- Proactively addressing sustainability challenges, including climate-related matters, faced by the organisation.
- Influencing sustainability outcomes in the areas of ESG by creating a framework, disclosing information and implementing policies related to climate-related matters.
- Communicating with internal and external parties, including the Board, investors, financiers, insurers, regulators and the government on sustainability matters.
- Establishing Energy Transition related programmes and their goals and objectives and shaping energy transition outcomes that align with TNB's corporate strategy, fostering growth and creating value for the organisation.

The SETC meeting is conducted monthly, chaired by the President/CEO and composed of TNB's corporate senior management team. They then escalate the Group's strategic direction for sustainability to other committees and/or the Board of Directors for approval. The Board establishes the direction for incorporating sustainability into the strategic direction, operational performance of the organisation with the goal of developing and preserving shareholder value.

Our Sustainability Governance Structure

TNB Board of Directors

TNB's Board deliberates on and approves TNB's sustainability strategy and pathway while overseeing its implementation and performance.

President/Chief Executive Officer (CEO)

Group Executive Management Committee (GEMC)

GEMC will reviews and endorses the sustainability strategy prior to presentation to the Board.

Sustainability and Energy Transition Council (SETC)

The SETC is responsible for aligning sustainability visions, targets and commitments with TNB's overarching sustainability pillars, shaping energy transition outcomes that align with TNB's corporate strategy and fostering growth while creating value for the organisation.

Group Function and Business Units

- Implementation of sustainability strategy and initiatives.
- Manage sustainability related risks and opportunity.

Corporate Strategy & Sustainability Department

Ensures overall strategic planning, target setting and sustainability initiatives are tracked and reported through comprehensive performance reporting and are aligned with long-term sustainability roadmaps.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

REMUNERATION POLICIES

The Board, with the assistance of the BNRC, reviews the overall remuneration policy for Non-Executive Directors, Executive Directors and Top Management. The policy aims to attract, retain and motivate executives and Directors who will create sustainable value and generate returns for the Company. The remuneration package is structured to link rewards to corporate and individual performance, reflecting the contributions towards the Group's achievements for the year.

To ensure accountability from all management levels and to steer the Group's sustainability performance, performance objectives relating to sustainability, including ESG rating, health and safety measures, integrity health index and the growth of TNB's renewable energy capacity, are tied to the President/CEO and Top Management Key Performance Indicators (KPI). TNB aims to implement a phased approach linking remuneration to key ESG KPIs and climate-related disclosures in line with the TCFD recommendations.

FY2022 ESG KPIs for TNB Top Management

ESG Elements	TNB Top Management
1. Overall TNB ESG Rating	<ul style="list-style-type: none"> • TNB President/CEO • Managing Director, TNB Power Generation Sdn. Bhd. • Chief Grid Officer • Chief Distribution Network Officer • Chief Retail Officer • Chief New Energy Officer • Chief Financial Officer • Chief Strategy & Ventures Officer • Chief Regulatory & Stakeholder Management Officer • Chief People Officer • Chief Information Officer • Chief Global Business Solutions Officer • Company Secretary • Chief Risk Officer
2. Environment	<ul style="list-style-type: none"> • TNB President/CEO • Managing Director, TNB Power Generation Sdn. Bhd. • Chief New Energy Officer • Chief Grid Officer • Chief Distribution Network Officer • Chief Retail Officer
3. Social	<ul style="list-style-type: none"> • Chief People Officer
4. Governance	<ul style="list-style-type: none"> • TNB President/CEO • Company Secretary • Chief Integrity Development Officer • Chief Procurement Officer • Chief Internal Auditor



For more information, please refer to Sustainability Statement section, which can be found on pages 65-136.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

RISK MANAGEMENT

Approved by the BRC in FY2019, our Risk Management Framework was developed in line with ISO 31000:2018 Risk Management – Guidelines. The purpose is to provide a structured and consistent approach to risk management, comprising the assessment of sustainability-related risks for informed decision-making.

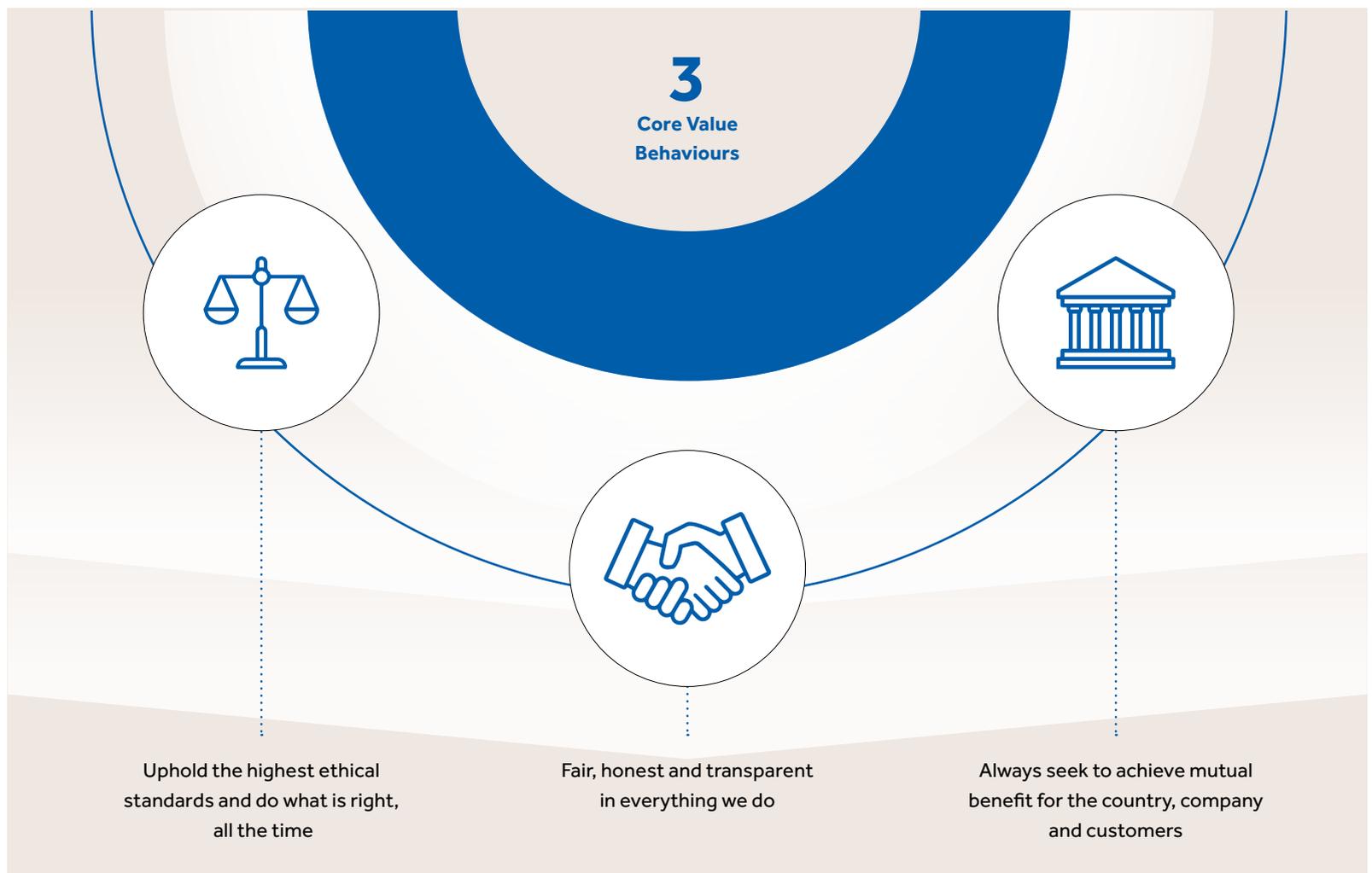
Our risk management and internal control systems are designed to manage risks within acceptable levels as opposed to eliminate risks. We regularly review our risks to ensure their relevance to the Group. The Board and Management also review and approve policies, codes and procedures to consistently enhance risk mitigation.



For more information on risk management, please refer to the Risk Management and Internal Control section on pages 202-209.

UPHOLDING A STRONG SENSE OF INTEGRITY

At TNB Group, we maintain high standards of integrity and go beyond compliance to establish a culture of excellence and integrity, which is ingrained as a Core Value in our TNB Reimagining Culture initiative.



PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

Key highlights and initiatives for FY2022 :

Key Activities	Description
Zero-tolerance rule	The zero-tolerance rule towards bribery and corruption was maintained. Avenue to report suspicious and unethical conduct is outlined in our Whistleblowing Policy.
TNB's Risk Management Framework	Our Risk Management Framework is in line with ISO 31000:2018 Risk Management – Guidelines and provides a structured approach to risk management, comprising the assessment of sustainability-related risks for informed decision-making.
TNB Corporate Integrity Management System (TCIMS) and Anti-Bribery Management System (ABMS) Implementation (ISO 37001 Certified)	<ol style="list-style-type: none"> 1. We conducted 10 Fraud and Bribery Workshops. 2. We conducted four (4) sessions of Internal Auditors Training. 3. A series of consultation sessions on ABMS and TCIMS was held for TNB's subsidiaries. 4. ILSAS was certified with ISO 37001 by SIRIM in 2022. 5. The Retail Division maintained its ISO 37001 certification.
Three (3) Integrity Mandatory Requirements	All employees are required to sign the Integrity Pledge, declare any conflicts of interest and complete the Integrity E-Learning Module on an annual basis.
Collaboration with the Malaysian Anti-Corruption Commission (MACC)	On 4 October 2022, we signed a Memorandum of Understanding (MoU) with the MACC to enhance our bilateral cooperation. In addition, we also pledged to uphold ethical standards by signing the Corruption Free Pledge (<i>Ikrar Bebas Rasuah</i>) with MACC at our headquarters, which was followed by similar ceremonies in seven (7) other states.
Integrity Engagement Programme (IEP)	We collaborated with MACC in 2022 to conduct six (6) sessions of Anti-Corruption Programmes and activities. As part of our efforts to combat corruption, TNB established a comprehensive Training and Communication Plan (TCP) that includes 18 activities.
TNB Integrity Health Index	In FY2022, we conducted an internal survey to evaluate TNB's integrity practices, which saw a high level of participation from 19,989 staff members. The results of the survey were impressive, with TNB achieving a score of 79.36%, indicating that the organisation is committed to maintaining the highest ethical standards in its operations. The score reflects the effectiveness of TNB's policies and practices in promoting ethical behaviour and ensuring compliance with regulations and standards.

Moving forward, we intend to introduce our Code of Business Ethics (COBE) and Organisational Anti-Corruption Plan. To further reinforce the institutionalisation of integrity in TNB, our Management has incorporated the Integrity Health Index (IHI) as part of its Key Performance Indicator in FY2022.

 For more information, please refer to *Ethics, Integrity & Trust*, which can be found on pages 182-183.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

ADOPTING TCFD RECOMMENDATIONS

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

Core Elements of Recommended Climate-Related Financial Disclosures



The imminent threats of climate change will impact not only our business sustainability but also the wider economy and the well-being of the community. We believe that every one of us will need to play a role in transforming and decarbonising the energy industry.

i For more information on the TCFD Recommendations, please refer to the Climate Change and Environment section under the Sustainability Statement on page 87.

GOVERNANCE

The Board is committed to strategically integrating sustainability across TNB's business and advancing our sustainability efforts, including climate action. TNB's Board will deliberate and approve the sustainability strategy and pathway, while also overseeing TNB's sustainability implementation and performance. This will include the materiality assessment, the scenario analysis study and Sustainability Pathway (SP) 2050. SETC and the respective Management Committees are responsible for managing sustainability and climate risks and opportunities, as well as monitoring the performance of related initiatives rolled out by TNB, with oversight from the Board. TNB's Sustainability Governance outlines clear roles and responsibilities in relation to sustainability and climate action for each level of leadership.

The BRC oversees the establishment and implementation of the risk management framework that is embedded in the culture, processes and structures of the Group and is responsive to changes in the business environment. Sustainability and climate risks are included as part of the enterprise risk management process.

The principles to guide climate action, particularly on GHG emissions, are covered under our Environmental Policy, Environmental Management System and Sustainability Energy Management (SEM) Framework based on the ISO 50001:2011 Energy Management System, ASEAN Energy Management System (AEMAS) and Grid Green Code of Conduct.

i For more information on sustainability and climate governance, please refer to the Our Sustainability Governance Structure under Sustainability Governance, page 164.

OPERATIONS OF THE BOARD

Prior to each Board meeting, the Board receives the Chairman Reports of each Board Committee on their deliberations and recommendations for each meeting. This ensures that each Director is informed of the decisions made, including the views raised. The Chairman of each Board Committee then tables to the Board its report and present the Committee's recommendation for the Board's approval accordingly. This permits the Board to express its views on all deliberations of the Committees. All deliberations and recommendations must be minuted and approved by each Board Committee and confirmed by the Chairman at their respective Board Committee meetings.

Under the guidance of the Chairman, all matters placed before the Board are discussed openly. Presentations and advice are received frequently from Senior Executives within the Group and from external advisers (if any) to facilitate the decision-making of the Board. In the year under review, the Board considered a wide range of matters in order to meet its obligations with discussions revolving around strategy, sustainability and operations of the Group, including that of both main operating subsidiaries, financial aspects of the Group and on legal, compliance, governance and risk matters. The Board and Committees meetings were held via online and hybrid mode throughout the Financial Year.

BOARD COMPOSITION AND INDEPENDENCE

The Board has reviewed the independence of each Independent Non-Executive Director. None of the Independent Non-Executive Directors who served during the year had any material business or other relationship with the Group and there were no other matters that were likely to affect their independence of character and judgement as guided by the MMLR. The Board recognises that in view of the characteristics of independence set out in the MCCG, length of service is an important factor when considering the independence of Independent Non-Executive Directors.

The Board adopts a policy that limits the tenure of its Independent Non-Executive Directors to nine (9) years without further extension, pursuant to Step Up 5.4 of MCCG. Currently, none of the Independent Non-Executive Directors has served the Board for more than nine (9) years.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUMMARY OF BOARD ACTIVITIES IN 2022

BOARD CHARTER

The Board is guided by its Charter which sets out the Board's roles, powers, duties and functions in accordance with the MCCG, MMLR, Companies Act 2016, Board current process and procedures, latest respective Board Committees' TOR, applicable rules/regulation and governance best practices.

MATTERS DELIBERATED BY THE BOARD AND ITS COMMITTEES DURING THE FINANCIAL YEAR ENDED 31 DECEMBER 2022

The list below is not exhaustive of all Key Areas of Focus/Matters Deliberated by the Board and its Committees throughout the Financial Year, but serves to provide stakeholders with an insight into some of the key matters considered by the Board :

BOARD

- Revenue, Operational and Capital Expenditure (CAPEX) Budget for Financial Year 2023
- Approval/Status Update on TNB's potential investments/divestment projects
- Approval/Status Update/Issues Raised on Operational matters of TNB and its Group of Companies
- TNB's Sustainability Pathway 2050 : Low Carbon Pathway and Key Action Items
- Quarterly Group Performance
- Audited Financial Statements for Financial Year 2021
- Quarterly Financial Results
- 2022 Integrated Annual Report Statements
- Appointment and Resignation of Chairman and Directors
- Proposed FY2023 KPIs for President/CEO
- Interim and Final Dividends
- Quarterly Risk Dashboard Report
- Quarterly Report on Non-Audit Services
- Approval of Procurement within its Approving Authority
- TNB Divisions/Departments Risk Profiles and Convergence Initiatives
- Quarterly Report on TNB's Litigation and Arbitration Cases
- Corporate Governance Report 2022
- Board Evaluation Assessment (BEA) for Board of Directors, Board Committees and Self and Peer FY2022
- PwC Malaysia Transparency Report
- Proposed Funding Options and Plans for FY2022 and onwards
- Proposals for TNB's contribution/sponsorship to flood victims through Government Linked Companies/Government Linked Investment Companies Disaster Response Network
- Indonesia Coal Supply Interruption Risk and Mitigation
- Impact of Rising Fuel Price and the Russia-Ukraine Conflict to TNB
- TNB Equity Portfolio Performance Report for the period ended 31 December 2021
- Notice of 33rd AGM

FIC

- Potential Proposals of Local and International Investment with focus on Renewable Energy
- Strategic Report of Subsidiary Management Department's Subsidiaries
- Commercialisation of TNB's Real Estate Assets
- TNB Hurdle Rate Monitoring Update
- 2022 Review of TNB Risk Adjusted Rate of Return for Future Investments
- Reviewed/Evaluated Investments in Subsidiaries and Associated Companies and Made Appropriate Proposals for any New Investments/Divestments
- TNB International Investments' Quarterly Performance
- Proposed capital structure and financing of TNB's wholly-owned subsidiaries
- Proposals for Voluntary Winding up of relevant subsidiaries
- Investment Executive Committee (IEC) Report
- Revision of IEC TOR

BTC

- Approval of Procurement within its Approving Authority
- Procurement Plan and Strategy
- Procurement Issues
- Procurement Policies and Procedures

BLTIP

- Approval on Granting and Vesting of LTIP Shares

BIC

- Management of Disciplinary Cases
- Quarterly Statistics of Disciplinary Cases
- Governing Body Review ISO 37001: Anti-Bribery Management System
- Semi Annual Reporting to the Malaysian Anti-Corruption Commission
- Approval on Amendments to Disciplinary Procedures
- Endorsement of TNB Code of Business Ethics
- Amendment of TNB Corporate Integrity Management System
- Review of BIC TOR
- Training Communication Plan and its Quarterly Updates

BAC

- Summaries of the activities of BAC, BNRC and BRC are available in their respective reports in this Integrated Annual Report.

BNRC

BRC

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUMMARY OF BOARD ACTIVITIES IN 2022

Matters Considered by the Board

The Board plays a pivotal role in reviewing the Company's strategic direction and approving corporate strategic initiatives developed by the Management. The Board deliberates annually the Company's strategic and business plan as proposed by the Management, including the annual capital and revenue budget for the ensuing year as well as the KPIs. This ensures that the KPIs correspond with the Company's annual strategic and business plan. The Board reviews and deliberates on the Management's views/assumptions in ensuring the best decisions are reached after considering all relevant aspects.

A separate and informal session between the Board and Top Management, known as the Board Breakout Session (BBO), serves as a platform for the Board and Management to deliberate and exchange views as well as opinions in formulating strategic plans/issues and to chart the direction of the Group, including the reporting of its progress. The BBO is coordinated by the Company Secretary's Office, with the engagement of the respective Divisions, as and when the need arises.

Half-year reviews of the business plan and the budget were conducted whereby comparisons of approved targets against the Company's actual performance were made.

During the Financial Year under review, three (3) BBOs were held, focusing on the way forward for the TNB ESG Strategy : Net Zero Commitment and Pathways as well as the Regulatory Period 3 (RP3) (2022-2024) Roll-Down for the Company.

During the BBOs, the Management shared with the Board that to achieve our Sustainability Pathway aspiration and targets, TNB is working on a smooth transition to 2050 with sustained business growth. This transition calls for actionable items that take into account two (2) key objectives, i.e. making the core sustainable and building new sustainable businesses. With Net Zero 2050 as TNB's aspiration, more details on the low carbon pathway are required.

