

TRANSITION FINANCE FRAMEWORK

JULY 2024





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GLOSSARY

ACMF	ASEAN Capital Markets Forum	LMA	Loan Market Association
AMI	Advance Metering Infrastructure	LSTA	Loan Syndications and Trading Association
APLMA	Asia Pacific Loan Market Association	LTIF	Lost Time Injury Frequency
BESS	Battery Energy Storage Systems	MCCG	Malaysian Code on Corporate Governance
BEV	Battery Electric Vehicles	MyRER	Malaysia Renewable Energy Roadmap
BP (Finance)	Business Partner (Finance)	MYR	Malaysian Ringgit
BSRC	Board Sustainability and Risk Committee	NDC	Nationally Determined Contribution
CAPEX	Capital Expenditure	NED	New Energy Division
CCS	Carbon Capture & Storage	NEP	New Energy Policy
CCU	Carbon Capture & Utilisation	NETR	National Energy Transition Roadmap
CEO	Chief Executive Officer	OPEX	Operational Expenditures
CFO	Chief Financial Officer	PAT	Profit After Tax
CFO (Subsi)	CFO of TNB's Subsidiary	PLN	PT Perusahaan Listrik Negara
CFT	Corporate Finance and Treasury	R&D	Research and Development
CPF	Corporate and Project Finance	RE	Renewable Energy
CTFH	Climate Transition Finance Handbook	RT2025	Reimagining TNB
DER	Distributed Energy Resources	SAIDI	System Average Interruption Duration Index
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization	SBP	Social Bond Principles
EGAT	Electricity Generating Authority of Thailand	SETC	Sustainability and Energy Transition Council
EHCMC	Vietnam's Saigon Gia Dinh Electric	SFC	Sustainable Finance Committee
ESG	Environmental, Social, Governance	SFT	Sustainable Finance Transactions
ET	Energy Transition	SLP	Social Loan Principles
EV	Electric Vehicles	SP2050	Sustainability Pathway 2050
GBP	Green Bond Principles	SRI	Sustainable and Responsible Investment
GEMC	Group Executive Management Committee	T&D	Transmission & Distribution
GHG	Greenhouse Gas	TCFD	Task Force on Climate-related Financial Disclosures
GLP	Green Loan Principles	TPGSB	TNB Power Generation Sdn Bhd
GRI	Global Reporting Initiative	UN SDGs	United Nations Sustainable Development Goals
GSS	Green, Social and Sustainability	VRE	Variable Renewable Energy
ICMA	International Capital Market Association		
KPI	Key Performance Indicator		





INTRODUCTION



1 INTRODUCTION

1.1 About TNB

Tenaga Nasional Berhad (“**TNB**” or “**the Company**” or “**the Group**”) is the largest electricity utility in Malaysia and a leading utility company in Asia with international business operations and presence in eight countries i.e., Ireland, the United Kingdom, Kuwait (operation and maintenance services), Turkey, Saudi Arabia, Pakistan (operation and maintenance services), Cambodia (technical advisory services) and Australia. As of 31 December 2023, TNB serves over 10.85 million customers throughout Peninsular Malaysia, Sabah and the Federal Territory of Labuan.

TNB’s core business comprises an end-to-end electricity supply chain, which includes electricity generation, transmission, distribution and retail. Other activities include repairing, testing and maintaining power plants, providing engineering, procurement and construction services for power plants related products, assembling and manufacturing high voltage switchgears, and trading.

Snapshots of TNB 2023¹

Total Revenue	Total Assets	Market Capitalisation	EBITDA/ EBITDA Margin	Total Borrowings
RM 53.1 billion	RM 204.7 billion	RM 58.1 billion	RM % 18.6 billion/ 35.1%	RM 61.8 billion
Thermal Generation Plants	Non-carbon Plants	Total Installed Capacity²	Total Customers³	Employees
5 Coal fired plants 10 Gas fired plants 51 Oil, diesel & solar hybrid	22 Large hydro 110 Renewable Energy (mini hydro, solar, wind & biomass)	16,283 MW	10.85 million	34,543

In 2021, TNB announced its intent to become a net zero company by 2050. The Company has outlined the detailed pathway of spearheading the energy transition enshrined in Sustainability Pathway 2050 (“**SP2050**”) developed in 2021, Energy Transition Plan (“**ET**”) Plan in 2022, as well as the sustainability and governance initiatives and improvements made to set TNB on its way to be a leading provider of sustainable energy solutions in Malaysia and internationally in line with TNB’s corporate strategy, Reimagining TNB (“**RT2025**”) launched in 2016.