The Management also shared with the Board the outcomes and current progress of TNB's Sustainability Pathway. Our net zero goal requires commitment to these changes.

TNB had seriously considered of how to best manage risk and achieve the best outcomes for TNB, TNB Power Generation Sdn. Bhd., the investors and Malaysia.

The Management also shared the outcome of RP2 Performances, RP3 Key Parameters and held discussions on RP3 Risks and Opportunities as well as value creation priorities in RP3.

The Board will deliberate and approve the sustainability strategy and pathway forward, while also overseeing TNB's sustainability implementation and performance.

More information on the Strategic Direction is available in From Our Leadership on pages 38-63 of this report.

Based on the evaluation for the Financial Year under review, the Board collectively concurred that it has reviewed the Company's strategic and financial plan as well as monitored its implementation, including the setting of suitable KPIs in achieving the Company's objectives.

Link to Strategy

- Grid of the Future
- Future-Proof Regulations
- Future Generation Sources
- Winning the Customer

Material Matters Reserved for the Board

Formulating, reviewing and approving the Company's strategic business plan

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUMMARY OF BOARD ACTIVITIES IN 2022

Matters Considered by the Board

The Board, through the BRC, is responsible for overseeing the effectiveness and adequacy of the Group's risk management framework and ensuring that it forms part of the Group's corporate culture. The BRC's key responsibilities include approving the risk management framework and policies on behalf of the Board and deliberating the Group's strategic and key operating risks as well as ensuring appropriate mitigations are implemented to manage these risks.

During the Financial Year under review, there were seven (7) BRC sittings. The BRC reviewed the Statement on Risk Management and Internal Control, which summarises the risk management practices and internal controls implemented by Management. It also deliberated on KRI that were developed in alignment with BRC's and Management's risk appetite.

The BRC is assisted by the Chief Risk Officer and the Risk Management Department (RMD) in discharging its duties and responsibilities. The RMD is responsible for the effective implementation of the TNB Risk Management Framework for informed decision-making. The framework is developed in alignment with ISO 31000:2018.

The BRC continues to diligently exercise its risk oversight responsibilities by ensuring that risk management is an integral part of strategic planning and decision-making for the achievement of the Group's strategic outcomes and long-term objectives.

Based on the evaluation for the Financial Year under review, the Board collectively agreed that it has discharged its roles in identifying principal risks and in ensuring that the Group has put in place an adequate risk management framework to effectively monitor and manage the risks of its operational businesses.

Link to Strategy

- Grid of the Future
- Future-Proof Regulations
- Future Generation Sources
- Winning the Customer

Material Matters Reserved for the Board

Identifying and managing principal risks affecting the Company

Matters Considered by the Board

The Board is responsible for ensuring that a sound reporting framework of internal controls and regulatory compliance is in place throughout the Company. Based on the evaluation for the Financial Year under review, the Board collectively concurred that it has discharged its roles through the BRC/BAC whereby regular meetings were held in reviewing the effectiveness of the Company's internal control system.

Link to Strategy

- Future-Proof Regulations

Material Matters Reserved for the Board

Reviewing the adequacy and integrity of the Company's internal control system

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUMMARY OF BOARD ACTIVITIES IN 2022

Matters Considered by the Board

The President/CEO is responsible for managing the day-to-day operations of the Company and implementing the Group strategies and policies as agreed by the Board. In doing so, he is well supported by the respective Management Committees. The performance of Management is measured through the Company's and Group's quarterly financial performance. The Board, on a continuous basis, is well informed of the progress of Company's strategic initiatives and critical operational issues as well as the Group's performance based on approved KPIs.

Link to Strategy

- Grid of the Future
- Future Generation Sources
- Winning the Customer

Material Matters Reserved for the Board

Overseeing and evaluating the conduct and performance of the Company's businesses

Matters Considered by the Board

The Board, assisted by the BNRC, is responsible for developing plans to identify the necessary and desirable competencies and skills of Directors and succession plans to ensure there is appropriate dynamics of skills, experience, expertise and diversity on the Board. In addition, the Board/BNRC also oversees the appointment and succession planning of the Top Management.

The selection of candidates and appointment of Independent Non-Executive Directors by the Board/BNRC are made with the assistance of an independent consultant, whenever necessary.

During the Financial Year under review, there were several changes to the Board. This includes the departures of Dato' Sri Hasan bin Arifin as Chairman/Non-Independent Non-Executive Director, with effect from 1 January 2023 and Datuk Seri Asri bin Hamidin @ Hamidon, Non-Independent Non-Executive Director, as well as his Alternate Director, Faisal @ Pital bin Abdul Ghani with effect from 5 January 2023, and the demise of Dato' Ir. Nawawi bin Ahmad, an Independent Non-Executive Director on 28 November 2022. The resignation of Datuk Lau Beng Wei took place with effect from 6 March 2023.

Several new additions were made to the Board duly appointed by BNRC/Board. Dato' Abdul Razak bin Abdul Majid was appointed as the Chairman/Non-Independent Non-Executive Director with effect from 27 March 2023,

with the concurrence of MoF Inc. Rohaya binti Mohammad Yusof was appointed as Non-Independent Non-Executive Director with effect from 20 March 2023, representing EPF, a major shareholder of TNB.

The Board on 10 April 2023 had approved on the appointment of Datin Rashidah binti Mohd Sies with the concurrence of MoF Inc. as Non-Independent Non-Executive Director of TNB.

During the Financial Year under review, several movements in the Top Management took place. The Board/BNRC deliberated on the succession planning for critical positions in TNB, intended to discover and manage the development of TNB's future leaders.

Ir. Dev Anandan was appointed as Chief Grid Officer with effect from 1 January 2023 in place of Datuk Ir. Husaini bin Husin who retired on 31 January 2023. Datuk Ts. Shamsul bin Ahmad was made the Chief Regulatory & Stakeholder Management Officer with effect from 12 December 2022, to lead the Regulatory & Stakeholder Management Division following the retirement of Datuk Wira Roslan bin Ab Rahman.

Following the resignation of Datuk Fazlur Rahman bin Zainuddin on 8 November 2022, the Strategy & Ventures Division is now led by Datuk Ir. Megat Jalaluddin bin Megat Hassan, who was redesignated with effect from 3 October 2022. Kamal Arifin A Rahman was appointed as Chief Retail Officer with effect

from 3 October 2022 in place of Datuk Ir. Megat Jalaluddin bin Megat Hassan following the change of portfolio. With the retirement of Datuk Fazil bin Ibrahim, Azlan bin Ahmad was made Chief Information Officer with effect from 18 July 2022.

These appointment were made after intensive deliberations and also after taking into account their qualifications, working experience, expertise, professionalism and knowledge of the Company and industry.

The Board is satisfied that the BNRC has efficiently discharged its duties pertaining to the nomination, remuneration and succession management functions as set out in its TOR.

The BNRC annually evaluates the performance of the President/CEO and Top Management, whose remunerations are directly linked to their respective KPIs. The President/CEO's remuneration package is reviewed by the BNRC to reflect the contributions made towards the Group's achievements for the year. The BNRC's views and recommendations on this are submitted to the Board for its deliberation/approval.

Based on the evaluation for the Financial Year under review, the Board collectively concurred that the succession planning for President/CEO and Top Management as well as for the Company's future leaders has been appropriately developed.

Link to Strategy

- Winning the Customer

Material Matters Reserved for the Board

Succession Planning

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

SUPPLY OF INFORMATION AND ACCESS TO ADVICE

A Pre-Board meeting is held prior to any Board meeting for the Management to provide the Chairman with insights into the papers that will be deliberated. The agenda of Board meetings is drawn up upon consultation between the Chairman, President/CEO and Company Secretary at the Pre-Board meeting. Copies of the agenda and Board papers are circulated to Board Members via an advanced meeting software which allows the Directors to securely access, read and review Board/Committees Documents and collaborate with Directors and the Company Secretary electronically at least five (5) working days prior to the meetings.

Aside from Board papers, presentations are provided by the Management to better facilitate the discussion of the subject matter. This permits prior review by the Directors and, if necessary, further clarification and additional information are sought upon deliberation to facilitate informed decision-making. The core activities of the Board and its Committees are well documented and planned on a forward agenda. A list of matters arising from each meeting is maintained and followed up at subsequent meetings.

The Company Secretary advises the Board on governance matters, ensuring good information flows within the Board, its Committees, the GEMC and senior management. The Company Secretary is responsible for ensuring the Board complies with all relevant processes and for assessing compliance with the MMLR, Corporate Disclosure Guidance, the MCGG and the Companies Act 2016. An important part of this is effective collaboration with other parties across all Group functions. Good training, regular discussions on key issues and support from those in areas of critical operational risk in evaluating areas for change are also imperative.

The Board and each Director are at liberty to obtain external independent or professional advice as deemed appropriate at the Company's expense to assist with decision-making. This includes the attendance of external advisers at meetings and seeking required information from any member of the Group's workforce.

DIVERSITY

The table below shows the gender diversity of the Board and in the workforce to date :

Gender	Male		Female		Total
	No.	%	No.	%	No.
TNB Board (excluding Alternate Director)	5	45%	6	55%	11
Top Management (comprising GEMC, C-Suite, Senior General Managers)	266	74%	92	26%	358
Senior Managers	601	64%	331	36%	932
Managers	1,364	60%	913	40%	2,277
Executives	1,750	58%	1,260	42%	3,010
Non-Executives	17,334	85%	3,015	15%	20,349
Total	21,320	79%	5,617	21%	26,937

RE-ELECTION OF DIRECTORS

Clause 64(1) of the Company's Constitution provides, among others, that one-third (1/3) of the Directors at the time being of whom have been longest in office shall retire by rotation at the AGM of the Company and shall be eligible for re-election.

Clause 63(2) of the Company's Constitution provides, among others, that the Directors shall have power at any time and from time to time to appoint any other person to be a Director of the Company either to fill a casual vacancy or as an addition to the existing Directors. Any Director so appointed shall hold office only until the next following AGM of the Company and shall then be eligible for re-election.

Juniwati Rahmat Hussin, Gopala Krishnan K.Sundaram and Datuk Rawisandran a/l Narayanan are retiring by rotation in accordance with Clause 64(1) of the Company's Constitution and being eligible, have offered themselves for re-election.

The Board recognises that the Directors' performance are used as basis in recommending their re-election to the shareholders. This, in turn, is determined through their annual evaluation and independence assessment, which are assessed by the BNRC before any recommendation is made to the Board for deliberation and approval.

Based on the annual independence assessment undertaken by the Independent Directors of whom are retiring at the coming AGM, namely Juniwati Rahmat Hussin, Gopala Krishnan K.Sundaram and Datuk Rawisandran a/l Narayanan, the BNRC/Board are satisfied that these Independent Directors have complied with the independence criteria as prescribed by the MMLR and continue to bring independent and objective judgement to the Board.

They have exercised the duty of care and diligence as Directors in the best interest of the Company, its shareholders and stakeholders. All retiring Directors named above, through the Board Evaluation Assessment including Self and Peer Assessment, have met the performance criteria required of an effective and high-performance Board.

In respect of the new appointments made to the Board, Dato' Abdul Razak bin Abdul Majid, Datin Rashidah binti Mohd Sies and Rohaya binti Mohammad Yusof shall retire at the forthcoming AGM in accordance with Clause 63(2) of the Company's Constitution and being eligible, have offered themselves for re-election.

Dato' Abdul Razak bin Abdul Majid and Datin Rashidah binti Mohd Sies are the Appointed Directors by MoF Inc., while Rohaya binti Mohammad Yusof represents the EPF.

In addition, all retiring Directors have declared that they did not have any existing or potential conflict of interest within or outside the Company that could affect the execution of their roles as Company Directors.

Having considered their fit and proper assessment, due diligence for the newly appointed Directors, professionalism, vast experience, material relationship, competency, commitment and individuals' contributions in performing their respective duties, the Board and the BNRC are satisfied that all Directors who are standing for re-election at the 33rd AGM have met the Board's expectation by continuously discharging their duties diligently as Company Directors.

With that, upon the BNRC's assessment, the Board resolved to support and recommend the re-election of each Director who is retiring at the upcoming 33rd AGM.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

DIRECTORS' DEVELOPMENT AND INDUCTION

To assist the Board in undertaking its responsibilities, a programme of training and development is available to all Directors, with training needs assessed as part of the Board evaluation procedure. The Board programme includes regular presentations from Management and informal meetings to build understanding of the business and sector, or in areas recognised as being technically complex. Such training is intended to support a deeper understanding as well as equipping the Non-Executive Directors with insight into how TNB's approach compares with the practices of its peers. All new Directors receive a comprehensive and tailored induction programme, including meetings with Top Management, site visits and briefings on key operational matters, Board procedures and governance matters.

The existing Directors excluding the Alternate Director had attended their Mandatory Accreditation Programme for Directors of Public Listed Companies (MAPs) as prescribed under Paragraph 15.08 and Practice Note 5 by the MMLR.

The Company Secretary's Office facilitates the Board in organising internal and arranging external programmes/seminars that are relevant to the Directors. These include the annual Board Development Programme (BDP) which is organised in-house as part of TNB's Board Continuing Development Programme.

BDP 2022 was held virtually in collaboration with PricewaterhouseCoopers Risk Services Sdn. Bhd. with the topic "Information Technology & Operational Technology". It was held on 18 October 2022 and attended by the Board and Top Management. The topic was relevant following the trends observed post the COVID-19 pandemic as it became endemic, where cyber threats grew pervasive due to widespread internet access.

Subsequent to that, the Integrity Department, assisted by the Company Secretary's Office, organised a specific programme, "Corporate Liabilities", presented virtually by Herbert Smith Freehills, Malaysia, on 26 September 2022 for the Board and Top Management to provide the latest developments in Corporate Liability in accordance with Section 17A of the Malaysian Anti-Corruption Commission Act 2009. This was in line with the Training Communication Plan 2022 approved by the BIC, which required TNB's Integrity Department to organise specific training for the Board and Top Management once in the third quarter of 2022.

On 1 November 2022, TNB Group Human Resource Division in collaboration with the Company Secretary's Office held the Successors Engagement Programme with the Board and Top Management with the theme "Realising Sustainability Through Diversity" which focused on the development of Women's Leadership through discussion on the role, development and leadership among women to achieve the Company's goals and aspirations. The theme was chosen to support the Company's efforts to empower the Diversity and Inclusion element. Through this session the Board and Top Management were able to interact with potential successors and were exposed to the role and importance of women's development in TNB.

To date, the following Directors' Induction Programmes were held :

- Integrity Department : Overview Briefing by Chief Integrity & Development Officer
- Real Estate Ventures : Overview Briefing by Head, Real Estate Ventures

During the Financial Year under review, the Directors attended, among others, the following conferences and professional trainings :

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING ATTENDED
Dato' Indera Ir. Baharin bin Din	29 November - 1 December 2022	Enlit Europe Conference 2022, as Panelist
Datuk Amran Hafiz bin Affifudin	25 May 2022	2022 Exco Workshop Agenda
	10 June 2022	Khazanah Sustainability Framework & Targets Launch : Investing in a Sustainable 2022
	29-30 August 2022	5 th International Sustainability Energy Summit
	3-4 October 2022	Khazanah Megatrends Forum 2022
	18 October 2022	BDP 2022 : Information Technology & Operational Technology (IT & OT)
	29 November - 1 December 2022	Enlit Europe Conference 2022
Ong Ai Lin	27 January 2022	BNM-FIDE Forum MyFintech Week Masterclass
	8 March 2022	BNM-FIDE Forum Dialogue : Climate Risk Management and Scenario Analysis
	9 March 2022	Overview On Corruption Risk Management & Organizational Anti-Corruption Plan
	9 March 2022	Climate Disclosure Training Programme
	15 March 2022	BNM-World Bank Group Report Launch

**PRINCIPLE A :
BOARD LEADERSHIP & EFFECTIVENESS**

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING ATTENDED
Ong Ai Lin (cont.)	28 April 2022	The Golden Key to Zero Trust Security
	8-9 June 2022	MIA International Accountants Conference 2022
	7 November 2022	Inflation, Looming Recession & Climate Change : A Tricky Balancing Act by Professor Roberto Rigobon and Mr. Allen Ng
	24 November 2022	The Emerging Trends – Threats and Risks to the Financial Services Industry : Managing Global Risk Investment and Payment System
Juniwati Rahmat Hussin	20 January 2022	MIA Conference : Woman of Substance Symposium 2021
	28 April 2022	The Golden Key to Zero Trust Security
	22-23 June 2022	Sustainable and Responsible Investment (SRI 2022) : Preserving the Climate Through Sustainable Business and Living
	6 July 2022	Sustainability and Its Impact On Organizations : What Directors Need to Know
	9 August 2022	SDG 7 Seminar : Affordable and Clean Energy - A Journey Towards Energy Transition
	20 September 2022	Sustainability Is the Future?
	26 September 2022	Corporate Liabilities
	3-4 October 2022	Khazanah Megatrends Forum 2022
	18 October 2022	BDP 2022 : IT & OT
	5 December 2022	Accelerating Implementation of Climate Strategies
6 December 2022	Invitation to Security Commission Malaysia's Audit Oversight Board Conversation With Audit Committees	
Gopala Krishnan K.Sundaram	20 January 2022	Updated Malaysian Code on Corporate Governance 2021
	2 March 2022	Economic Outlook - Taking Temperature for 2022 and Beyond
	9-10 March 2022	FCD Series Module B : Stakeholder Voice in the Boardroom
	23 March 2022	FCD Series Module E : Digital Awareness and Upskilling for Board
	6 April 2022	Sustainability Management and Reporting
	20 April 2022	Fraud Risk Management
	22 April 2022	Pre-IPO Briefing
	11 May 2022	Governance, Risk and Control (GRC)
	18 May 2022	Drafting Sustainability Statement or Report
	19 May 2022	Roles & Responsibilities of a Director in a Public Listed Company : What You Need to Know
	24 May 2022	Corruption Risk Management
	7 June 2022	Artificial Intelligence (AI) for Company Directors and Executives
	9 June 2022	Related Party Transactions and Conflict of Interest Including the Arms Length Definition on Transaction
	16 June 2022	Law Behind Corporate Governance
	23 June 2022	Introduction to Natural Capital
	28 June 2022	Stakeholder Communication
	6 July 2022	Sustainability and Its Impact On Organizations : What Directors Need to Know
	1-2 August 2022	Strategic Supply Chain
18 August 2022	Securities Commission Guidelines On the Conduct of Directors of Listed Corporations and Their Subsidiaries : Implications to the Listed Corporations, Their Subsidiaries, Directors and Management, Including What Needs to be Done to Demonstrate Compliance	

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING ATTENDED
Gopala Krishnan K.Sundaram (cont.)	6 September 2022	Corporate Governance & Remuneration Practice for the ESG World
	13 September 2022	Corporate Governance Guide 4 th Edition – Rise Together
	21 September 2022	Sustainability Management and Reporting
	26 September 2022	Corporate Liabilities
	28 September 2022	Governance, Risk and Controls (GRC)
	3-4 October 2022	Khazanah Megatrends Forum 2022
	5-6 October 2022	Supply Chain Resilience
	17-18 October 2022	Sustainable Supply Chain
	18 October 2022	BDP 2022 : IT & OT
	12 October 2022	Understanding Sustainability Taxonomies Globally and Regionally
	19 October 2022	BFF 2022 : Scaling Up Innovation Towards Future Sustainable Business Now
	8-9 November 2022	Personal Integrity Development Programme
	6 December 2022	Invitation to Security Commission Malaysia's Audit Oversight Board Conversation With Audit Committees
7 December 2022	Seminar on Sustainability Governance, Management and Reporting	
Dato' Roslina binti Zainal	20 January 2022	MIA Conference : Woman of Substance Symposium 2021
	10-11 May 2022	Technical Visit to Rahman Hydraulic Berhad Tin Mine, Perak
	8-11 June 2022	Transition to a Net-Zero Emissions Economy
	17 June 2022	ICDM BNRC Dialogue and Teh Tarik Session With Shai Ganu
	26 September 2022	Corporate Liabilities
	3-4 October 2022	Khazanah Megatrends Forum 2022
	18 October 2022	BDP 2022 : IT & OT
29 November - 1 December 2022	Enlit Europe Conference 2022	
Dato' Rawisandran a/l Narayanan	26 September 2022	Corporate Liabilities
	6 December 2022	Invitation to Security Commission Malaysia's Audit Oversight Board Conversation With Audit Committees
Dato' Merina binti Abu Tahir	14 February 2022	Understanding Climate Risks : Launch of the ASEAN Climate Governance Network
	15-17 February 2022	Mandatory Accreditation Programme
	21 February 2022	Sustainability and Its Impact On Organisations : What Directors Need to Know
	2 March 2022	MIA Digital Month 2022 : Leading the Digital Transformation of the Accounting Profession
	16 March 2022	Global Outlook for ESG Finance and Digital Transformation
	23 March 2022	FCD Series Module E : Digital Awareness and Upskilling for Board
	12 April 2022	Energy Outlook 2022 : Malaysia's Energy Transition Outlook
	20 April 2022	ACCA Annual Virtual Conference 2022
	21 April 2022	PNB Knowledge Forum 2022 : Sustainable Investing : ESG at the Forefront
10 May 2022	Climate Governance Malaysia : Conversation on Climate Governance Session 1 & 2	

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

NAME OF DIRECTOR	DATE	CONFERENCE/TRAINING ATTENDED
Dato' Merina binti Abu Tahir (cont.)	25 May 2022	APAC Thought Leadership Virtual Forum - Sustainability Reporting : Get Ready For New ISSB Standards
	26 May 2022	MIA Virtual CFO Event : Advancements on ESG Reporting
	8-9 June 2022	MIA International Accountants Conference 2022 : Leading ESG, Charting Sustainability
	17 June 2022	ICDM BNRC Dialogue and Teh Tarik Session With Shai Ganu
	6 July 2022	Sustainability and Its Impact On Organizations : What Directors Need to Know
	12 July 2022	3 rd Malaysian Energy Roundtable
	13 July 2022	Navigating through the Evolution of Corporate Governance with the Introduction of Tax Corporate Governance Framework
	27 July 2022	PowerTalk ESG Series 2022 (Part II) : Session #4 - ESG Disclosure At a Glance – Key Developments and Future Trends
	28 July 2022	No Planet B – A Call to Climate Action
	3 August 2022	PowerTalk ESG Series 2022 (Part II) : Session #5 - Climate Change and Carbon From the Financial Risk & Reporting Perspectives
	9 August 2022	SDG7 Seminar, Affordable and Clean Energy : A Journey Towards Energy Transition
	10 August 2022	PNB Knowledge Forum 2022 : Tall Buildings and Living in the Space Age : The Enigma and Convergence of Science and Art
	11 August 2022	PowerTalk ESG Series 2022 (Part II) : Session #6 - Characteristics of ESG & Sustainability Leadership
	20 September 2022	Advocacy Session for Directors and Senior Management of Main Market Listed Issuers
	3-4 October 2022	Khazanah Megatrends Forum 2022
18 October 2022	BDP 2022 : IT & OT	
6 December 2022	Security Commission Malaysia's Audit Oversight Board Conversation With Audit Committees	

Trainings attended by the Company Secretary during the Financial Year under review :

- Integration of ESG and Corporate Sustainability in a Company
- SSM National Conference 2022: Corporate Governance and Sustainability Needed Now More Than Ever
- Role of Company Secretaries as Reporting Institution in Combating Money Laundering and Terrorism Financing under Anti-Money Laundering Act 2001
- Sustainability Management and Reporting "What This Entails & How The Board and Management Go About Managing & Reporting Sustainability Practices"
- Drafting Sustainability Statement or Report: Identifying and Scoping the Contents for Meaningful Disclosure and Monitoring
- The Updated Malaysian Code on Corporate Governance
- Board Assessment: A Key Cog in an Effective Governance Structure
- ESG Reporting for ESG Leaders & Managers
- ESG Reporting for Business & Government

BOARD EVALUATION

The Board recognises that an objective and well-managed board evaluation process can lead to substantial improvement in Board effectiveness, bringing significant benefits to the Company. This is achieved through annual performance evaluations, induction programmes for new Board members and ongoing Board development activities.

TNB supports Practice 6.1 of MCCG whereby for Large Companies, the Board engages independent experts at least every three (3) years to facilitate objective and candid Board evaluations. The last assessment carried out by the independent expert, Willis Towers Watson (WTW), was in 2021.

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

2022 BOARD EVALUATION ASSESSMENT RESULTS

The 2022 BEA was conducted internally and facilitated by the Company Secretary through questionnaires guided by the Bursa Corporate Governance Guide (4th Edition). The questionnaires for the 2022 BEA were divided into several sections :

- Questionnaire Relating to ESG or Sustainability
- Board & Board Committees Effectiveness Assessment
- Directors and Board Committee Members' Self and Peer Assessment (SPA), including Fit & Proper Assessment
- Board Audit Committee Evaluation
- Board Audit Committee Members' SPA

The effectiveness of the Board is assessed in the areas of the Board's responsibilities and composition, Quality of Information and Decision-making, Boardroom Activities and Board's Relationship with the Management as well as the effectiveness of the Chairman and the President/CEO.

The assessment of individual Directors' contribution and performance is conducted based on performance criteria which are incorporated in the Directors' SPA questionnaires. This included, among others :

- will and ability to critically challenge and ask the right questions
- confidence to stand up for a point of view and offer advice/guidance
- character and integrity in dealing with potential conflict of interest situations
- calibre and personality
- commitment to serve the Company
- due diligence and integrity
- fit and proper
- independence and objectivity
- skills and competencies
- contribution and performance

Performance evaluations of the Board include reviews of its performance in addressing the Company's material sustainability risks and opportunities.

The effectiveness of Board Committees is assessed in terms of structure and processes, accountabilities and responsibilities, as well as the effectiveness of the Chairmen of the respective Board Committees. The SPA for the Board Committee members is similar to the Directors' SPA, which is intended to assess their contribution, performance, calibre and personality in relation to the skills, experience and other qualities they bring to the Board/Board Committees.

The SPA also examines the ability of each Board or Committee member to give input at meetings and to demonstrate a high level of professionalism and integrity in the decision-making process. It also takes into account the ability of each individual member to exercise independent judgement and demonstrate objectivity and clarity of thought on issues during deliberations at meetings, provide logical honest opinion and offer practical and realistic advice to the discussions.

Based on the 2022 BEA results, the overall ratings for the 2022 BEA were in average of 4.0, indicating that the performances of the Board, each Board Committees, individual Directors and members of each Board Committees had been satisfactory. Each Director was generally effective in discharging his/her duties/responsibility.

It was clear that the effectiveness of both the Chairman and President/CEO is reflective of the Board's confidence in them, indicating strong and effective leadership in spearheading the Company's direction.

The Board is seen to be effective and ensures the integrity of the Company is aligned with regulatory requirements, internal standards and best practices. The Board is committed to its fiduciary duties and assumes the core responsibilities of reviewing and monitoring the Group's strategic plan, overseeing and evaluating the conduct of the Group's business and establishing sound risk management and internal control frameworks for the Group.

Based on 2021 BEA findings, the Board recognised the need to continuously strengthen its composition in terms of diversity, in line with its strategic direction and enhance the succession planning of the Board/Top Management. Based on the 2022 BEA findings, areas that required ongoing attention for continuous improvement were sustainability strategies and Directors' trainings need to be tailored according to the Directors' need.

Responsibility and Conduct

- Business strategy and governance and implementation oversight
- Risk management and integrity
- Implementation oversight and monitoring of strategies and policies

Process and Administration

- Board Charter and Committee TORs
- Agenda and frequency of meetings
- Sufficient information availability and on a timely basis
- Culture and dynamics

Composition

- Diversity
- Competencies of the members
- Board and Committee compositions

This year's process

Each Director completed the BEA for the Board and their respective Committees, including Self and Peer Assessment.

The BEA analysis was presented to the BNRC for deliberation

A summarised report of BEA was tabled to the Board by the Chairman of the BNRC with a view to discuss areas of improvement

PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

EXECUTIVE DIRECTOR AND TOP MANAGEMENT REMUNERATION

The remuneration package for the Executive Director is structured to link rewards to corporate and individual performance. It comprises salary, allowances, bonuses and other customary benefits as accorded by comparable companies. A significant portion of an Executive Director's compensation package has been made variable and is determined by performance during the year against individual KPIs in a scorecard aligned with the corporate objectives as approved by the Board. The Executive Director recuses himself from deliberation and voting on his remuneration at Board meetings.

The BNRC reviews the performance of the Executive Director annually and submits views/recommendations to the Board on adjustments in remuneration and/or rewards to reflect the Executive Director's contributions towards the Group's achievements for the year.

The key elements of remuneration package for Top Management are structured into three (3) components namely (i) the base salary, fixed allowances and benefits, (ii) Short Term Incentive (STI) and (iii) Long Term Incentive Plan (LTIP).

The base salary needs to be competitive enough to attract and retain the relevant talents, and is determined by the scope of work, experience and expected performance of a talent. The fixed allowances are for certain benefits in cash and are not linked to the base salary.

STI is based on yearly performance and paid as bonuses, subject to the profitability of the Company and the performance of Top Management. Performance is measured based on quantitative targets and their alignment to the values the Company stands for, which would be qualitative in nature. The LTIP is to retain and reward Top Management to see out the growth and business strategy aligning with the long-term success of the Company.

In summary, TNB strongly believes in performance culture and the remuneration policy serves to pay competitively for sustainable performance while being in line with the shareholders' interest.

The Company has opted not to disclose the components of the remuneration of its Top Management as per Practice 8.2 of MCCG, as such disclosure may bring disadvantages to the Company's business interest. This is further explained in the CG Report.

NON-EXECUTIVE DIRECTORS' REMUNERATION

The Non-Executive Directors are remunerated through fixed monthly fees, meeting allowances and benefits-in-kind, inclusive of the reimbursement of utilities bills and business peripherals.

The level of remuneration of Non-Executive Directors reflects the current demanding challenges in discharging their fiduciary duties, roles and responsibilities, whether individually or collectively, as well as the complexity of the Company's operations and the industry. The Non-Executive Directors' remuneration/benefits have remain unchanged since 2013.

In 2021 WTW, as an independent expert, conducted a holistic and independent review of TNB's Non-Executive Directors' remuneration to determine its market competitiveness in Malaysia. Based on the findings, the structure of Non-Executive Directors' remuneration (including benefits) was generally aligned with the market practice and was recommended to be retained and reviewed in three (3) years' time.

OUR REMUNERATION APPROACH

The Board, through the BNRC, is to determine an appropriate remuneration policy that aligns remuneration with strategy to drive the long-term success of the Company and ensures that the Company may continue to attract, retain and motivate quality leaders.

The Directors' Remuneration Policy is shaped by the following underlying principles :



PRINCIPLE A : BOARD LEADERSHIP & EFFECTIVENESS

DISCLOSURE ON DIRECTORS' REMUNERATION

Details of each Director's remuneration for the Financial Year ended 31 December 2022 :

Name of Directors	Salary (RM)	Director's Fees		Meeting Allowances		Emoluments ¹ (RM)	Benefits-in- Kind ² (RM)	Total (RM)
		Company (RM)	Subsidiaries (RM)	Company (RM)	Subsidiaries (RM)			
Executive Director								
Dato' Indera Ir. Baharin bin Din	1,560,000.00	-	-	-	-	2,616,780.00	107,519.60	4,284,299.60
Non-Executive Directors								
Datuk Amran Hafiz bin Affudin	-	-	-	-	-	-	35,996.65	35,996.65
Ong Ai Lin <i>(Redesignated w.e.f. 30 September 2022)</i>	-	240,000.00	-	72,000.00	-	-	35,382.17	347,382.17
Juniwati Rahmat Hussin	-	240,000.00	-	88,000.00	-	-	4,675.55	332,675.55
Gopala Krishnan K.Sundaram	-	240,000.00	-	79,500.00	-	-	26,390.30	345,890.30
Dato' Roslina binti Zainal	-	240,000.00	-	94,500.00	-	-	27,645.80	362,145.80
Datuk Rawisandran a/I Narayanan	-	240,000.00	-	68,500.00	-	-	40,011.75	348,511.75
Dato' Merina binti Abu Tahir	-	220,000.00	-	76,500.00	-	-	41,853.16	338,353.16
Datuk Lau Beng Wei <i>(Resigned w.e.f. 6 March 2023)</i>	-	240,000.00	-	60,500.00	-	-	18,000.00	318,500.00
Datuk Seri Asri bin Hamidin @ Hamidon <i>(Cessation of Office as Director w.e.f. 5 January 2023)</i>	-	240,000.00	-	46,500.00	-	-	-	286,500.00
Dato' Sri Hasan bin Arifin <i>(Cessation of Office as Chairman w.e.f. 1 January 2023)</i>	-	360,000.00	60,000.00 ³	40,000.00	7,500.00 ³	-	68,013.36	535,513.36
Dato' Ir. Nawawi bin Ahmad <i>(Demised on 28 November 2022)</i>	-	218,666.66	-	76,000.00	-	-	48,219.42	342,886.08
Faisal @ Pital bin Abdul Ghani <i>(Cessation of Office as Alternate Director w.e.f. 5 January 2023)</i>	-	-	-	15,500.00	-	-	20,500.00	36,000.00
Azmin bin Ishak <i>(Cessation of Office as Alternate Director w.e.f. 10 February 2022)</i>	-	-	-	3,500.00	-	50,000.00	25,292.00	78,792.00
Total	1,560,000.00	2,478,666.66	60,000.00	721,000.00	7,500.00	2,666,780.00	499,499.76	7,993,446.42

Notes :

- Contribution to EPF, bonus, car allowance, LTIP, ex gratia and gratuity
- Utility bills, business peripherals, purchase of handphone, medical, travelling, uniforms and club memberships.
- Payment made by respective subsidiaries.

**PRINCIPLE A :
BOARD LEADERSHIP & EFFECTIVENESS****ENSURING SOUND FINANCIAL MANAGEMENT AND ROBUST CONTROLS****NR BOARD NOMINATION AND REMUNERATION COMMITTEE REPORT****BOARD NOMINATION
AND
REMUNERATION
COMMITTEE****Chairman****Dato' Roslina binti Zainal**

Independent Non-Executive Director

Members**Datuk Amran Hafiz bin Afffudin**

Non-Independent Non-Executive Director

Dato' Merina binti Abu Tahir

Independent Non-Executive Director

Datuk Lau Beng Wei

Independent Non-Executive Director

(Appointed as member w.e.f. 1 February 2023)

(Ceased as member w.e.f. 6 March 2023)

Dato' Ir. Nawawi bin Ahmad

Independent Non-Executive Director

(Demised on 28 November 2022)

Datuk Seri Asri bin Hamidin @ Hamidon

Non-Independent Non-Executive Director

(Ceased as member w.e.f. 5 January 2023)

The Committee last reviewed its TOR in
January 2021.**Key Activities of the Committee**

During the Financial Year under review, the BNRC held seven (7) meetings. To date, the BNRC's key activities included the approval/deliberation of the following :

- Annual Assessment of Independence of Independent Non-Executive Directors
- BEA of the Board of Directors, its Committees and each Individual Director
- Assessment of fit and proper and performance review of Directors for re-appointment/re-election
- Recommendation to the Board with regards to Directors who sought re-election at the AGM
- Assessment of fit and proper of potential candidates for proposed appointment as TNB Non-Executive Directors
- Review of the Board Skills Matrix, upon any appointment of potential candidates to the Board
- Appointment and resignation of Chairman
- Appointment of Senior Independent Non-Executive Director
- Appointment and resignation of Non-Executive Directors
- Review of the composition of the Board Committees upon appointment/resignation/demise of Directors
- Fit and proper assessment of potential candidates for Top Management
- Appointment of Top Management due to establishment of respective Divisions/succession planning
- Review of composition of the Boards of TNB Group for BNRC approval
- Review of succession planning of Top Management
- Assessment and recommendation to the Board on the promotion and renewal of service contracts of Top Management
- Review of performance evaluation against assigned KPIs of President/CEO and Top Management
- TNB Notice of 33rd AGM
- TNB Board of Directors' Fit and Proper Policy.

The Board on 30 June 2022 approved TNB Board of Directors' Fit and Proper Policy as guidance for the appointment and re-appointment of directors of TNB and its Group of Companies. TNB Board of Directors' Fit and Proper Policy is categorised into character and integrity; experience and competence; and time and commitment. In drafting the TNB Board of Directors' Fit and Proper Policy, references to and benchmarking against other Government Linked Companies/ Public Listed Companies policies were made. The Policy is also available on the Company's website at www.tnb.com.my.

KEY ROLES & RESPONSIBILITIES

For details of the roles and responsibilities of the Committee, please refer to page 163.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

ETHICS, INTEGRITY & TRUST

In 2017, TNB was one of the first listed corporation to embark on the ISO 37001:2016 Anti-Bribery Management System (ABMS) certification. Towards achieving the certification, TNB launched the TNB Corporate Integrity Management System (TCIMS) to drive an integrity-based culture and a high level of compliance with local and international anti-bribery standards. On 15 November 2018, TNB was awarded with the ABMS Certification from SIRIM and to further reinforce this culture, launched the TCIMS Handbook. TNB has a well thought out set of Shared Values made publicly available and communicated to the workforce. First among the TNB Shared Values is Integrity. The three (3) behaviours of Integrity are :



The Handbook covers five (5) TCIMS policies, namely the Anti-Bribery Policy; the Gifts, Hospitality and Related Benefits Policy; the Conflicts of Interest Policy; the Whistleblowing Policy; and the Integrity Pact and Committee Integrity Pledges Policy.

In 2022, TNB reviewed the four (4) main policies to reflect the current policies, circulars and practices. The reviewed policies are as follows :

- (i) Anti-Bribery Policy
- (ii) Gifts, Hospitality and Related Benefits Policy
- (iii) Conflict of Interest Policy
- (iv) Whistleblowing Policy.

During the Financial Year under review, a surveillance audit by SIRIM was conducted involving the Procurement & Supply Chain Division, the Retail Division and two (2) wholly-owned subsidiaries of TNB, namely Tenaga Cable Industries Sdn. Bhd. and TNB Repair and Maintenance Sdn. Bhd. where all the entities successfully retained the ISO 37001 Anti-Bribery Management System certification by SIRIM. One of TNB subsidiary, TNB Integrated Learning Solution Sdn. Bhd. (ILSAS) was also certified with ISO 37001 Anti-Bribery Management System by SIRIM.