¹ Source: [TNB Integrated Annual Report 2023](#)

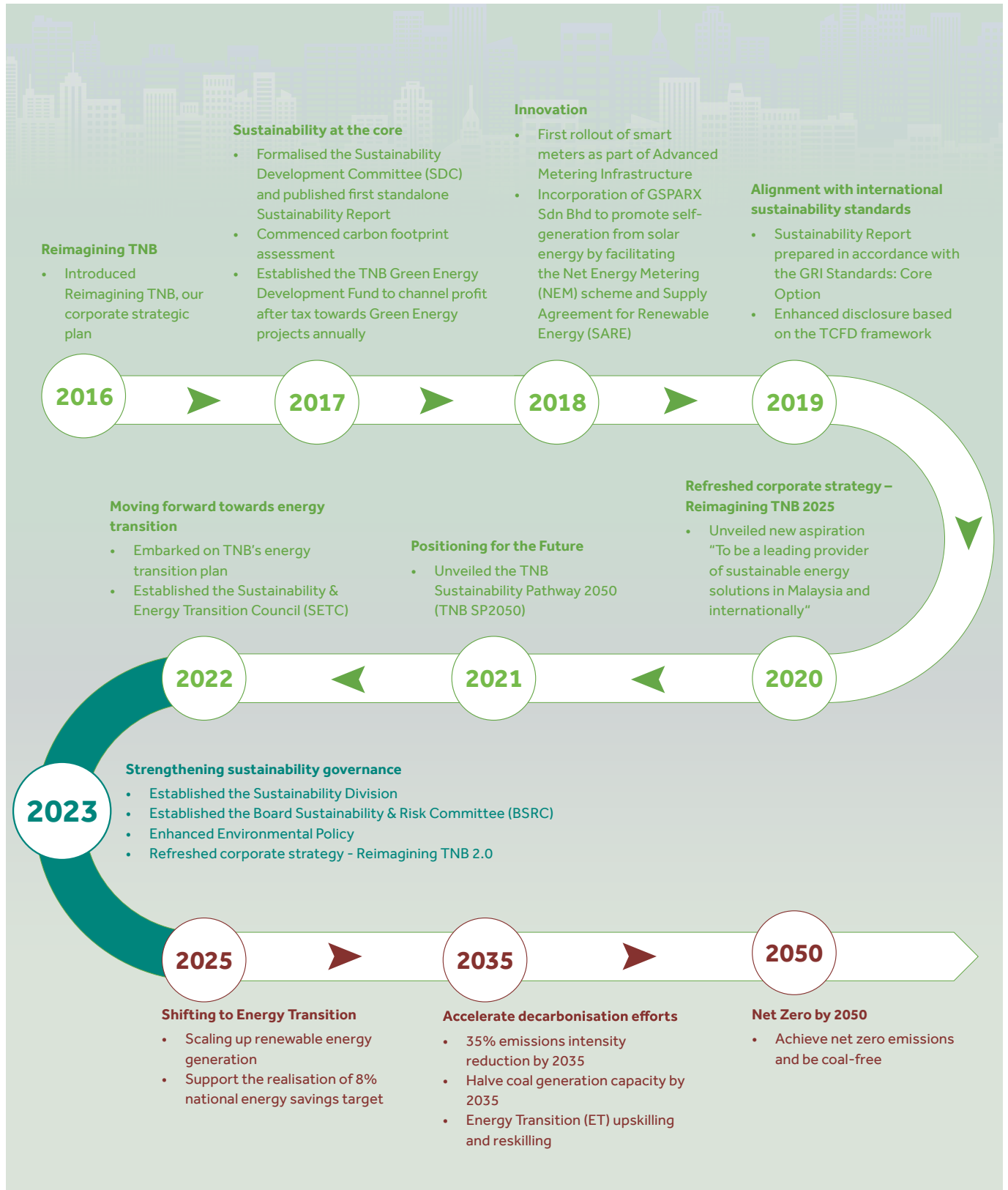
² For wholly-owned, majority-owned and minority-owned (equity basis) MW of generating capacity of both domestic and international plants