In 2022, TNB signed a Memorandum of Understanding (MoU) with the Malaysian Anti-Corruption Commission (MACC) and signed the Corruption Free Pledge. This pledge emphasises the pledges and promises made by the leadership of TNB and its staff voluntarily in their capacity as an organisation to ensure that each of us will be more responsible in carrying out our duties and curbing corruption.

TNB also conducted the Integrity Health Survey in 2022 through UNITEN Research & Development Sdn. Bhd. and based on the survey TNB received a 79.36% score. Based on this score, TNB was categorized as world class best practices according to the Global Ethics & Integrity Benchmarks 2020 by Joan Elise Dubinsky and Alan Richter. TNB has also established a systematic approach through the Annual Training and Communication Plan (TCP) for the areas of improvement identified through the Integrity Health Survey conducted in 2021.

In 2022, all activities under the TCP were successfully completed, including training for Board of Directors. A series of trainings & awareness sessions were conducted during the Financial Year by the Integrity Department to better equip the Company for the implementation of Section 17A of the Malaysian Anti-Corruption Commission (MACC) Act 2009. These included the following :

- 10 sessions of Fraud and Bribery Risk Management Workshops
- All staff and active vendors/business partners/associates were required to complete the Integrity E-learning
- All staff are required to sign the integrity pledge and declare any conflicts of interest via Employee Self Services Online System annually
- ISO 37001 Internal Audit was carried out Company-wide
- TNB Integrity Health Index (IHI) was established to access and capture relevant information on different attributes and dimensions of Integrity Health status and performance of the Integrity Health system
- 19,989 staff participated in the IHI survey FY2022 and the score was 79.36%
- Published 18 Integrity bulletins and articles

In 2022, TNB was named among the top five Gold winners of the 2022 National Integrity, Governance and Anti-Corruption Award (AIGA). It marks TNB's achievements in their commitment to the Environmental, Social and Governance (ESG) agenda, particularly in governance and the personal integrity of employees, through improving organisational integrity.

LIMITS OF AUTHORITY

The Limits of Authority outlines principles to govern decision-making within the Group, including appropriate escalation and reporting to the Board. The Board has also delegated to the President/CEO and through the President/CEO to other Executives, responsibility to manage the Company's day-to-day activities. The Limits of Authority encompasses both monetary and non-monetary limits of authority for recommending and approving operational and management decision-making activities prior to their execution. This allows for balanced effective oversight with appropriate empowerment and accountability of the Management.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

CODE OF ETHICS

The Board of Directors is guided by a high standard of ethical conduct in accordance with the Code of Ethics for Company Directors as established by the Companies Commission of Malaysia. Each Non-Executive Director is supplied with the Non-Executive Directors' Handbook as reference for their professional responsibilities as well as the terms and conditions of their service. The Non-Executive Directors' Handbook is updated as and when the need arises to reflect any changes to the applicable rules and regulations as well as in the policies/procedures that govern the conduct of the Directors.

TNB has a Code of Ethics to govern the conduct of its employees. The provisions set out in the Code of Ethics ensure compliance with laws and regulations, sound employment practices, confidentiality and privacy. It also includes provisions on conflicts of interest, giving and accepting business courtesies and the protection and proper use of TNB's assets and resources. TNB's Code of Ethics also defines how TNB relates to its shareholders, employees, customers, suppliers and the communities in which it operates. It includes TNB's general principles on business integrity. All employees are expected to conduct business in accordance with the applicable laws, rules and regulations and in a manner that enhances and protects the reputation of TNB.

TNB's Procurement Code of Conduct guides TNB's Directors and employees as well as all existing and potential suppliers/contractors, including their directors and employees. TNB believes that all supplier/contractor relationships should be based on principles of good governance such as integrity, accountability, fairness and a zero-tolerance rule towards bribery and corruption. These principles are enforced in the Procurement Code of Conduct, which is constantly revised to reflect changes in regulations, reputational demands and business challenges.

The Procurement & Supply Chain Policy and Procedures provides a set of general policy and procedures as guidance in executing procurement within TNB. The Policy and Procedures enables TNB to obtain the best value in procurement, adopt leading business practices, advance TNB's business priorities, add value to customers and uphold good corporate governance. TNB's Code of Ethics and Procurement Code of Conduct are available in their respective sections of the Company's website at www.tnb.com.my.

CONFLICTS OF INTEREST

To foster ethical and independent decision-making, the Company requires Directors with any direct or indirect interest in a proposal or transaction being considered by the Board or its Committees to declare that interest and recuse himself/herself from the deliberations. The affected Director will take no part in the decision-making. As initiated by the Procurement & Supply Chain Division in collaboration with the Integrity Department to further strengthen our integrity and transparency in dealing with the Company's procurement activities, at each Board meeting, each Director shall sign an Integrity Pact, declaring his/her interest involving procurement/matters to be discussed at the meeting, to prevent corruption, conflict of interest and to maintain confidentiality of information.

WHISTLEBLOWING PROCEDURE

The Whistleblowing Procedure embodies TNB's commitment to maintaining an open working environment in which employees, contractors and members of the public are able to report instances of unethical, unlawful or undesirable conduct on a confidential basis without any fear of intimidation or reprisal. An independent investigation team investigates all reported concerns and, where applicable, provides feedback regarding the investigation's outcome.

The objectives of the Whistleblowing Procedure are as follows :

- to detect and address unacceptable conduct
- to provide employees and contractors with a supportive working environment in which they feel able to raise issues of legitimate concern to them and to TNB, and
- to protect people who report unacceptable conduct in good faith.

Reporting channels :

- Online Whistleblowing Information System (WBIS) - wbis.tnb.com.my
- Email to one (1) of the designated officers by using the Whistleblowing Complaint Form, available in Malay & English :

NAME	DESIGNATION	EMAIL ADDRESS
Ong Ai Lin	Senior Independent Non-Executive Director	ongailin.integrity@tnb.com.my
Kalivann Palanivelu	Chief Integrity Development Officer	kalivann.integrity@tnb.com.my
Hasbah binti Hasbullah	Head, Integrity Development & Culture	hasbahh.integrity@tnb.com.my

- Whistleblowing toll free number : 1-800-888-862

ANTI-BRIBERY POLICY

TNB aims to state its position on bribery and related matters and to establish key pillars in its structure to protect the Company against any form of bribery. Bribery in all its forms related to TNB's activities is prohibited. It is the responsibility of personnel at all levels to act with integrity. TNB holds a 'No Gifts' policy, although certain exceptions are allowed. Integrity Pledges must be signed by personnel on a regular basis, as well as a conflict of interest declaration. Business associates acting on behalf of the Company are managed carefully. Reporting of misconduct by personnel or third parties is expected, with protection provided for all disclosers acting in good faith. TNB is committed to enforcing its position, with the Integrity Department taking on this role. The TCIMS will be assessed and updated on a regular basis to ensure its effectiveness is maintained.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

BOARD AUDIT COMMITTEE REPORT

BOARD AUDIT COMMITTEE

Chairman

Dato' Merina binti Abu Tahir

Independent Non-Executive Director

Members

Ong Ai Lin

Senior Independent Non-Executive Director
(Redesignated w.e.f. 30 September 2022)

Gopala Krishnan K.Sundaram

Independent Non-Executive Director

Datuk Rawisandran a/I Narayanan

Independent Non-Executive Director

Juniwati Rahmat Hussin

Independent Non-Executive Director

Datuk Lau Beng Wei

Independent Non-Executive Director
(Ceased as member w.e.f. 6 March 2023)

The Board Audit Committee (BAC) was established to assist the Board in carrying out their oversight and fiduciary duties and responsibilities.

BAC's objectives, authorities and functions are governed by the Terms of Reference (ToR) which is reviewed annually. The ToR was last revised in November 2021 to incorporate changes in regulations. The ToR is accessible on the Company's official website at www.tnb.com.my.

MEMBERSHIP AND MEETINGS

As of 31 December 2022, the BAC comprises six (6) members, all of whom are Independent Non-Executive Directors. This composition is aligned with Paragraph 15.09 (1) (a) and (b) of the Bursa Malaysia Securities Berhad Main Market Listing Requirements (MMLR), which states that the Audit Committee must be composed of not fewer than three (3) members and all the Audit Committee members must be Non-Executive Directors, with a majority of them being Independent Directors.

The BAC is chaired by Dato' Merina binti Abu Tahir effective from 1 February 2022. The BAC continues to fulfil the practice stipulated in the Malaysian Code on Corporate Governance (MCCG) 2021, whereby the Chairman of the BAC was not the Chairman of the TNB Board during the year under review.

The governance practices are further strengthened as the BAC fulfils the requirements of Paragraph 15.09 (1) (c) of MMLR, which requires that at least one (1) member of the Committee must be a member of the Malaysian Institute of Accountants (MIA). As of 31 December 2022, two (2) members of the BAC, Dato' Merina binti Abu Tahir and Ong Ai Lin, are members of MIA.

During FY2022, 12 BAC meetings were held and this fulfils the requirement in the BAC ToR where the BAC is to meet at least six (6) times a year. Attendance at all meetings met the requisite quorum as stipulated in the BAC ToR. The Company Secretary, who is the Secretary to the BAC, and the Chief Internal Auditor (CIA) were in attendance during the meetings. The President/CEO and other officers were invited to the meetings to deliberate on matters within their purview.

After each meeting, the BAC Chairman submits a report on matters deliberated to the Board of Directors' meeting for information and attention. Matters reserved for the Board's approval are tabled at the TNB Board meetings. Action sheets are issued by the Company Secretary on the decisions made and actions required. These are circulated to Management and relevant parties for their actions.

MAIN ACTIVITIES OF BAC IN FY2022

Based on the 12 meetings held in FY2022, BAC had carried out the following to effectively discharge its duties and responsibilities as set forth in the BAC ToR :

1. INTERNAL AUDIT

- i. Deliberated the adequacy and effectiveness of governance, risk management and internal control systems based on the findings and outcomes of audits conducted and reported by Group Internal Audit Department (GIA) during the year. The audit findings were presented and deliberated in BAC meetings and where relevant, BAC requested Management to rectify the weaknesses based on recommendations provided by GIA. GIA's areas of coverage for FY2022 are summarised in the Statement of Internal Audit Function.
- ii. Reviewed TNB's quarterly State of Internal Controls (SOIC) on the adequacy, effectiveness and reliability of internal control systems based on the overall risks/areas covered and issues reported by GIA and subsidiary's internal audit functions, as well as the status of corrective actions implemented by Management.
- iii. BAC took note of TNB's FY2021 Integrated Assurance Report for GIA and other assurance providers i.e. subsidiary's internal audit functions, compliance function in divisions, Health, Safety and Environment Department and Risk Management Department, which was intended to demonstrate the organisation's risk coverage and help identify gaps and overlaps. Additionally, the report demonstrates the overall governance and state of internal controls in TNB based on reviews performed by the various assurance providers.

KEY ROLES & RESPONSIBILITIES



For detailed roles & responsibilities of the Committee, please refer to page 162.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

- iv. Approved GIA's Annual Audit Plan and reviewed the methodology applied in preparing a risk-based audit plan to ensure adequacy of audit scope and comprehensive coverage of the Group's activities. The BAC also took cognisance of the resource and budgetary requirements for the successful completion of the audit plan.
- v. Approved GIA's revised Annual Audit Plan to ensure it remained agile, in view of emerging risks arising from changes in the business environment and regulatory requirements, as well as in response to requests from the BAC and Management.
- vi. On a quarterly basis, the BAC reviewed the effectiveness of GIA through evaluation of its performance comprising, among others, contribution to cost saving and process improvement, BAC survey index, completion of audit plan and audit turnaround. The BAC also appraised the overall FY2021 performance for GIA.
- vii. Approved GIA's 3-year Strategic Plan which was developed based on International Professional Practices Framework (IPPF) Practice Guide on 'Developing the Internal Audit Strategic Plan'. Additionally, the BAC approved GIA's Quality Assurance and Improvement Programme (QAIP) initiatives identified as a result of assessment of the internal audit function on conformance to the IPPF.
- viii. Reviewed GIA's organisational independence declaration for FY2021 to facilitate the BAC in making relevant disclosures as required in the MCCG pertaining to independence and objectivity of the internal audit function. GIA discharged its duties objectively and independently through the current reporting arrangements, which allow GIA to report functionally to the BAC. There were no conflict of interest situations reported for FY2021. GIA has in place mechanisms to report conflict of interest situations at department, engagement and individual levels.
- ix. Approved GIA's revised Internal Audit Charter which was reviewed to assess whether the purpose, authority and responsibilities of the internal audit function continue to enable it to accomplish its objectives. The revision was made in line with the global trend in ESG, particularly in sustainability landscape, where companies consider subjecting their sustainability statements to an assurance process to ensure the integrity of the data reported.

2. EXTERNAL AUDIT

- i. In assessing the suitability, independence and objectivity of the External Auditor, the BAC reviewed the following in line with the MCCG Guidance :
 - The overall performance and effectiveness of the External Auditor for the period from 1 January 2021 to 31 December 2021. For this purpose, a survey was coordinated by GIA and assessments on the effectiveness of the External Auditor were performed by members of the BAC and Management covering the areas of (1) quality of service, (2) sufficiency of resources, (3) communication and interaction and (4) independence, objectivity and professional scepticism.
 - The audit fees for quarterly review of the unaudited consolidated results and annual statutory audit of TNB and its subsidiaries for Board's approval.
 - The External Auditor's Annual Transparency Report which outlines amongst others, the legal and governance structure as well as measures undertaken by the External Auditor to uphold audit quality and manage risks.
 - Non-audit services provided by the External Auditor for TNB and the Group. The fees for non-audit services carried out by the External Auditor were within the allowed threshold set in TNB's Implementation Guideline on Provision of Services by External Auditors.

- ii. Took note of TNB's Internal Control Recommendations and Control Environment Report for FY2021 which provides status updates on control recommendations to address the accounting, systems and process weaknesses; and areas of enhancement over financial reporting and information technology general control (ITGC) respectively.
- iii. Reviewed TNB's revised External Auditors Policy which was amended to be in line with the updated MCCG 2021.
- iv. The BAC exercised its rights, as stipulated in the ToR, to hold meetings with the External Auditor without the presence of Management, Executive Directors or Non-Independent Directors to enable open discussion with the BAC. This is also in line with the terms stipulated in MMLR issued by Bursa Malaysia Securities Berhad.

In FY2022, two (2) meetings were held with the External Auditor without the presence of Management and Executive Director to reinforce independence of the External Auditor of the Company.

3. FINANCIAL REPORTING

The BAC reviewed and endorsed the following financial matters before recommending them to the Board for approval :

- i. Quarterly unaudited financial results of the Group and the draft announcements with considerations on key developments during the period, significant accounting matters and other review matters.
- ii. Audited financial statement of the Group and of the Company for the Financial Year ended 31 December 2021 and agreed that the financial statements were prepared in accordance with the relevant standards and regulatory requirements as to give a true and fair view of the Group's financial performance.

4. RELATED PARTY TRANSACTIONS

In February 2022, the BAC reviewed and recommended to the Board to approve the related party/recurrent related party transactions entered into by TNB Group for the year ended 31 December 2021.

5. ANNUAL REPORTING

The BAC recommended for the Board's approval the reports to be incorporated in the Integrated Annual Report 2021, namely (i) BAC Report, (ii) Statement of Internal Audit Function, (iii) Statement of Risk Management and Internal Control, (iv) TNB Sustainability Statement and (v) Corporate Governance Overview Statement and Corporate Governance Report.

6. OTHERS

- i. Reviewed the proposal for granting and vesting of performance shares as well as restricted shares under the Long Term Incentive Plan (LTIP) for Board's approval.
- ii. Discussed on other key operational matters, amongst others on summons/compounds imposed on TNB by regulatory authorities, integrity and governance reporting matters and safety and health governance practices across TNB.
- iii. Attended technical visits to Sabah Electricity Sdn. Bhd. and National Load Dispatch Centre in the effort of understanding the business operations and relationship building.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

BOARD RISK COMMITTEE REPORT

BOARD RISK COMMITTEE

Chairman

Ong Ai Lin

Senior Independent Non-Executive Director
(Redesignated w.e.f. 30 September 2022)

Members

Juniwati Rahmat Hussin

Independent Non-Executive Director

Gopala Krishnan K.Sundaram

Independent Non-Executive Director

Datuk Rawisandran a/I Narayanan

Independent Non-Executive Director

The Board Risk Committee (BRC) was established on 5 June 2013 by the Board of Directors (Board) to assist the Board in carrying out its responsibilities. The Board, through the BRC, is responsible of overseeing the effectiveness and adequacy of the Group's risk management framework and ensuring that it forms part of the Group's corporate culture.

ROLE OF THE BOARD RISK COMMITTEE

The main role of the BRC is to assist the Board in ensuring that the Group has in place a sound and robust enterprise risk management framework and that such framework has been effectively implemented to enhance the Group's ability to achieve its strategic objectives. This is in line with the requirements stated in the Malaysian Code on Corporate Governance and Bursa Malaysia's Main Market Listing Requirements.

KEY RESPONSIBILITIES

The BRC is guided by its Terms of Reference in carrying out these responsibilities :

- Oversee the establishment and implementation of the risk management framework that is embedded into the culture, processes and structures of the Group and is responsive to changes in the business environment.
- Approve the risk management framework and policies on behalf of the Board.
- Ensure that the principles and requirements of managing risk are consistently communicated and adopted throughout the Group.
- Deliberate the Group's strategic risks as well as key operating risks and risk issues through timely and regular reports and ensure the implementation of appropriate systems to manage these risks. It has the authority to direct special investigations, on behalf of the Board, into significant risk management activities, as and when necessary.
- Approve, on behalf of the Board, the risk appetite for the strategic risks and key operating risks and ensure that actions are taken in a timely manner when risks are outside tolerable ranges.
- Review the adequacy of and provide independent assurance to the Board of the effectiveness of the risk management framework implemented in the Group on an annual basis.

HOW THE COMMITTEE OPERATES

The BRC meetings are pre-determined for the following Financial Year and is thereafter, communicated to the members with the specific meeting agenda prior to each meeting.

In FY2022, there were seven (7) BRC meetings. Prior to the meetings, BRC members were provided with papers approved for tabling and updates of outstanding matters from previous meetings for the members' perusal.

KEY ROLES & RESPONSIBILITIES



For detailed roles & responsibilities of the Committee, please refer to page 163.

The President/CEO, the Chief Risk Officer and the Company Secretary, who is also secretary to the BRC, attended the meetings. Other attendees, internal or external, were invited to deliberate on matters within their purview. Action sheets were issued by the Company Secretary on decisions made and action required. These were circulated to Management for further action. The BRC Chairman Reports were tabled at the Board meetings for notification and/or further deliberation on matters within the purview of the Board.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

MAIN ACTIVITIES OF THE BRC

The BRC, assisted by the Chief Risk Officer and the Risk Management Department (RMD), had carried out the following to effectively discharge its responsibilities set forth in its ToR :

TNB RISK MANAGEMENT FRAMEWORK

The BRC had approved the TNB Risk Management Framework that provides a structured and consistent approach to risk management across the Group. The implementation of the framework is governed through the TNB risk governance documents, which are guidance documents for the business entities across the Group to implement and integrate risk management into its business operations for informed decision-making and to achieve objectives and targets. These risk governance documents are reviewed annually with the criteria for revision and levels of approving authority clearly stated to ensure the documents are robust, practical for implementation and reflective of the internal and external context.

RISK GOVERNANCE

The TNB Risk Management Structure described in the TNB Risk Management Framework governs the risk management implementation in the Group. The oversight role is executed by the TNB Board of Directors and the BRC, whilst cross-functional risk management matters are deliberated at the Group Risk Management Working Committee (GRMWC) and Subsidiaries Risk Management Working Committee (SRMWC). Both working committees meet quarterly to ensure that the TNB Risk Management Framework is effectively implemented in business entities and sufficient resources are committed for continuous improvement and integration of risk management in business processes.

The BRC had approved the TNB 3-Year Cycle Risk Governance Plan for implementation from FY2022 to FY2024. This plan is implemented by RMD to assist the BRC in ensuring that TNB business entities are effectively implementing the TNB Risk Management Framework and is embedded into the culture, processes and structures of the Group. The plan outlines three (3) risk governance activities, which are risk review, risk maturity assessment and desktop risk assessment. Over a span of three (3) years, the risk governance activities shall be completed for identified business entities in the Group. According to plan, RMD in collaboration with TNB business entities conducted 15 risk reviews, five (5) risk maturity assessments and eight (8) desktop risk assessments in FY2022. Recommendations for improvement were deliberated with the respective business entity to strengthen the implementation and integration of risk management in day-to-day operations and decision-making.

TNB STRATEGIC RISKS

The BRC had approved revisions to the TNB Strategic Risks in FY2022. These strategic risks are assessed in the context of the Reimagining TNB strategy and long-term objectives. The annual revision ensures that the strategic risk exposures of the Group are comprehensively assessed in view of changes in the external and internal environments and are mitigated accordingly. The TNB Strategic Risks cover risk areas related to the external context, sustainability, regulatory, market, customer, finance and capabilities.

KEY OPERATING RISKS

The BRC deliberated the key operating risks of nine (9) TNB business entities in FY2022. Based on an annual schedule, a TNB business entity tables its operational risk profile to the BRC, highlighting key risks and mitigations taken to address root causes, emerging risks related to its business and lessons learned from risk events that are communicated to employees to strengthen the risk management culture. Direction and advice from the BRC were duly noted for progressive improvements in embedding risk management principles in day-to-day operations and decision-making at the respective business entity.

Additionally, the BRC deliberated on reports of specific risk exposures in the areas of safety and security, floods, legal and compliance and data management.

TNB RISK DASHBOARD

The BRC deliberated the Key Risk Indicators (KRIs) that are reported in the TNB Risk Dashboard. These KRIs provide early warning of increasing risk exposures and potential risk events and are developed in alignment with the risk appetite of the BRC and Management. The BRC approved the annual revisions of the KRIs to ensure the KRIs are relevant to current business strategies and risk exposures of the Group.

The status of the KRIs is reported quarterly in the TNB Risk Dashboard and reflects the risk exposures of the Group according to five (5) impact areas, which are operations, financial standing, reputation, regulatory and international investment. The quarterly reporting and monitoring of KRIs ensures that actions are taken in a timely manner when risks are outside tolerable ranges.

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

BOARD RISK COMMITTEE REPORT

REPORTING

The BRC jointly reviewed and endorsed the Statement of Risk Management and Internal Control with the Board Audit Committee, which was thereafter approved by the Board for reporting in the TNB Integrated Annual Report. The statement reports the risk management practices and internal controls implemented in the Group as well as assurances from the President/CEO and Chief Financial Officer to the Board that the Group's risk management and internal control system is operating adequately and effectively, in all material aspects.

Business entities across the Group submitted two half-year risk reports to the RMD according to the TNB Risk Report Guide. Each business entity reported its risk profile, key mitigations, KRIs, lessons learned from risk events and emerging risks unique to its business and RMD thereafter collated and reported the TNB Half-Year Risk Reports to Management for a holistic perspective of the Group's strategic, operational and emerging risks.

CAPABILITY BUILDING

The BRC mandated for risk practitioners in the Group to be adequately trained and certified by recognised local or international professional bodies to ensure quality risk management practices are effectively implemented at all levels. Risk management trainings at fundamental and intermediate levels are conducted by the RMD and administered by the TNB Integrated Learning Solutions Sdn. Bhd. (ILSAS) to increase the risk competency of employees across the Group. In FY2022, 55 executives completed the fundamental module with 70 executives at the intermediate level. Additionally, in a collaborative effort between RMD and the business entities, six (6) risk management webinars were conducted that engaged 458 employees in total. These webinars aim to strengthen employees' risk-thinking mindset through practical applications of the TNB Risk Management and TNB Business Continuity Management frameworks.

The Risk Manager Circle, of which the RMD is secretariat, is a community of risk practitioners from across the Group with the aim of promoting capability enhancement among peers. The Circle collaborates quarterly to spearhead risk initiatives and share knowledge and feedback on effective practices and lessons learnt, drawing from their experiences in implementing risk management at respective business entities.

COMMUNICATION

The BRC continually communicates its tone from the top, emphasising the importance of effective risk management and a strong risk culture. Pre-pandemic, an annual risk forum was conducted in-person for that purpose. However, in FY2022, a video of BRC members was produced

for the same purpose and communicated to Management and employees at relevant platforms such as management meetings and risk conferences. In 2023, BRC will continue to communicate its tone from the top through the annual risk forum.

The tone from the top on risk management and its benefits was further cascaded by Management to employees via videos of each member of Management that were produced and uploaded into TNB intranet for easy viewing, downloading and sharing.

In addition, five (5) risk conferences were organised by the RMD in FY2022 with total participation from approximately 466 executives and non-executives. These events were organised once restrictions were relaxed post-pandemic and the face-to-face interactions were well-received by the participants and achieved the objective driving the message on the importance of integrating risk management in daily operations and decision-making.

BUSINESS CONTINUITY MANAGEMENT

The BRC deliberated the TNB Business Continuity Management (BCM) Framework and its implementation in the Group. The framework provides a structured approach in managing business continuity that enables prompt, coordinated and effective response to a crisis and maintains continuity of essential activities as well as protecting human life, assets, reputation and the environment. The framework is the focal point of reference for business entities to formulate and implement relevant business continuity strategies tailored to respective business objectives and critical functions.

The BRC emphasised the importance of enhancing preparedness through drills of various scenarios and close collaboration with external stakeholders to ensure prompt and adequate response when crisis occurs. The RMD, as the Corporate BCM Secretariat, under the leadership of the TNB Corporate BCM Steering Committee, carried out three (3) drills in FY2022 with involvement from Management and support from BCM practitioners across the Group. In addition, drills to test readiness of business entities in crisis scenarios such as floods and dam safety were carried out according to plan and improvements identified from post-mortems were implemented to close gaps.

CONCLUSION

The BRC continues to diligently exercise its risk oversight responsibilities by ensuring that risk management is an integral part of strategic planning and decision-making for the achievement of the Group's strategic outcomes and long-term objectives.

This statement was made in accordance with the resolution of the Board of Directors dated 20 March 2023.

**PRINCIPLE B :
EFFECTIVE AUDIT AND RISK MANAGEMENT**

STATEMENT ON INTERNAL AUDIT FUNCTION

TNB's internal audit function, which is under the purview of Group Internal Audit Department (GIA), is established by the Board to provide independent, objective assurance and consulting services designed to add value and improve TNB's operations.

GIA assists TNB in accomplishing its business objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes.

GIA reports directly to the Board Audit Committee (BAC) to preserve its independence and objectivity and administratively to President/CEO to enable the required stature to fulfil its responsibilities.

GIA is led by Lizah Abd Wahab, who was appointed as the Chief Internal Auditor (CIA) on 1 April 2021. She holds a Bachelor of Accounting and Finance degree from Manchester Metropolitan University, United Kingdom and a Master of Business Administration from Universiti Tenaga Nasional and Graduate Certificate in Management from the University of Melbourne. Additionally, she is a Certified Internal Auditor and obtained a Certification of Risk Management Assurance from the Institute of Internal Auditors (IIA). She brings over 20 years of experience in internal auditing at various areas or functions within TNB.

PRACTICES AND FRAMEWORK

GIA endeavours to protect and enhance organisational value by providing risk-based and objective assurance, advice and insight through innovative solutions.

GIA is guided by the Internal Control Framework of Committee of Sponsoring Organisation of the Treadway Commission (COSO) and Control Objectives for Information and Related Technology (COBIT) in assessing and reporting the adequacy and effectiveness of the design and implementation of the organisation's overall system of internal control, risk management and governance.

GIA's processes and activities are governed by the standards and principles outlined in the International Professional Practices Framework (IPPF) issued by IIA, which comprises Core Principles for the Professional Practice of Internal Auditing, International Standards for the Professional Practice of Internal Auditing, Definition of Internal Auditing and Code of Ethics. The effectiveness and quality of the internal audit function are assessed externally at least every three (3) years and the report is presented to the BAC.

SCOPE AND COVERAGE

GIA's responsibilities and scope of internal audit activities are outlined in the Internal Audit Charter which was approved by the BAC. The Internal Audit Charter is reviewed annually to ensure relevance and alignment with the requirements of IPPF.

GIA continues to formulate the annual audit plan using a risk-based approach, taking into consideration TNB's risk profile, strategic objectives, regulatory requirements as well as inputs from BAC and senior management.

Beginning FY2022, GIA introduced the thematic auditing approach where audits were clustered into predetermined high-risk areas. The review for each theme was carried out across TNB and its subsidiaries to provide assurance on the overall governance and state of internal controls for the audit area.

During FY2022, GIA issued a total of 143 reports arising from planned audits, follow-up audits and quality assurance reviews. Audit findings were presented to the BAC for deliberation and where relevant, the BAC requested Management to rectify the weaknesses based on recommendations provided by GIA. Subsequently, GIA monitored the implementation of corrective actions through an online platform, the Audit Management System and reports the status to the BAC and Management on a quarterly basis.

GIA has categorised the areas of review according to five (5) audit hotspots based on the current trends, changes in risk landscape and revolving roles of internal auditors. Among the key areas reviewed during FY2022 include :

HOTSPOTS	AREAS OF REVIEW
Governance and Ethics	<ul style="list-style-type: none"> Corporate Governance Compliance Whistleblowing Management Strategic Initiatives Business Continuity Management*
Environment and Social	<ul style="list-style-type: none"> Environmental Management* Scheduled Waste Management Safety and Health Management* Human Resource Management Corporate Social Responsibility (CSR) Management
Information Technology and Cybersecurity	<ul style="list-style-type: none"> Operational Technology (OT) Security and Governance Data Centre Readiness Information Communication & Technology (ICT) Management

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

STATEMENT ON INTERNAL AUDIT FUNCTION

HOTSPOTS	AREAS OF REVIEW
Operations and Supply Chain	<ul style="list-style-type: none"> • Operation and Maintenance • Billing Management • Asset Management* • Warehouse Management • Budget, Insurance and Treasury Management • Financial Management* • Security Management • Fleet and Workshop Management • Logistics and Freight Management • Management of Claim and Compensation for Third Party Damage • Procurement, Contract and Vendor Performance Management*
Project Management	<ul style="list-style-type: none"> • Project Governance • Project Planning and Implementation • Verification of Works

Note :

* Indicates thematic audits.

In providing value to the Company and maintaining the efficiency of the audit works, the internal auditors' key performance indicators include value creation in terms of cost saving/recoveries or business process improvements implemented, completion of the audit plan and audit turnaround.

In addition to the audit engagements performed, GIA carried out two (2) quality assurance reviews of subsidiary's internal audit functions to check compliance with the IPPF elements. GIA was also actively involved in strengthening the internal control system in the Company through sharing of best practices and knowledge on internal auditing, risk management and internal controls.

Additionally, GIA presented TNB's FY2021 Integrated Assurance Report to the BAC, which demonstrates the organisation's overall risk coverage and the state of governance and internal controls in TNB based on reviews performed by the various assurance providers, i.e. GIA, subsidiary's internal audit functions, compliance function in divisions, Health, Safety and Environment Department and Risk Management Department.

RESOURCES

The internal audit activities in FY2022 (as at 31 December 2022) were performed in-house by a group of 62 internal auditors with diverse disciplines, as summarised below :

DISCIPLINE	NO. OF AUDITORS	PERCENTAGE (%)
Accounting, Finance and Business	30	48
Engineering	25	40
Quantity Surveying	2	4
System and Data Analyst/ Information Technology	5	8
Total	62	100

The total cost incurred in managing the internal audit function for FY2022 is RM14.9 million, comprising mainly staff costs and audit activities related spending, as follows :

CATEGORY	RM (MILLION)	% OF TOTAL COST
Staff costs	12.9	87
Operating costs	2.0	13
Total	14.9	100

PROFESSIONAL QUALIFICATION AND CONTINUOUS DEVELOPMENT

GIA strongly supports continuous learning and development of the internal auditors to ensure that high level of proficiency and due professional care are demonstrated in fulfilling auditors' responsibilities.

As at 31 December 2022, there are 27 GIA staff with various professional certifications as shown below :

CERTIFICATION	NO. OF CERTIFICATIONS OBTAINED
Certified Internal Auditor (CIA)	12
Certified Information System Auditor (CISA)	4
Certification in Risk Management Assurance (CRMA)	4
Association of Chartered Certified Accountants (ACCA)	3
Chartered Institute of Management Accountants (CIMA)	1
Chartered Accountant (Malaysia)	3
Professional Engineer	2
Professional Technologist	10
CISCO Certified Network Associate (CCNA)	3
Certified COBIT 5	3
Total	45

PRINCIPLE B : EFFECTIVE AUDIT AND RISK MANAGEMENT

In addition to the above, 34% (21 auditors) are in the midst of pursuing their professional certifications at various levels.

GIA commits to ensure that the level of auditors' skills, knowledge and competencies are maintained as reflected in the Internal Audit Charter. These are accomplished through the following :

- Involvement of auditors in national conferences and trainings in the areas of auditing, strategic initiatives, leadership and communication, business acumen, data analytics and personal development.
- Participation in environmental, social and governance (ESG) related trainings to gain understanding and insights on fundamentals of ESG and roles on internal auditor in providing ESG-related assurance, in line with the global trend on sustainability landscape.
- Maintain corporate membership status in IIA Malaysia, which provides access to internal auditors for trainings, reading materials and audit resources and current happenings in audit fraternity.

As of 31 December 2022, GIA incurred a total cost of RM222,955 on internal and external trainings/conferences to enhance auditors' skills, knowledge and competencies.

SUMMARY OF GIA'S ACTIVITIES IN FY2022

The key activities undertaken by GIA in FY2022 are as follows :

- Provided independent and objective assurance on the adequacy of internal controls implemented to mitigate risk exposures. The reports on audits performed, which consist of observations, improvement opportunities, management responses, deadline and person in charge for implementation of corrective actions were issued to respective client, senior management and BAC.
- Presented TNB's State of Internal Controls to the BAC on a quarterly basis covering the following :
 - Audit completion status against the approved audits
 - Risks reviewed during audits
 - Results of internal control assessment
 - Status of corrective actions including aging for pending actions
- Performed follow-up audits on corrective actions agreed by Management to assess if the actions have been implemented adequately and timely.
- Attended periodic management and board breakouts to provide independent feedback on governance, risk and controls as well as understanding the Company directions, to be able to provide value-added assurance roles.
- Coordinated and attended meetings with Risk Management Department to deliberate on the Company's risk indicators, emerging risks and relevant mitigation plans. Coordination meetings were also conducted with the External Auditor on a quarterly basis to discuss the audit scope/issues to ensure adequate coverage or minimise duplication of effort.
- Held syndication with TNB's senior management to understand emerging risks and concerns facing TNB to be considered during the development of Annual Audit Plan.
- Maintained a Quality Assurance and Improvement Program (QAIP) covering all aspects of the internal audit activities and evaluated conformance of these activities with the standards established in IPPF issued by the IIA.
- Organised GIA's Webinar Series to provide awareness on risk and internal controls to all TNB employees. Three (3) webinar sessions were conducted in FY2022 relating to ICT systems and infrastructure, internal controls and project management.
- Hosted the Head of ASEAN Power Utilities/Authorities (HAPUA) Internal Audit Summit 2022 entitled Cybersecurity and Information Technology/Operational Technology with participation from internal audit functions from Singapore, Thailand, the Philippines and Vietnam.
- Implemented guest auditor initiative involving subject matter experts on safety and health as well as TNB subsidiaries' internal audit personnel.
- Coordinated training on sustainability related matters for GIA staff and demonstrated commitment towards sustainability goals through GIA's corporate social responsibility (CSR) programme by organising a beach cleaning activity.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

BOARD LEADERSHIP OF STAKEHOLDER ENGAGEMENT

We have a well-established programme of engaging with a wide range of stakeholders who are key to the successful delivery of our strategy. These include shareholders, the government, regulators, environmental bodies and trade unions. We know that actions taken today will shape the longer-term performance of TNB and determine our impact on the wider world, including our contribution to action on climate change. Such engagement broadens our understanding of the issues we take into account, informs our decision-making and helps to protect the long-term interests of stakeholders.

The Board is responsible for engagement with stakeholders and ensures that appropriate Board time is given to discussing their concerns and that sufficient resources are available for the Group to effectively engage with stakeholders. Internally, divisions across the organisation maintain engagement



CUSTOMERS

Our customers comprise residential and non-residential segments. The non-residential or business customers come from the commercial, industrial customer segments, including Government, Large Businesses, MSMEs (Micro, Small and Medium Enterprises).

Engagement Platform

- Customer service outlets
- Call centre
- myTNB mobile application and online portal
- ▲ Customer surveys
- ◆ Social media
- ◆ Roadshows
- ◆ Campaigns

Areas of Interest or Concern

1. New technologies (e.g. implementation of the smart meter and its offerings, smart solutions, solar solutions and platform solutions)
2. Customer experience and service delivery
3. Accessible, affordable and reliable supply of electricity
4. Regulated & non-regulated innovative solutions
5. Customer education on energy literacy
6. Increasing customer take-up rates on green/sustainable solutions (e.g. REC, GET)

Our Response

- Sustainable Infrastructure and Ecosystems, pages 73-74.
- Customer Centricity, pages 78-81
- Contributing to Community Development, pages 128-136.



GOVERNMENT

The Malaysian Federal and State Governments, parliamentarians, municipal councils and regulators.