³ For Peninsular Malaysia, Sabah and Federal Territory of Labuan





TNB Sustainability Journey ⁴

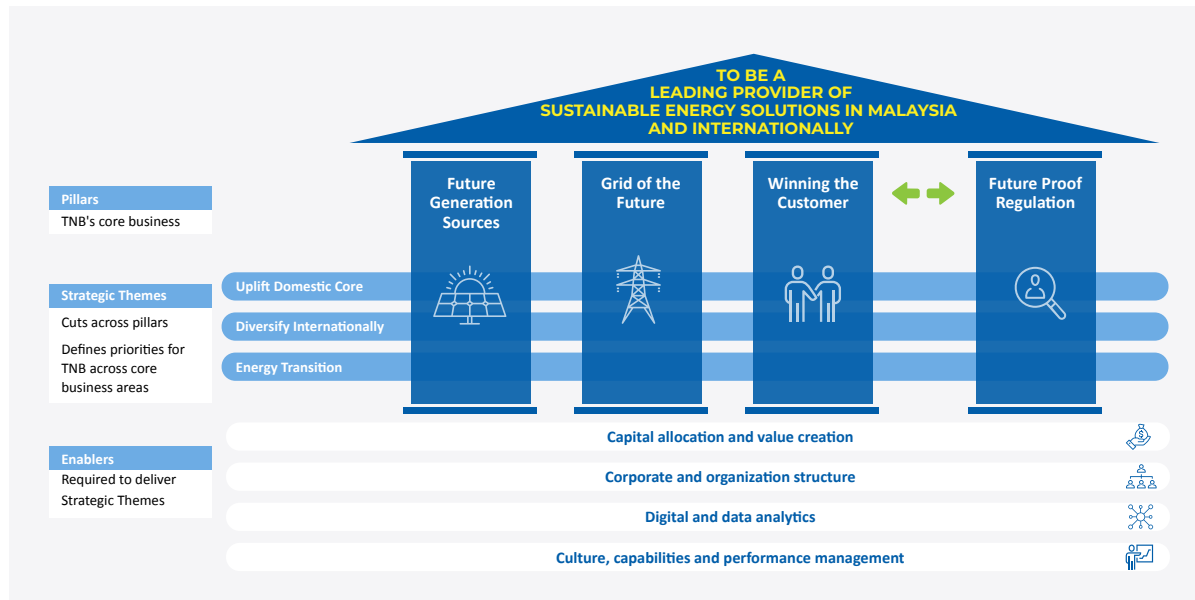


⁴ Source: [TNB Sustainability Report 2023](#)









TNB Corporate Strategy | Reimagining TNB ("RT2025")⁵



Various international rating agencies and analysts monitor and rate TNB's sustainability performance based on different sets of methodologies. These ESG ratings inform and influence the investor community as well as other interested stakeholders of TNB's key sustainability risks and opportunities as well as current performance.

ESG Rating Agency	Score
	MSCI ESG Rating Score BBB (January 2024)
	FTSE Russell ESG Rating Score 3.5 (June 2024)
	CDP Climate Change Score C (March 2024)
	Sustainalytics ESG Rating Score 30.4 (May 2024)

⁵ Available at: www.tnb.com.my





1.2 TNB's Approach to Sustainability

The company aims to stay ahead of industry disruptions which are centred around decarbonisation, decentralisation, digitalisation and deregulation while ensuring reliable supply and fair tariffs, delicately balancing socioeconomic considerations and conserving the environment.

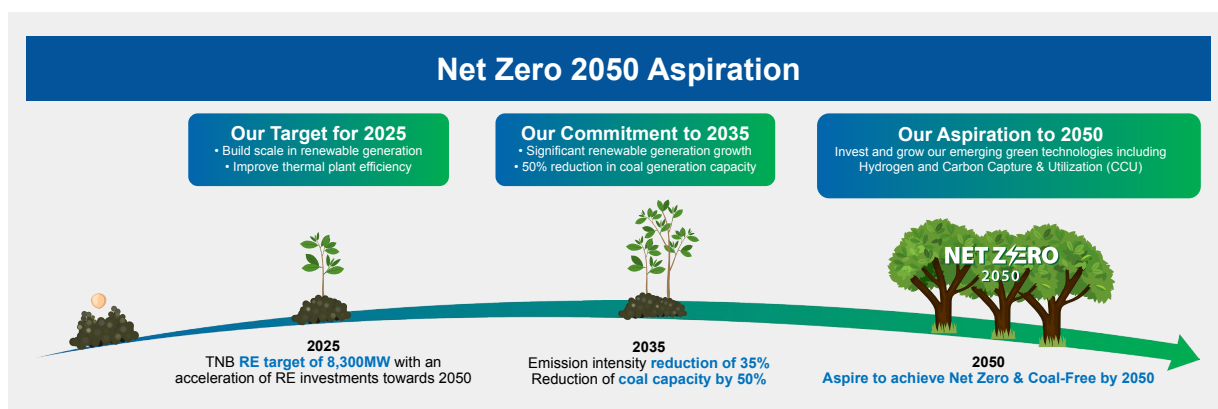
As a national utility company, TNB plays an important role in supporting and aligning the Group's target in supporting Malaysia's commitment to the Paris Agreement via Nationally Determined Contribution ("NDC") pledge and strategies in line with the, National Energy Policy 2022-2040 ("NEP")⁶, National Energy Transition Roadmap ("NETR")⁷ and the Malaysia Renewable Energy Roadmap⁸ ("MyRER") to realise Malaysia's Low Carbon Aspirations. The NEP has laid out the roadmap for Malaysia to achieve its low-carbon economy aspirations.