Engagement Platform

- Meetings and briefings
- ◆ Site visits
- ◆ Round table sessions
- One-to-one engagements
- Outreach programmes
- ▲ Summits/conferences

Areas of Interest or Concern

1. Regulatory and operational compliance
2. Changes in the regulatory framework and electricity supply industry
3. National Disaster Management (Flood, Dam Safety Management) and cybersecurity management
4. Nation-building initiatives, including community and capability development
5. Energy Trilemma (Accessibility, Affordability and Sustainability)
6. ESG initiatives (e.g. Environmental management)
7. Rakyat well-being, targeted subsidies, stimulate economic growth through green energy and create job opportunities
8. TNB's role as a GLC in making Malaysia a developed nation
9. Local Bumiputera Vendor Development Programme
10. Implementation of Projek Internet Luar Bandar

Our Response

- Creating Value Through Strong Governance, pages 137-209.
- Sustainability Governance, page 164.
- Sustainable Infrastructure and Ecosystems, pages 73-74.
- Minimising Environmental Impacts, pages 105-110.
- Contributing to Community Development, pages 128-136.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

with key stakeholders, ensuring effective communications channels and mitigation of any concerns. Members of executive management, including the Executive Director, provide regular updates to the Board, to ensure awareness and inform discussions. The Board takes these opportunities to assess and challenge Management's approach relating to engagement.

TNB'S STAKEHOLDER ENGAGEMENT

We are dedicated to building strong relationships with key stakeholder groups. Through meaningful interactions with our stakeholders, we can leverage their insights and address any pressing emerging interests or concerns, keeping us focused on key sustainability matters. Ultimately, this will translate into the strategic management of sustainability in delivering long-term value for our stakeholders.

Legend : Daily All the time Ongoing As needed Quarterly Annually Biannually

INVESTORS

Institutional and retail investors, analysts and potential investors with interest.

Engagement Platform

- Quarterly and Full Year Financial Results Announcements
- Engagement sessions with the investment community through one-on-one/group meetings & investor conferences and Non-Deal Roadshows
- Annual General Meeting
- TNB corporate website's Investor Relations section
- Bursa filings and Press Releases
- Annual Integrated and Sustainability Reports
- Email updates to investment community

Areas of Interest or Concern

1. Business strategy and performance
2. Regulatory risk due to high fuel cost environment
3. Environmental, Social & Governance (ESG) and Energy Transition (ET) Plan
4. Financial sustainability and returns
5. Growth catalyst

Our Response

- Strategic Review, pages 38-53.
- Sustainable Infrastructure and Ecosystems, pages 73-74.
- Customer Centricity, pages 78-81.
- Minimising Environmental Impacts, pages 105-110.
- Climate Change, page 87.
- Employment Management and Growth, pages 111-122.
- Emphasis on Health, Safety and Well-being, pages 123-127.

EMPLOYEES

Our 34,699 full-time employees throughout TNB Group. Only full-time employees, excluding contractors.

Engagement Platform

- Townhalls
- Turun padang*, brown-bag sessions and other outreach programmes
- Online portal (intranet), newsletters, emails and TV TNB Employee surveys
- One-to-one engagements (online-based)
- Social media
- Corporate Social Responsibility (CSR) events
- Webinars

Areas of Interest or Concern

1. Performance, Rewards and Benefits
2. Health and safety of employees
3. Employee well-being and workplace culture
4. Talent and skills development
5. Employee satisfaction
6. TNB's strategies and initiatives

Our Response

- Employment Management and Growth, pages 111-122.
- Emphasis on Health, Safety and Well-being, pages 123-127.
- Contributing to Community Development, pages 128-136.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS



TRADE UNIONS/ASSOCIATIONS

Three (3) registered unions and two (2) workers associations that cover all categories of employees.

Engagement Platform

- ◆ Joint Consultative Council (JCC)
- ◆ Negotiations for Collective Agreements (CA)
- ◆ Syndication & engagements

Areas of Interest or Concern

1. Mitigation & Resolution of issues
2. Employee well-being
3. Employee engagement regarding strategies and initiatives
4. Impact of new policies or policy revision to employees

Our Response

- Employment Management and Growth, pages 111-122.



VENDORS

3,299 active contractors and suppliers.

Engagement Platform

- ◆ Engagement Sessions with Suppliers and Contractors
- ◆ Road Tour Dialogues
- ◆ Vendor Training & Awareness
- ◆ Joint Operation Center

Areas of Interest or Concern

1. Industry support for business growth through technology and solutions
2. Training and capability development
3. Potential health and safety impacts
4. Procurement processes
5. Fraud and bribery awareness
6. New business opportunities and future developments

Our Response

- Sustainable Infrastructure and Ecosystems, pages 73-74.
- Emphasis on Health, Safety and Well-being, pages 123-127.

Our Stakeholder Engagement Approach :



Strategic alignment with Government agenda and future-proof policies and regulations

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

Legend : Daily All the time Ongoing As needed Quarterly Annually Biannually

COMMUNITIES

Local communities in or near areas where we operate, including those affected by our operations.

Engagement Platform

- Outreach programmes
- CSR events
- Townhalls
- Dialogue sessions
- Sporting events

Areas of Interest or Concern

1. Potential public facilities and basic infrastructure
2. Full compliance with the legal and regulatory requirements
3. Coordination of drill, ERP, crisis
4. Energy literacy
5. Accessible and reliable supply of electricity
6. Efficiency of services

Our Response

- Strategic Review, pages 38-53.
- Minimising Environmental Impacts, pages 105-110.
- Contributing to Community Development, pages 128-136.

NON-GOVERNMENTAL ORGANISATIONS (NGOS) AND INTERNATIONAL ASSOCIATIONS

Consumer associations, think tank groups, environmental groups, chambers of commerce and international associations, for example the Heads of ASEAN Power Utilities/Authorities (HAPUA) and Association of the Electricity Supply Industry of East Asia and Western Pacific (AESIEAP).

Engagement Platform

- One-to-one engagements
- Outreach programmes
- Seminars and knowledge sharing sessions
- Collaboration sessions
- Social media
- Meetings

Areas of Interest or Concern

1. Affordable tariffs
2. Innovation in technology and RE
3. Quality of service
4. Supply reliability
5. Current and planned ESG efforts
6. Energy literacy
7. Environment & Occupational safety/health
8. Full compliance with the legal and regulatory requirements

Our Response

- Strategic Review, pages 38-53.
- Sustainable Infrastructure and Ecosystems, pages 73-74.
- Minimising Environmental Impacts, pages 105-110.

Develop the capability of our people and communities to inculcate a high performing culture and increase the level of energy literacy

Resolve issues and create excellent engagement experiences with all key stakeholders

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

ANNUAL GENERAL MEETING

We value and facilitate a direct, two-way dialogue with the shareholders and investors. It is our top priority to provide relevant information to shareholders, listen to and understand their perspectives and respond to their feedback.

Our AGM plays an important role in providing the shareholders with an opportunity to communicate directly with the Chairman and President/CEO about the business, governance, financial performance and prospects. It also provides an opportunity for shareholders to raise questions for the Board, Top Management and the External Auditors on the management and performance of the Company.

The Board ensures that shareholders are given sufficient notice and time to consider the resolutions that will be tabled and discussed at the AGM. The AGM Notice includes explanatory notes that contain further information on the proposed resolutions. It has been the Company's practice since 2017 as per the MCCG, to issue out the Notice of AGM to the shareholders at least 28 days prior to the meeting.

TNB hosted its 32nd AGM on 2 June 2022 virtually via Remote Participation and Voting (RPV) at Dewan Seminar, Kompleks Balai Islam An-Nur, Ibu Pejabat Tenaga Nasional Berhad, No. 129, Jalan Bangsar, 59200 Kuala Lumpur, Malaysia, the Broadcast Venue. Holding a virtual AGM allows our shareholders with the opportunity to participate in the AGM regardless of their geographical differences.

A dedicated link was created in our website within a stipulated timeframe so as to provide the shareholders with all information they needed to attend the meeting, including our virtual AGM online guide on how to use the online facility.

In line with the Group's commitment in promoting ESG as well as to achieve greater cost efficiencies, TNB encouraged its shareholders to go paperless and to access the digital copy of TNB's Integrated Annual Report 2021 by downloading it from the Company's website. Aside from that, TNB issued out postcards with QR code to the shareholders, consisting the Notice of 32nd AGM, Administrative Details of the 32nd AGM, Integrated Annual Report 2021 and Proxy Form to the shareholders, which were also available at the Company's website.

A total of 1,598 shareholders and proxies representing 3,786,076,952 ordinary shares participated online in TNB Virtual 32nd AGM as per the Attendance Record issued by TNB Share Registrar. All Directors attended the AGM,

including the Chairmen of respective Board Committees. The Engagement Partner of PricewaterhouseCoopers PLT (PwC) was also in attendance at the AGM to answer shareholders' questions on the conduct of the audit, the preparation and content of the audit report, the accounting policies adopted by the Company and the independence of auditors in the audit process.

Shareholders were provided with similar opportunities online as they would have had attending the AGM in person. They were able to view presentation on the Company's financial and technical/operational highlights by the President/ CEO, as well as vote and ask questions during the meeting. During the Meeting, the Chairman encouraged the shareholders to post questions to the Board and Management on the proposed resolutions tabled at the AGM. All questions submitted during the meeting were answered by the President/CEO, Chief Financial Officer and Company Secretary accordingly during the meeting.

The 32nd AGM was conducted online via BoardRoom's LUMI AGM. Shareholders/proxies were able to view the live webcast of the AGM proceedings, post questions to the Board/Management and submit their votes in real-time whilst the meeting was in progress. The procedures for RPV facilities were explained in the Administrative Details of 32nd AGM issued to the shareholders on 29 April 2022.

All resolutions of 32nd AGM were tabled and approved by the shareholders. All resolutions were voted by poll and the results were validated by Boardroom Corporate Services Sdn. Bhd., the independent scrutineer appointed by the Company. The outcomes of poll voting were announced to the market and posted on the Company's website on the same day of the AGM.

The minutes of meeting was made available on TNB's website at www.tnb.com.my no later than 30 business days after the AGM.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

FINANCIAL CALENDAR

Announcements of Consolidated Results

 30 May 2022	—	Unaudited consolidated results for the first (1 st) quarter ended 31 March 2022
 30 August 2022	—	Unaudited consolidated results for the second (2 nd) quarter ended 30 June 2022
 23 November 2022	—	Unaudited consolidated results for the third (3 rd) quarter ended 30 September 2022
 27 February 2023	—	Unaudited consolidated results for the fourth (4 th) quarter ended 31 December 2022

Dividends

Interim Single-Tier Dividend of 20.0 sen per ordinary share for the Financial Year ended 31 December 2022

 **30 September 2022** — Entitlement Date

 **14 October 2022** — Payment Date

Final Single-Tier Dividend of 26.0 sen per ordinary share for the Financial Year ended 31 December 2022

 **31 March 2023** — Entitlement Date

 **14 April 2023** — Payment Date

Annual General Meetings

 **29 April 2022** — Notice of Virtual 32nd Annual General Meeting and Issuance of Integrated Annual Report and Audited Financial Statements for the Financial Year ended 31 December 2021

 **2 June 2022** — Virtual 32nd Annual General Meeting

 **17 April 2023** — Notice of Virtual 33rd Annual General Meeting and Issuance of Integrated Annual Report and Audited Financial Statements for the Financial Year ended 31 December 2022

 **18 May 2023** — Virtual 33rd Annual General Meeting

FOSTERING BENEFICIAL RELATIONSHIPS THROUGH PROACTIVE AND TRANSPARENT COMMUNICATION WITH THE INVESTMENT COMMUNITY

The Group commits to effective communication and proactive engagements with the investment community to foster purposeful and strategic relationships for sustainable long-term success. The Investor Relations (IR) team supports the Senior Management and maintains an inclusive practice of disseminating relevant and material information on the development of the Group to the investment community. We communicate formally with our investment community via various channels, namely :

- Quarterly and Full Year Financial Results Announcements
- Engagement sessions with the investment community through one-on-one/group meetings and investor conferences and Non-Deal Roadshows
- Annual General Meeting
- TNB corporate website's Investor Relations section
- Bursa filings and Press Releases
- Annual Integrated and Sustainability Reports, and
- Email updates to investment community.

Active communication with existing and potential investors through various platforms keeps the investment community abreast of our strategic developments, financial and technical performance and other areas of interest as outlined under the "Investment Community Feedback" section below.

Our dedicated Investor Relations section on TNB's corporate website at www.tnb.com.my provides an access to our corporate financial information as well as investor presentation to the investment community. The team welcomes any investor related queries and feedback at tenaga_ird@tnb.com.my.

ACTIVE DIALOGUE WITH THE INVESTMENT COMMUNITY

Year 2022 was a challenging year as the country's economic environment remained fragile due to the emergence of the Omicron variant, higher fuel prices and widespread global inflation. Nevertheless, the IR team continued to maintain an active dialogue with the investment community through various available meeting platforms.

During the year, the number of engagements with analysts and investors was 598 through a planned investor relations programme, i.e. investor conferences/non-deal roadshows and corporate days, engagement sessions with the investment community through one-on-one/group meetings, analyst briefings for financial results as well as engagement through other communication platforms.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

IR CALENDAR OF EVENTS FOR FY2022

EVENT	
 7 January 2022	— CIMB Annual Malaysia Corporate Day
 25 February 2022	— Analyst Briefing 4QFY2021 Quarterly Results Announcement
 10 March 2022	— 18 th Annual CITIC CLSA Asean Forum 2022
 22 March 2022	— Bursa – HLIB Stratum Focus Series XIII : Electric Vehicles (EV)
 1 June 2022	— Analyst Briefing 1QFY2022 Quarterly Results Announcement
 9 June 2022	— Nomura Investment Forum
 10 June 2022	— UBS One Asean Conference
 7 July 2022	— Maybank IBG Invest Asean 2022 Corporate Access Malaysia Week
 21 July 2022	— Site Visit to TNB Sepang Solar with UOB Kay Hian Securities and Clients
 28 July 2022	— Site Visit to Jimah East Power with CLSA and Clients
 16 August 2022	— TNB Energy Transition with GLICs and Investor Day
 1 September 2022	— Analyst Briefing 2QFY2022 Quarterly Results Announcement
 15 September 2022	— CLSA Conference 2022
 22 September 2022	— ESG Corporate Day - CGS-CIMB
 4 October 2022	— Site Visit to TNB Sepang Solar with Kenanga Investment Bank and Clients
 12 October 2022	— Nomura Malaysia Corporate Day 2022
 27 October 2022	— RHB Conference on EV
 28 November 2022 – 2 December 2022	— CLSA & UBS Non-Deal Roadshow in the United Kingdom and Europe
 8 December 2022	— Analyst Briefing 3QFY2022 Quarterly Results Announcement

INVESTMENT COMMUNITY FEEDBACK

Based on IR's engagement sessions with the investment community, the key areas of interest include :

- Business strategy and performance
- Regulatory risk due to high fuel environment
- Energy Transition (ET) Plan initiatives and progress :
 - GenCo decarbonisation plan
 - Renewable Energy growth opportunities
 - Capital Expenditure (CAPEX) plan for ET
 - TNB's plan on electric vehicle (EV) ecosystem
- Financial sustainability and return :
 - Working capital management initiatives
 - Cash flow situation due to higher fuel prices
 - Gearing and financial position
 - Dividend

BUILDING LONG-TERM SHAREHOLDER VALUE

In 2022, TNB Board of Directors approved a final single tier dividend of 26.0 sen per share, raising the single tier dividend total to 46.0 sen per share. This translates to a dividend payout ratio of 55.2% from the Group's Adjusted PATAMI, honouring the Company's 30% to 60% dividend policy consistently for the last five (5) Financial Years.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

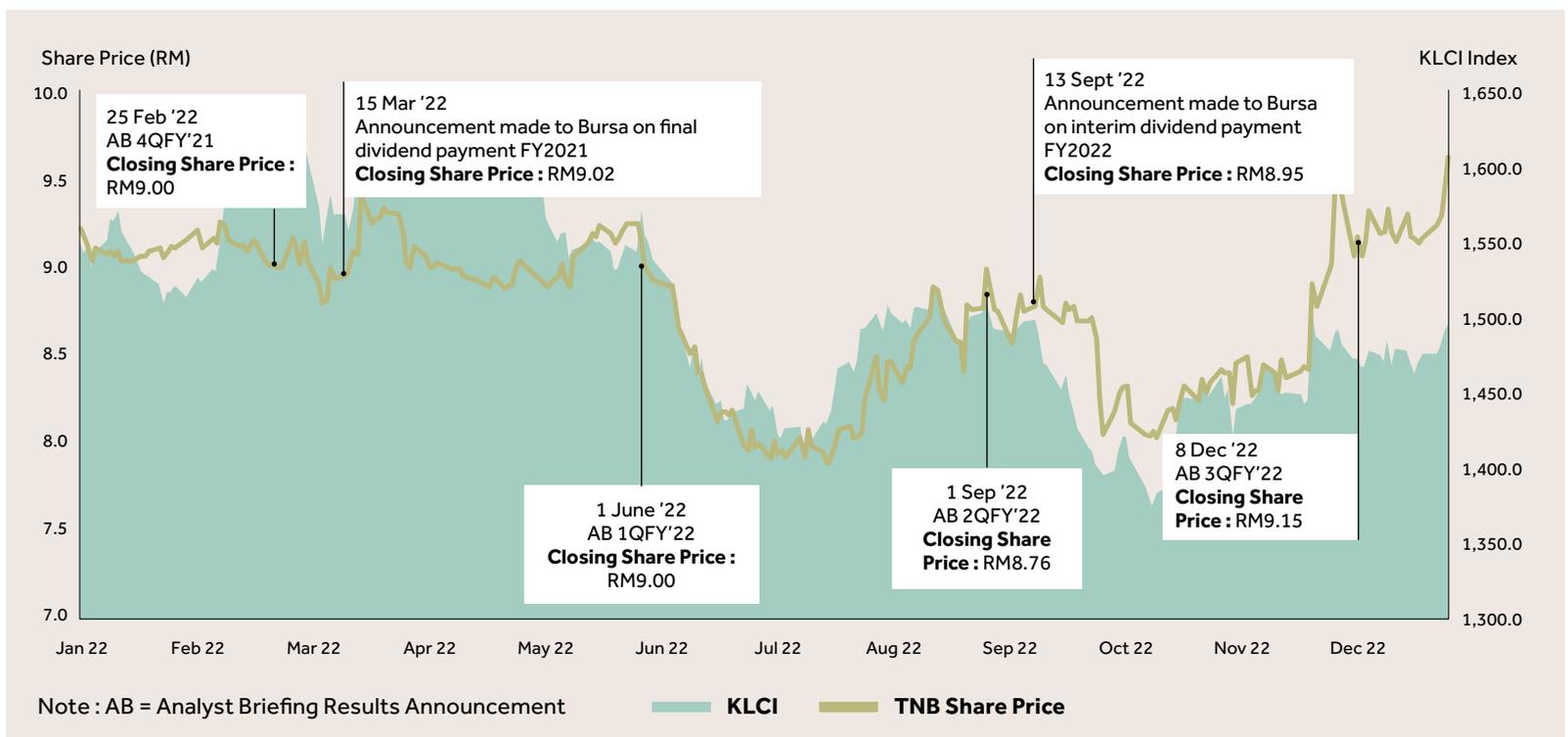
ANALYST COVERAGE

As one of the largest companies by market capitalisation on Bursa Malaysia, we have a broad range of analyst coverage, with 20 sell-side research analysts covering the stock of which 45% are from foreign research houses. We maintained close relationships with our analysts to ensure that all information provided to the market is accurate and consistent with the Company's performance and latest developments.

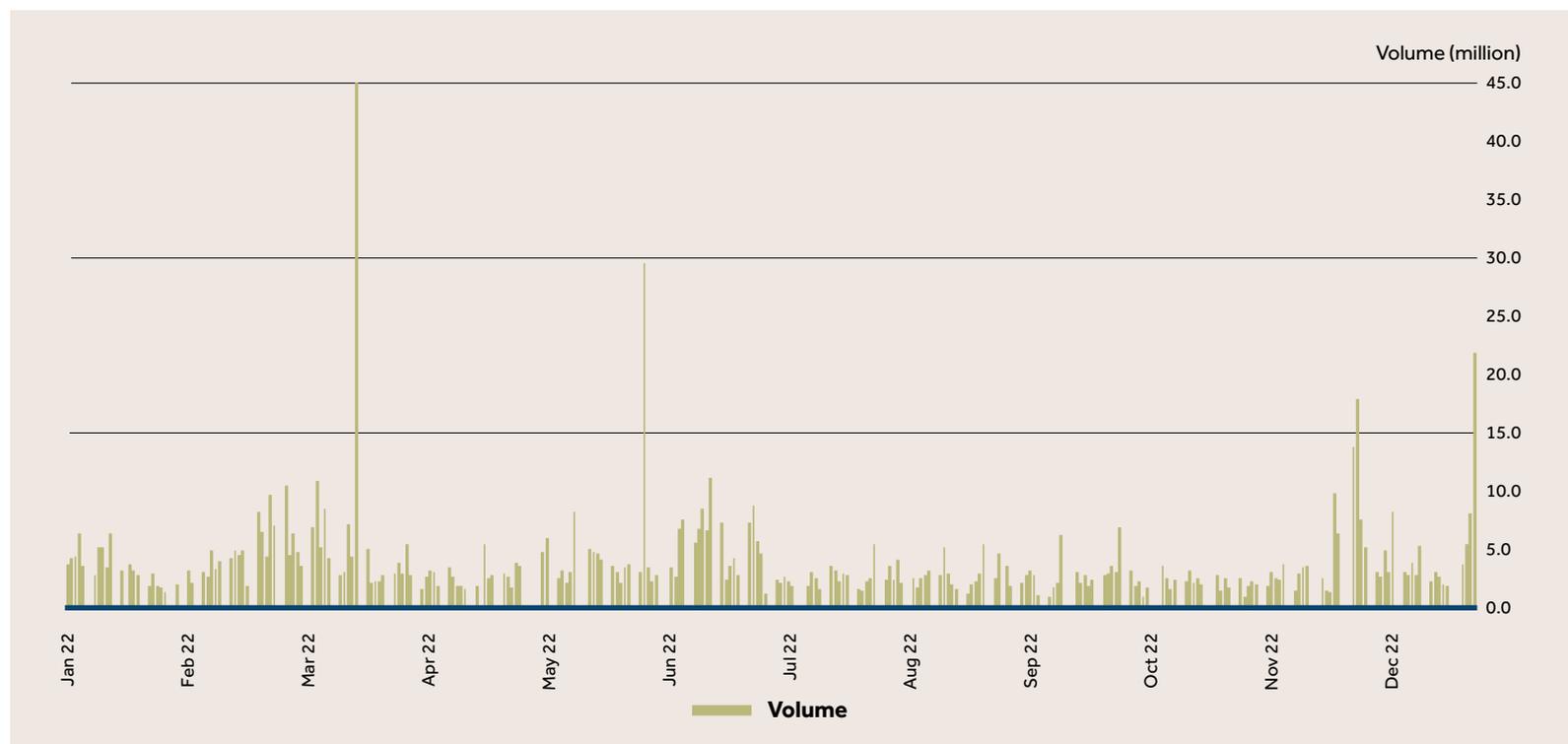
Affin Hwang Investment Bank	AmlInvestment Bank	CGS-CIMB Securities	Citi Research	CLSA
Credit Suisse	Hong Leong Investment Bank	J.P. Morgan	KAF-Seagroatt & Campbell Securities	Kenanga Investment Bank
Macquarie Capital Securities	Maybank Investment Bank	MIDF Amanah Investment Bank	Morgan Stanley Research	Nomura
Public Investment Bank	RHB	TA Securities	UBS Global Research	UOB Kay Hian Securities

SHARE PRICE PERFORMANCE

TNB SHARE PRICE, FBM KLCI INDEX AND VOLUME TRADED IN FY2022



PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS



RELATIONSHIP WITH EXTERNAL AUDITORS

The Board maintains a transparent and professional relationship with the External Auditors, with the BAC responsible for recommending the appointment or removal of the External Auditors, the approval of their remuneration and the terms of their engagement to the Board.

The Board and the BAC are responsible for reviewing, assessing and monitoring the performance, suitability and independence of External Auditors. The Board has set a policy on External Auditors which stipulates the guidelines and procedures for the Board and the BAC to assess and monitor the performance and independence of the External Auditors.

The policy covers Selection and Appointment, Independence, Conflict of Interest, Non-Audit Services, Rotation of Audit Partner (applies to lead audit engagement partner), Annual Reporting, Annual Assessment and Audit Fees.

The appointed Audit Partner by the External Auditors is subject to rotation at least every five (5) Financial Years, and a two (2) year gap before returning as Audit Partner for the engagement.

The External Auditors can also be engaged to perform non-audit services provided such services do not impair either in fact or appearance the auditors' objectivity, judgment or independence.

The External Auditors are required to provide their written assurance of meeting the independence requirements for each non-audit service undertaken by them for TNB Group.

The prohibition of non-audit services is based on three (3) basic principles, that the External Auditors cannot function in the role of Management; cannot audit their own work; and cannot serve in an advocacy role of TNB Group.

The External Auditors shall observe and comply with the By-Laws of MIA in relation to the provision of non-audit services and, if necessary, apply safeguards as stipulated in the By-Laws of MIA.

The Board, through the BAC, at its meeting on 24 February 2022 had approved the review of External Auditors Policy in accordance with Practice 9.2 of the MCCG, whereby the BAC has a policy that requires a former partner of the External Auditors of TNB to observe a cooling-off period of at least three (3) years before being appointed as a member of the BAC. Apart from that, the said review also is in line with the inclusion of Guidance 9.3 of the MCCG, of which the annual assessment of External Auditors should also consider information presented in the Annual Transparency Report of the audit firm.

PRINCIPLE C : INTEGRITY IN CORPORATE REPORTING AND MEANINGFUL RELATIONSHIP WITH STAKEHOLDERS

The BAC assists the Board in assessing whether the independence of the External Auditors has been maintained, having regard to any non-audit related services. The BAC considered the provision of non-audit fees by the External Auditors for the non-audit services provided to the Group and the Company during the Financial Year and concluded that the provision of these fees does not compromise or impair the External Auditors' independence or objectivity.

The amount of Audit and Non-Audit Fees paid or payable to PwC or its affiliates by the Company and TNB Group for the Financial Year ended 31 December 2022 is as follows :

	Group RM million	Company RM million
Statutory Audit	8.5	1.4
Audit Related Services	1.9	1.4
Total	10.4	2.8
Non-Audit Services :		
- Tax Related Services	0.2	0.1
- Other Non-Audit Services	1.5	0.2
Total	1.7	0.3

The Non-Audit Fees did not exceed 50% of the Audit Fees for the Financial Year under review, in line with TNB's External Auditors Policy.

All services were procured competitively in accordance with TNB's Procurement & Supply Chain Policy and Procedures and External Auditors Policy. Non-audit services can be offered by the External Auditors of the Group if there are clear efficiencies and value added benefits to the Group.

Based on the External Auditors Assessment Results for the Financial Year 2022, overall, the Company was highly satisfied/satisfied, with a score of 93.3%, a slight decrease of 2.8% compared to the previous Financial Year, with the services provided by PwC in term of quality, sufficiency of resources, communication and interaction and independence, objectivity and professional skepticism. All comments made were forwarded to PwC in order to further improve their services.

With that, the Board/BAC are satisfied with the quality of service, sufficiency of resources, communication and interaction and independence, objectivity and professional skepticism demonstrated by PwC in carrying out its duties as External Auditors.

Being satisfied with the External Auditors' performance, the Board recommends their re-appointment for shareholders' approval at the AGM.

INSIDER TRADING

The Directors and Top Management of TNB are prohibited from trading in securities or any kind of price-sensitive information and knowledge which have not been publicly announced, in accordance with the MMLR and relevant provisions of the Capital Markets & Services Act 2007. Notices on the closed period for trading in TNB's securities are circulated on a quarterly basis in advance of each closed period to Directors and Top Management who are deemed to be privy to any price-sensitive information and related actions.

RESPONSIBILITY STATEMENT IN RESPECT OF THE FINANCIAL YEAR UNDER REVIEW

The Board is fully accountable for ensuring the Audited Financial Statements are prepared in accordance with the Companies Act 2016 and the applicable approved accounting standards set out by the Malaysian Accounting Standards Board so as to present a true and fair view of the Group's state of affairs and of the profit or loss and cash flow as at the end of the accounting period. In preparing the Audited Financial Statements, the Directors are satisfied that the applicable approved accounting standards in Malaysia have been complied with and reasonable and prudent judgements and estimates have been made. The Audited Financial Statements are also prepared on a going concern basis as the Board has a reasonable expectation, after having made enquiries, that the Group has adequate resources to continue its operational existence for the foreseeable future.

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

The Board of Directors (the Board) is pleased to present its Statement on Risk Management and Internal Control (SORMIC) for the Financial Year ended 31 December 2022 that has been prepared and jointly endorsed by the Board Risk Committee and Board Audit Committee. This Statement is prepared pursuant to paragraph 15.26(b) of the Main Market Listing Requirements of Bursa Malaysia Securities Berhad (Bursa) and guided by the Statement on Risk Management and Internal Control – Guidelines for Directors of Listed Issuers issued by Bursa.

This Statement outlines the nature and scope of the risk management and internal control systems within TNB Group during the year under review. The scope of this disclosure excludes associated companies and joint ventures.

The Board affirms its overall responsibility and is committed to establishing and maintaining sound, effective and efficient risk management and internal control systems to safeguard shareholders' investment and the Group's assets. These systems are designed to manage rather than eliminate risks and therefore provide reasonable rather than absolute assurance against material losses, misstatements or other significantly adverse consequences.

THE BOARD COMMITTEES

The Board acknowledges the importance of maintaining robust risk management practices and sound internal controls for good corporate governance.

The following Board Committees were established with clearly defined terms of reference to promote governance, transparency and accountability :

Board Audit Committee	Board Risk Committee
Board Tender Committee	Board Integrity Committee
Board Nomination & Remuneration Committee	Board Finance & Investment Committee
Board Long Term Incentive Plan Committee	

THE MANAGEMENT COMMITTEES

TNB Management is accountable to the Board for ensuring effective implementation of the Group's risk management and internal controls. The Management is responsible for implementing the processes to identify, evaluate, monitor and report risks and for ensuring the effectiveness of internal controls, taking appropriate and timely action as required.

The following Management Committees are in place to implement and execute the Group's risk management and internal control systems for the achievement of short- and long-term business objectives.

Group Executive Management Committee	Group People Committee
Group Management Tender Committee	Commodity Procurement Executive Committee
Investment Executive Committee	Energy Supply Committee
Regulatory Council	Sustainability and Energy Transition Council
Electric Vehicle Council	Technology Council
Information & Communication Technology Governance Council	Smart Meter Council
Health, Safety and Environment Council	Integrity Council

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

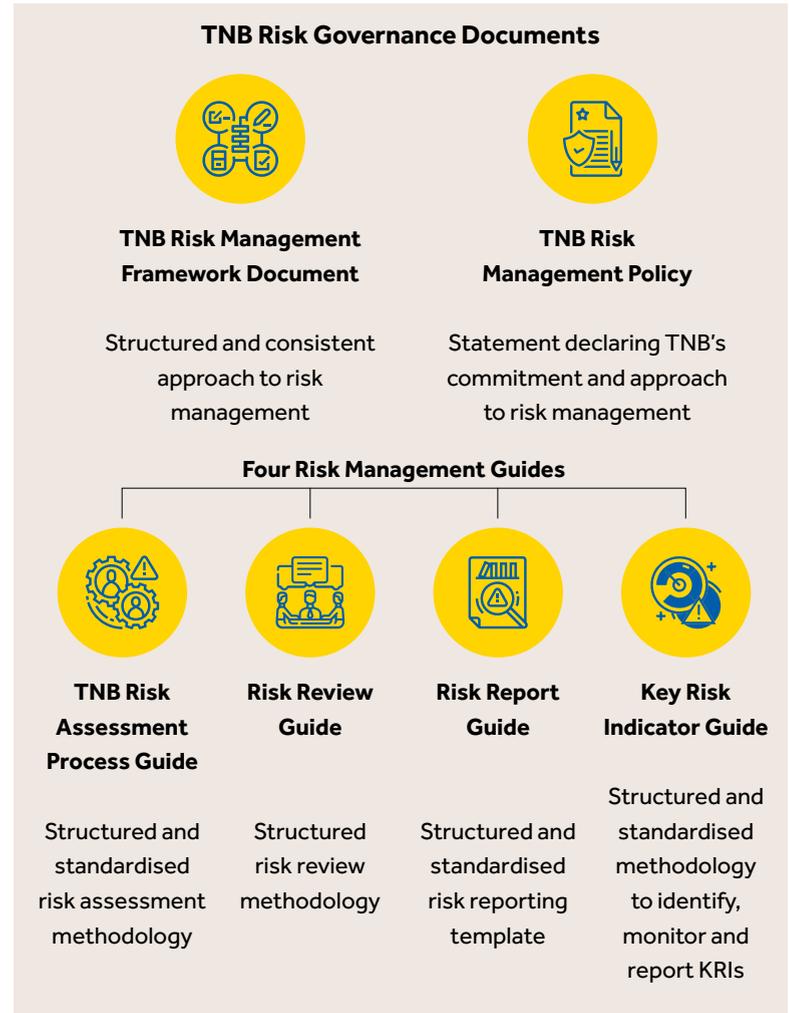
RISK MANAGEMENT

RISK MANAGEMENT FRAMEWORK

Risk management in TNB is governed by the TNB Risk Management Framework, which adopts the principles and guidelines set out in ISO 31000:2018, 'Risk Management - Guidelines'. This framework provides a structured and consistent approach for risk management implementation across the Group. The purpose of risk management is to create and protect value and this is exemplified through each element in the TNB Risk Management Framework.



The framework has been approved by the Board Risk Committee (BRC) and is reviewed annually. The implementation of the TNB Risk Management Framework is documented through six risk governance documents, which are the TNB Risk Management Framework, TNB Risk Management Policy, TNB Risk Assessment Process, Risk Review, Risk Report and Key Risk Indicator.



The TNB Risk Management Framework document describes the criteria and frequency of revision of these risk governance documents and the levels of approving authority to ensure the documents are robust, practical for implementation and reflective of the internal and external context. In the year under review, revisions for clarity in the TNB Risk Management Framework document were deliberated on and approved by the Group Risk Management Working Committee (GRMWC).

RISK MANAGEMENT POLICY

The TNB Risk Management Policy is a statement of the overall intention and direction of the Group on risk management. It describes the commitment of the Group to assessing risks in alignment with business objectives, integrating risk management in all decision-making processes, anticipating potential risks in response to changes in the internal and external environments and ensuring that risk information is communicated through a clear and robust monitoring and reporting structure.

The policy emphasises the role of all TNB employees, who are responsible and accountable for managing risks related to their actions and decisions by taking all reasonable care to minimise losses, maximise opportunities and ensure TNB's reputation is upheld.

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

LEADERSHIP AND COMMITMENT

The TNB Risk Management Structure depicts the leadership and commitment of the Board and Management in the escalation and cascading of risk information across all levels.



The establishment of the BRC reaffirms the Board’s commitment to ensuring that the Group has in place a sound and robust enterprise risk management framework and that the framework has been effectively implemented to enhance the Group’s ability to achieve its strategic objectives. The BRC is supported by Management through the Group Executive Management Committee chaired by the President/Chief Executive Officer, the cross-functional GRMWC and Subsidiaries Risk Management Working Committee (SRMWC), as well as the Risk Management Department led by the Chief Risk Officer. Assurances are provided to the Board and Management through internal and external audits.

In the year under review, the BRC convened seven sittings to deliberate risk issues and key risk indicators, as well as reviewing the effectiveness of appropriate systems to manage risks. The business entities provided assurances to the BRC of their risk management and internal controls, assisting the Board in its decision-making, especially in the management of potential risks that could prevent the Group from achieving its objectives.

RISK ASSESSMENT PROCESS

TNB business entities are guided by the TNB Risk Assessment Process that provides a structured approach to identifying, analysing, evaluating and treating risks. TNB business entities apply the process in a systematic, iterative and collaborative manner, drawing on the knowledge and views of stakeholders to develop their respective risk profiles.

The TNB Risk Assessment Process was applied in the assessment of the TNB Strategic Risks that could prevent the Group from achieving its Reimagining TNB strategies, considering internal and external factors. Annual revisions of these risks were approved by the BRC in the year under review and the 10 TNB Strategic Risks are described below :

CATEGORY	NO.	RISK
External	1.	<p>Catastrophic disruptions from external factors</p> <p>TNB business entities are exposed to unpredictable external events that could catastrophically impact business operations, profitability and reputation. Examples of external factors are pandemics, cybersecurity attacks, economic trade wars, extreme weather events, etc.</p>

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

CATEGORY	NO.	RISK
Sustainability	2.	<p>Inability to keep pace with Environmental, Social & Governance (ESG) developments and transitions globally</p> <p>It is vital that TNB aligns itself with global ESG commitments and frameworks to fulfil its purpose of brightening lives through innovative and sustainable solutions for a better world. Failure to do so could erode market confidence in TNB as a sustainable company, adversely affecting employee morale and damaging TNB's reputation.</p>
Regulatory	3.	<p>Unfavourable energy transition & climate change policies & regulations</p> <p>TNB has established its Reimagining TNB aspiration, strategies and targets to be met in 2025, anchored on the energy transition theme. Changes in policies and regulations relating to energy transition and climate change may impact TNB's ability to achieve the 2025 aspiration and targets.</p>
	4.	<p>Unfavourable ESI regulatory implementation and outcomes</p> <p>The energy sector is a highly regulated sector, and any changes in regulations will heavily impact our business continuity. TNB's regulated business is dependent on favourable decisions arising from other regulated policies and directions, e.g. ICPT, Annual Regulatory Adjustment, political scenario, MESI reform, etc.</p>
	5.	<p>Regulatory uncertainty</p> <p>Due to their nature of business, TNB business entities are susceptible to decisions by regulatory stakeholders at the federal, state and international levels. Business operations may be delayed or encumbered due to measures and decisions in relation to investment and divestment, use of natural resources, right-of-way, etc.</p>
Market	6.	<p>Unable to be competitive in non-regulated business (international & domestic)</p> <p>TNB is diversifying its business into non-regulated segments, both domestically and internationally. However, these markets are highly competitive and challenging, making it difficult for TNB to participate in and compete.</p>
Customers	7.	<p>Inability to remain as the electricity provider of choice for customers</p> <p>TNB supplies electricity to the entire nation and needs to continue doing so in a reliable, safe and high-quality manner to retain the trust and confidence of customers. Failure to deliver the above could lead to customer dissatisfaction and disengagement, inability to capture potential business growth and a negative image and reputation.</p>
Finance	8.	<p>Ineffective capital allocation to maximise value creation</p> <p>Effective sourcing and allocation of funds is important to enhance operational efficiency, growth and financial stability to ensure fair returns to shareholders. Ineffectiveness could lead to missed opportunities, reduction of financial profits and decreased market confidence.</p>
Capabilities	9.	<p>Gaps in workforce capabilities to deliver Reimagining TNB strategy and sustainability aspiration</p> <p>It is critical for TNB to develop and deploy new institutional capabilities to the right areas in the organisation and to increase workforce diversity (skill sets, exposure, gender, etc.) in line with TNB's sustainability aspiration. Failure to close the capabilities gap could impact TNB's ability to achieve its long-term strategy and aspirations.</p>
	10.	<p>Failure to ingrain TNB culture in employees' behaviour in supporting Reimagining TNB strategy and sustainability aspiration</p> <p>Culture moulds the direction, beliefs and shared values that shape employee perception, behaviour and understanding across all levels in TNB, including the Board. Failure to effectively ingrain the Reimagining Culture values in the organisation and processes may result in lower productivity, fraud and bribery, a silo mentality, etc.</p>

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

REVIEW, MONITOR AND REPORT

The BRC approved the TNB Three-Year Cycle Risk Governance Plan for implementation from FY2022 to FY2024. This plan was implemented by the Risk Management Department to assist the BRC in ensuring that TNB business entities have in place a sound and robust enterprise risk management framework which is being implemented effectively. The plan outlines three (3) risk governance activities, which are risk review, risk maturity assessment and desktop risk assessment. In accordance with the plan, the Risk Management Department, in collaboration with TNB business entities, conducted 15 risk reviews, five (5) risk maturity assessments and eight (8) desktop risk assessments in the year under review.