Malaysia's Climate Commitment

- Reduce greenhouse gas ("GHG") emission intensity of GDP by 45% by 2030 compared to 2005
- Become a net zero GHG nation as early as 2050
- Increase 31%, 40% and 70% share of Renewable Energy ("RE") in electricity mix by 2025, 2035 and 2050

In 2021 TNB has pledged to achieve Net Zero Emissions aspiration by 2050. This target is integral to TNB's SP2050 - a roadmap which sets out TNB's sustainability commitments while simultaneously futureproofing its business.



In supporting the climate action strategic objective, TNB announced its commitment to fast-track its ET Plan in 2022, aimed at achieving Environmental, Social, Governance ("ESG") targets and business growth. Many initiatives under the NEP are aligned with TNB's own RT2025 strategy, SP2050 and ET Plan.

TNB's integrated sustainability strategy connects sustainability pillars – ESG matters with its corporate strategy i.e., RT2025, reinforcing its contribution towards the United Nations Sustainable Development Goals ("UN SDGs") by becoming a leading provider of sustainable energy solutions in Malaysia and internationally. TNB has prioritised eight (8) UN SDGs to deliver sustainable value, empowering both our people and the wider community.

⁶ National Energy Policy, 2022-2040 (DTN) is available at [EPU 2022](#)

⁷ National Energy Transition Roadmap is available at [Ministry of Economy 2023](#)

⁸ Malaysia Renewable Energy Roadmap (MyRER) is available at [SEDA 2021](#)





TNB Sustainability Pillars	TNB's Integrated Strategy	Reimagining TNB 2.0
Environment Minimising our environmental impact and optimising utilisation of natural resources wherever we operate.	<p>To be a leading provider of sustainable energy solutions in Malaysia and internationally</p> <div> <div> 3 GOOD HEALTH AND WELL-BEING </div> <div> 4 QUALITY EDUCATION </div> </div> <div> <div> 7 AFFORDABLE AND CLEAN ENERGY </div> <div> 8 DECENT WORK AND ECONOMIC GROWTH </div> </div> <div> <div> 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE </div> <div> 10 REDUCE INEQUALITIES </div> </div> <div> <div> 13 CLIMATE ACTION </div> <div> 17 PARTNERSHIPS FOR THE GOALS </div> </div>	Deliver Clean Generation Increasing the sustainability of our power generation business through cleaner power generation
Social Developing long-term and meaningful relationships with our customers, employees, and communities.		Develop Energy Transition Network Future-proofing our electricity grid for a clean energy future that embraces renewable energy and electric mobility
Governance Reinforcing ethical business practices and a forward-looking culture.		Dynamic Energy Solutions Empowering our customers with flexible and adaptable energy solutions that prepare them for the energy transition
		Drive Regulatory Evolution Collaborating with our government and other stakeholders for inclusive regulations and policies that accelerate a sustainable energy future