As per the TNB Risk Management Framework, TNB business entities are responsible for assessing their respective risks and registering them in the TNB Risk Information System (TRIS), a centralised online real-time tool and database, for monitoring and reporting. Risks are also reviewed annually by the business entities with participation and eventual approval from the risk owners.

Half-yearly risk reports are submitted by the business entities to the Risk Management Department for consolidation. Group-wide consolidated half-yearly risk reports, which include reports of emerging risks, are deliberated on and endorsed by the GRMWC for onward internal dissemination.

KEY RISK INDICATORS

Key Risk Indicators (KRIs) that provide early warning of increasing risk exposures and potential risk events have been developed by the business entities. These KRIs are developed with the risk appetite of the BRC and TNB Management in mind. The status of KRIs is reported quarterly to the BRC, GRMWC and SRMWC and mitigating measures are deliberated on to prevent risk exposures from escalating beyond tolerable levels.

The KRIs are escalated and reported to the BRC to monitor risks that would impact five (5) areas, which are operations, financial standing, regulatory, reputation and international investment. Other operational KRIs that are deliberated on by the GRMWC and SRMWC enable inter-business collaboration to mitigate risks from a Group-wide perspective.

The KRIs are reviewed annually for relevancy and adequacy, considering short- and long-term business objectives and changes in the internal and external environments.

COMMUNICATION & INTEGRATION

The business entities regularly communicate with internal and external stakeholders with up-to-date risk information and timely feedback is

collected for continual improvement. It is the role of the business entity to ensure risk management forms part of and is not separate from, its objectives, governance, leadership and commitment, operations and performance management.

In the year under review, five (5) risk conferences were organised by the Risk Management Department with total participation from approximately 466 TNB executives and non-executives. These events were organised once restrictions were relaxed post-pandemic and the face-to-face interactions were well received by participants and achieved the objective of driving the message on the importance of integrating risk management in daily operations and decision-making.

Additionally, webinars continued to be conducted in collaboration with the TNB business entities and in the year under review, 458 employees were engaged through six (6) webinars. These webinars aimed to strengthen employees' risk-thinking mindsets through practical applications of the TNB Risk Management and TNB Business Continuity Management frameworks.

The BRC continually communicates its tone from the top, emphasising the importance of effective risk management and strong risk culture. Pre-pandemic, an annual risk forum held with the BRC was conducted in-person for that purpose. However, in FY2022, a video of BRC members was produced for the same purpose and communicated to Management and employees through relevant platforms such as management meetings and risk conferences. In 2023, the BRC will continue to communicate its tone from the top through the annual risk forum.

The tone from the top on risk management and its benefits was further cascaded by Management to employees via videos of each member of Management that were produced and uploaded to TNB's intranet for easy viewing, downloading and sharing.

In collaboration with TNB Integrated Learning Solution (ILSAS), the centre for energy learning, advisory, services and consultancy, the Risk Management Department continued to drive risk management training modules at the fundamental and intermediate levels. In the year under review, a total of 55 employees completed the fundamental module and 70 employees completed the intermediate module. In addition, five (5) employees from the Risk Management Department successfully obtained the professional risk certification from the Academy of Risk Management Malaysia (ARiMM) and were recognised as Certified Risk Managers.

CULTURE

The risk culture described in the TNB Risk Management Framework is aligned with the six (6) TNB core values and behaviours. The application of these core values and behaviours are described in a risk management context to provide clear guidance and communicate the expected behaviour of employees in building a sustainable risk culture.

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

INTERNAL CONTROL

GROUP POLICIES AND PROCEDURES

Group-wide policies and procedures have been approved by the Board and Management to ensure ethics and internal control principles and mechanisms are embedded in business operations. These policies and procedures are consistently reviewed for relevance and effectiveness.

Among others, the Group policies and procedures in place are :

TNB Code of Ethics	TNB Environmental Policy
TNB Ethics & Integrity Policy	TNB Security Policy
TNB Risk Management Policy	TNB Communication Policy
TNB Confidentiality Policy	TNB Personal Data Protection Policy
TNB Asset Management Policy	TNB Disciplinary Procedures
TNB Limits of Authority	TNB Investment Process Control : Updated Investment Process and Investment Risk Methodology
TNB Procurement and Supply Chain Policy and Procedures	TNB Group Financial Policies and Procedures
TNB ICT Security Policy and ICT Codes of Practice	TNB Group Human Resource circulars and guidelines
TNB Safety & Health Policy	

FINANCIAL AND OPERATIONAL CONTROL FRAMEWORK

TNB Group Financial Policies and Procedures (GFPP) serve as a compulsory source of reference for the Group in conducting its operations to manage associated risks. The Group has acted in accordance with generally accepted accounting principles and the Malaysian Financial Reporting Standards. Periodic reviews of actual performance versus budgets, targets and performance in prior periods for key functions and major initiatives are carried out and appropriate mitigating and follow-up actions are taken.

The Board Audit Committee (BAC) reviews the Group's quarterly financial performance together with TNB Management and this is subsequently reported to the Board. The quarterly reviews enable the BAC to deliberate on and assess the Group's financial results and operational performance.

TNB continues to proactively engage with relevant stakeholders for smooth implementation of the IBR framework. The performance of the regulated business is meticulously monitored through the IBR performance indicators and dashboards. These are reported regularly to relevant decision-making committees to ensure effective implementation of the IBR framework, as well as to the Energy Commission in compliance with the IBR guidelines.

The procedures for critical functions and key activities are documented, communicated to employees and periodically reviewed. Relevant business entities have been consistently maintaining their certifications in ISO 9001, ISO 14001, ISO 27001, ISO 37001, ISO 45001 and ISO 55001. Internal audits are conducted to ensure compliance with relevant standards and procedures.

STRATEGIC PLANNING AND PERFORMANCE MANAGEMENT CYCLE

A holistic strategic planning process is integral to providing focus and alignment between aspiration, strategies, performance management and the desired strategic outcomes. The Strategic Planning and Performance Management (SPPM) cycle approved by the Board depicts a 5-part cycle that integrates the capital and budget allocation process with the performance management cycle. It includes the identification of strategy-driven Key Performance Indicators (KPIs) based on long-term business plans and annual operating plans, which are thereafter cascaded to all levels of employees. The strategy-driven KPI methodology is derived from the Balanced Scorecard concept that focuses on performance measures from four perspectives, which are financial, customer, internal process and learning and growth.

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

Job descriptions and responsibilities of approved positions are clearly defined and communicated through the internal online platform, People Matters. Workforce requirements planning is carried out and led by Group Human Resource, mirroring the budget planning cycle with the aim of optimising staffing levels and increasing productivity. Employee training needs are regularly assessed and various programmes are in place to address competency gaps.

Moreover, effective succession management improves organisational ability to maintain continuity of operations with minimal disruption and benefits both the employees by preparing them to be strong talents and the organisation by facilitating smooth transitions. The TNB Succession Management Framework aims to ensure the succession management strategy is agile and in line with current and projected business objectives by defining critical positions, nominating and evaluating talents, identifying development needs and reviewing and adapting to business needs.

HEALTHCARE & WELLNESS MANAGEMENT

The TNB Total Wellness Programme, which aims to educate and influence employees towards a healthy lifestyle and work-life balance, continues to be implemented through the 'Vibrant Living – Healthier. Together' initiative. This initiative focuses on six (6) scopes, which are healthy diet, no smoking/vaping, active lifestyle, weight management, basic health screening and mental well-being. Weekly "Wellness Wednesday" health talks and awareness sessions conducted online are open to all employees and retirees with the aim of increasing awareness on common health issues and encouraging healthier habits.

TNB DIGITAL STRATEGY

The TNB Digital Strategy was established to lay the necessary digital foundations and direction in supporting the RT strategies. The digital strategy is implemented through five (5) streams : first, identifying the digital vision and value levers for ten key business entities; second, developing a clear plan for attracting and developing the right digital talents and for cultural change; third, enhancing digital architecture readiness to support business imperatives; fourth, establishing a digital operating model, factory and skills hub to host critical in-demand skills and fifth, building a governance and value realisation framework.

MANAGEMENT INFORMATION SYSTEMS

Leveraging information and communications technology is vital in promoting effective and efficient business operations as well as timely and accurate communications with internal and external stakeholders.

Examples of key information systems utilised by the Group for this purpose are :

Enterprise Resource Management System (ERMS)
Enterprise Human Resources Management System (EHRMS)
Supervisory Control and Data Acquisition System (SCADA)
TNB Outage Management Systems (TOMS)
Billing Customer Relation Management (BCRM)
Employee Self Service (ESS)

Super User Privilege Management and Governance, Risk and Compliance systems have been implemented to control and govern access to core systems and servers. This is to ensure that access to critical information systems and confidential information is adequately monitored and controlled. Annual disaster recovery tests are carried out at the data centres and ICT security assessments are regularly carried out on systems at the business entities. In addition, various enhancements are implemented to strengthen cybersecurity for Information Technology and Operational Technology systems. In the event of system failure, various mitigations are in place to minimise disruptions to operations.

PERSONAL DATA PROTECTION

TNB is committed to safeguarding customers' privacy rights and personal data in accordance with the Personal Data Protection Act 2010 (PDPA). TNB was an active contributor to the development of the Personal Data Protection Code of Practice for the Utilities Sector (Electricity) Version 2.0 (Code of Practice), which serves as a guide for the processing and handling of customers' personal data. The Code of Practice is aligned with Section 23 of the PDPA, which protects the personal information of an individual being processed for commercial transaction purposes. The Legal Services Department is committed to consistently educating and communicating the requirements of the PDPA and the Code of Practice across the Group to heighten awareness and compliance, as well as enhancing controls.

TNB Corporate Integrity Management System

The TNB Corporate Integrity Management System (TCIMS) is in place to improve the integrity culture in the Group, reduce the impact of corruption or mismanagement and position TNB at par internationally through a strategic and structured integrity management system. TNB is certified with ISO 37001:2016 Anti-Bribery Management Systems and has put in place a management system designed to help prevent, detect and respond to bribery and comply with anti-bribery laws and voluntary commitments applicable to its activities. Annually, TNB employees complete the Integrity Pledge and Conflict of Interest declarations via the Employee Self Service system and the Integrity E-learning module via the People Matters Better Brighter system.

In addition, the Integrity Department designs and implements an annual training and communication

STATEMENT ON RISK MANAGEMENT AND INTERNAL CONTROL

plan to ensure a comprehensive and diversified approach in institutionalising the integrity culture in TNB. Highlights of the training and communication plan include an Integrity Day, integrity e-learning for staff and vendors and joint programmes with the Malaysian Anti-Corruption Commission. The progress of the plan is updated to the Board Integrity Committee on a quarterly basis, which is a part of the monitoring and reporting mechanism in place for integrity development.

TENAGA SAFETY CULTURE

The Tenaga Safety Culture programme aims to inculcate safety as part of the everyday working culture, transforming it from a mere compliance activity. It is based on four core behaviours, which are 'Assess', 'Comply', 'Intervene' and 'Actively Caring'. Various initiatives are implemented to instil these core behaviours in each employee, including from a spiritual approach to align good safety practices with religious teachings. With the convenience of a mobile application called HSE Wallet that was developed in-house, employees are encouraged to proactively observe and report unsafe acts or conditions as potential incidents and notices, compounds or lawsuits.

The *Nampak, Dengar & Rasa Selamat* (NDRS) programme was launched to reinforce strong safety culture values in all employees. The NDRS programme encourages employees to be sensitive to their surroundings, evaluate potential health and safety risks, comply with safety requirements and take proactive action to prevent risks from materialising. The NDRS framework includes three elements, which are engineering, education and enforcement and is supported by a consequence management process that rewards safe behaviour and practices and penalises non-compliance.

CUSTOMER EXPERIENCE

With regard to customer-centricity, a variety of channels, utilising the 'Click, Call, Come Over' platform, are made available to customers. The platform covers a wide range of touchpoints that enable quality solutions, services and continuous interaction options to enhance customer experience. A systematic approach is in place for timely resolution of feedback such as service requests, complaints, comments, enquiries and concerns. In addition, the myTNB web portal and mobile application are available to customers to manage their electricity account(s) in one location. myTNB allows customers to make express payment of electricity bills without needing to log in.

BUSINESS CONTINUITY MANAGEMENT

The TNB Business Continuity Management (BCM) Framework was developed in alignment with ISO 22301:2019 Security and Resilience – Business Continuity Management Systems. The framework provides a structured approach to managing business continuity in the Group, allowing for a quick, coordinated and effective response to a crisis while maintaining the continuity of essential activities and protecting human life, assets, reputation and the environment. The framework is the focal point of reference for the business entities to formulate and implement business continuity strategies tailored to their respective business objectives and critical functions.

The preparedness and effectiveness of the Corporate Crisis Command Structure, of which the President/Chief Executive Officer and TNB Management are members, is tested annually through planned drills.

Improvements identified in drill post-mortems are implemented to enhance capabilities and readiness. Additionally, in preparation for the anticipated monsoon season, drills with flood scenarios were conducted at state and regional levels in collaboration with the relevant business entities to enhance coordination and resiliency. Specific business continuity plans were also developed and tested to ensure available and reliable electricity supply throughout the period of the nation's 15th General Election.

To further strengthen prompt and coordinated response during crises, in the year under review, strategic engagements were carried out with relevant government agencies. Knowledge exchange engagements with government agencies such as the National Security Council and National Disaster Management Agency (NADMA) were mutually beneficial in ensuring effective and efficient response and recovery to crises affecting the nation. A key outcome of the engagements was a successful tabletop exercise carried out in collaboration with NADMA in September 2022, replicating the landslide crisis at Kenyir that occurred in February 2022, with the objective of enhancing preparedness and coordination between relevant parties at the state and federal levels.

The TNB BCM Framework and continuity strategies at corporate and business entity levels were essential in the management of crises in the year under review such as the pandemic, floods, landslides and electricity supply interruptions. In the management of these crises, key information was escalated to the Corporate Crisis Management Team chaired by the President/Chief Executive Officer via dashboard reporting at regular intervals.

CONCLUSION

The Board has obtained assurances from the President/Chief Executive Officer and Chief Financial Officer that the Group's risk management and internal control system is operating adequately and effectively, in all material aspects. Where weaknesses were identified, rectification steps have been put in place.

The Board is of the view that the risk management and internal control system in place for the year under review and up to the date of approval of this statement for inclusion into the annual report is adequate and effective to safeguard shareholders' investments, the interests of customers, regulators and employees and the Group's assets.

REVIEW OF THE STATEMENT BY EXTERNAL AUDITOR

As required by Paragraph 15.23 of the Bursa Malaysia Securities Berhad Main Market Listing Requirements, the external auditors have reviewed this Statement on Risk Management and Internal Control. Their limited assurance review was performed in accordance with Audit and Assurance Practice Guide (AAPG) 3 issued by the Malaysian Institute of Accountants. AAPG 3 does not require the external auditors to form an opinion on the adequacy and effectiveness of the risk management and internal control systems of the Group.

This statement is made in accordance with the resolution of the Board of Directors dated 20 March 2023.

ADDITIONAL COMPLIANCE INFORMATION

(1) UTILISATION OF PROCEEDS RAISED FROM CORPORATE PROPOSALS

Utilisation of Proceeds Raised from Corporate Proposals by the Company during the Financial Year under Review :

Multicurrency Sukuk Issuance Programme of USD2.5 billion (or its Equivalent In Other Currencies) by TNB Global Ventures Capital Berhad with TNB as the Obligor

First issuance on 19 October 2016	USD750.0 million
Balance of proceeds as at 31 December 2022	- Nil -
Second issuance on 1 November 2018	USD750.0 million
Balance of proceeds as at 31 December 2022	- Nil -

Sukuk Wakalah Programme of Up to RM10.0 billion by TNB

Second issuance on 25 November 2021	RM3.0 billion
Balance of proceeds as at 31 December 2022	- Nil -
Third issuance on 30 June 2022	RM4.0 billion
Balance of proceeds as at 31 December 2022	- Nil -

(2) MATERIAL CONTRACTS

There were no material contracts entered into by the Company and its Subsidiaries involving the interests of the Directors or Major Shareholders, either still subsisting at the end of the Financial Year or, if not then subsisting, entered into since the end of the previous Financial Year.

(3) RELATED PARTY TRANSACTIONS

The Group has established appropriate procedures to ensure it complies with the MMLR with regards to related party transactions. All related party transactions are reviewed by the Group Internal Audit Department, following which a Group-Wide Report is submitted to the BAC on a quarterly basis for monitoring purposes. The Group did not seek any mandate from its shareholders pertaining to related party transactions during the Financial Year under review.

STATEMENT ON COMPLIANCE WITH THE REQUIREMENTS OF BURSA MALAYSIA IN RELATION TO APPLICATION OF PRINCIPLES AND ADOPTION OF BEST PRACTICES LAID DOWN IN THE MALAYSIAN CODE ON CORPORATE GOVERNANCE 2021 (Pursuant to paragraph 15.25 of the MMLR)

The Board has reviewed, deliberated and approved this Statement on 27 February 2023. The Board is pleased to report to its shareholders that to the best of its knowledge, the Company has complied with and shall remain committed to attaining the highest possible standards of corporate governance through the continuous adoption of the principles and best practices of the MCCG and all other applicable laws, save as disclosed above.



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