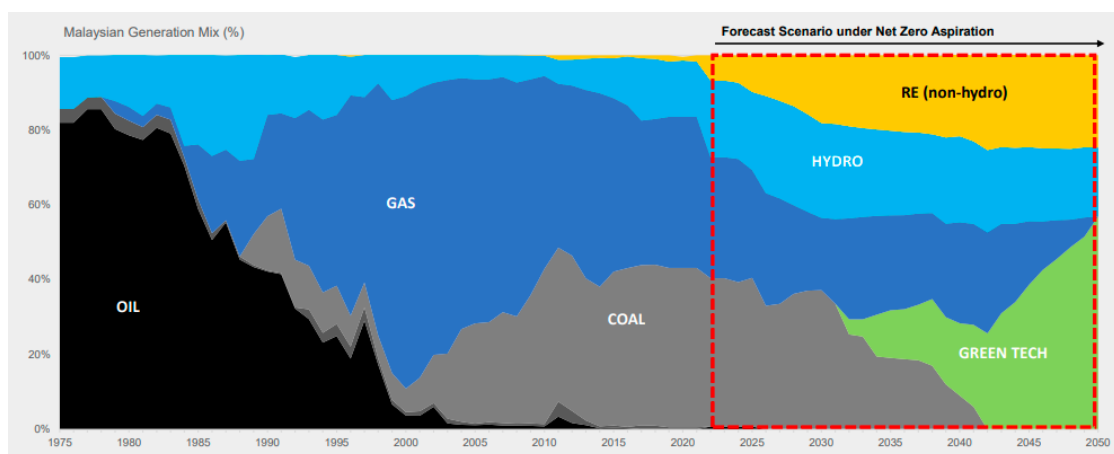




1.3 TNB's Energy Transition Plan




The nation's current generation mix reflects the diversification required for security of supply, and will continue to shift as we take a responsible approach towards energy transition. As a critical player in Malaysia's energy sector with a portfolio extending across the value chain, TNB is focused on delivering the nation's energy transition that is in line with the Peninsular Malaysia's Generation Development Plan with the underlying principle of balancing the security of electricity supply, affordability and environmental sustainability. In addition, TNB plays a key role in spearheading initiatives to accelerate the whole-of-nation energy transition efforts as outlined in NETR. TNB's two-prong strategy in greening its generation mix emphasises on reducing our coal capacity in a gradual manner while increasing its RE portfolio.

Malaysia Generation Mix



In accelerating our efforts towards decarbonisation, TNB has fortified RT2025 by embarking on the energy journey under **Energy Transition (ET) Plan** as catalyst for the SP2050. ET Plan focuses on three (3) strategic pillars namely “**Energy Sources**”, “**Energy Vector**”, and “**Energy Usage**” supported by key enablers in shifting from fossil-based energy mix to greener energy sources.

To reinforce its ET Plan, TNB has established a New Energy Division (“**NED**”) to future proof the Group's business commitments by expanding the company's RE portfolio in targeted markets and set up strategic partnerships with leading RE players to leverage on their technical expertise. NED targets to achieve an installed capacity of renewable energy of 14.3 GW by 2050 with an estimated equity investment of USD7 billion. NED oversees three (3) key entities responsible to explore opportunities at different market regions:

Wholly-owned Subsidiary	
	Vantage RE Ltd Focus on the United Kingdom and Europe market
	TNB Renewables Focus on the domestic and Southeast Asia market
	Spark Renewables Focus on the Australia market





TNB's Energy Transition Plan

Pillar 1 – Energy Sources <i>Deliver Clean Generation</i>	Pillar 2 – Energy Vector <i>Develop Energy Transition Network</i>	Pillar 3 – Energy Usage <i>Dynamic Energy Solutions</i>
<ul style="list-style-type: none"> Repower existing power plants with cleaner technologies Accelerate green tech adoption through strategic technology partnerships Manage emissions through Carbon Capture and Utilisation Increase RE capacity, focusing on hydro, solar and wind on both domestic and international grounds 	<ul style="list-style-type: none"> Strengthen the grid to enable higher penetration of Variable Renewable Energy (“VRE”), Distributed Energy Resources (“DER”) and electrification Expand regional inter-connection, allowing for wider reallocation of RE resources to decarbonise ASEAN power system Develop Green Hydrogen hub, hydrogen production for industrial and power sectors 	<ul style="list-style-type: none"> Grow customer participation through adoption of smarter, greener lifestyle and improving energy literacy Develop electric vehicles infrastructures
Increase RE Capacity <ul style="list-style-type: none"> Capture strong RE growth potential in domestic & international markets Embark on strategic partnership for new technology Adopt commercial capabilities in foreign markets to drive domestic RE growth Coal Generation Capacity <ul style="list-style-type: none"> Uplift value of existing plants Reduce coal generation capacity Increase gas generation capacity Carbon Management <ul style="list-style-type: none"> Reduce scope 1,2,3 GHG emission Capture emissions (CCS, CCU) Trade/Offset Manage carbon pricing 	Smart Grid <ul style="list-style-type: none"> Enhance grid & network flexibility by investing in bidirectional DER, electricity infra-structure, demand response Strengthen regional interconnection Hydrogen <ul style="list-style-type: none"> Application for power, industrial and mobility sectors for domestic market Production for export market Energy Storage <ul style="list-style-type: none"> Peak shifting System stability Off-grid supply ESS developer 	Electrification <ul style="list-style-type: none"> Spur the development of low-carbon mobility ecosystem Energy Efficiency <ul style="list-style-type: none"> Energy efficient machinery, equipment & appliances Energy monitoring system Prosumers <ul style="list-style-type: none"> Solar with battery storage Digital Platforms <ul style="list-style-type: none"> Digital marketplace Electric Vehicles (EV) digital platform Green energy aggregation and trading platform
Ongoing Initiatives ⁹		
Fast track decarbonisation <ul style="list-style-type: none"> Coal plants early retirement Repowering plants with cleaner fuel and green tech Strategic technology partnership 	Regional Interconnection <ul style="list-style-type: none"> To strengthen security of supply and open investment opportunities 	TNB will invest RM90 mil to support Battery Electric Vehicles (BEV) ecosystem over the span of 3 years Driving changes in customer behaviour via myTNB

⁹ TNB Presentation to Investors June 2024 is available at TNB website [here](#)





1.4 Funding the Energy Transition Journey

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 and identified six key enablers to support the execution of its ET Plan.

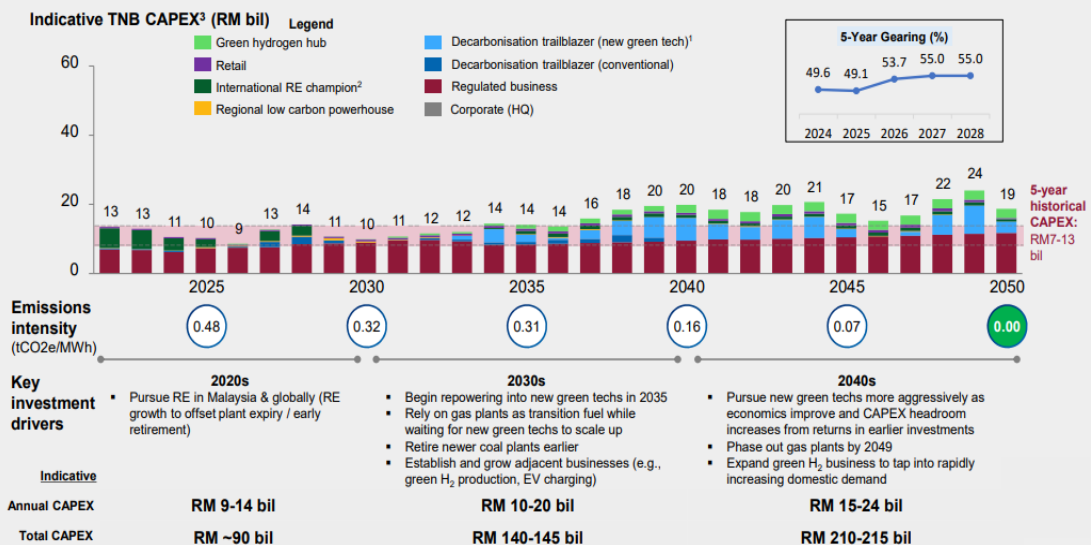
Enabling Functions to Support the Execution of Energy Transition					
Policy Advocacy	Sustainability Framework	Funding the Journey	Green Supply Chain	Capability Building	Digitalisation

TNB aims to raise and secure sustainable financing via a robust funding strategy to support its financing of TNB's decarbonisation and transition initiatives. TNB's investments in green technologies and infrastructure as well as renewable energy expansions will leverage on structuring innovative ways to utilise sustainable financing. Showcasing our commitment to execute this strategy, in August 2022 TNB has committed to set aside 10-20 billion MYR yearly Group's total budgeted Capital Expenditure ("CAPEX") for initiatives to fast-track TNB's transition to net zero emissions by 2050¹⁰.

In creating long-term value for shareholders, these key investments drivers under ET Plan will gradually shift our existing portfolios to greener ones, decoupling sustainable business growth from GHG emissions.

TNB's Energy Transition Plan ➔ Group Investment

Pathway will require investment of RM10-20 bil yearly over the next 30 years



¹⁰ TNB Presentation to Investors June 2024 is available at TNB website: www.tnb.com.my

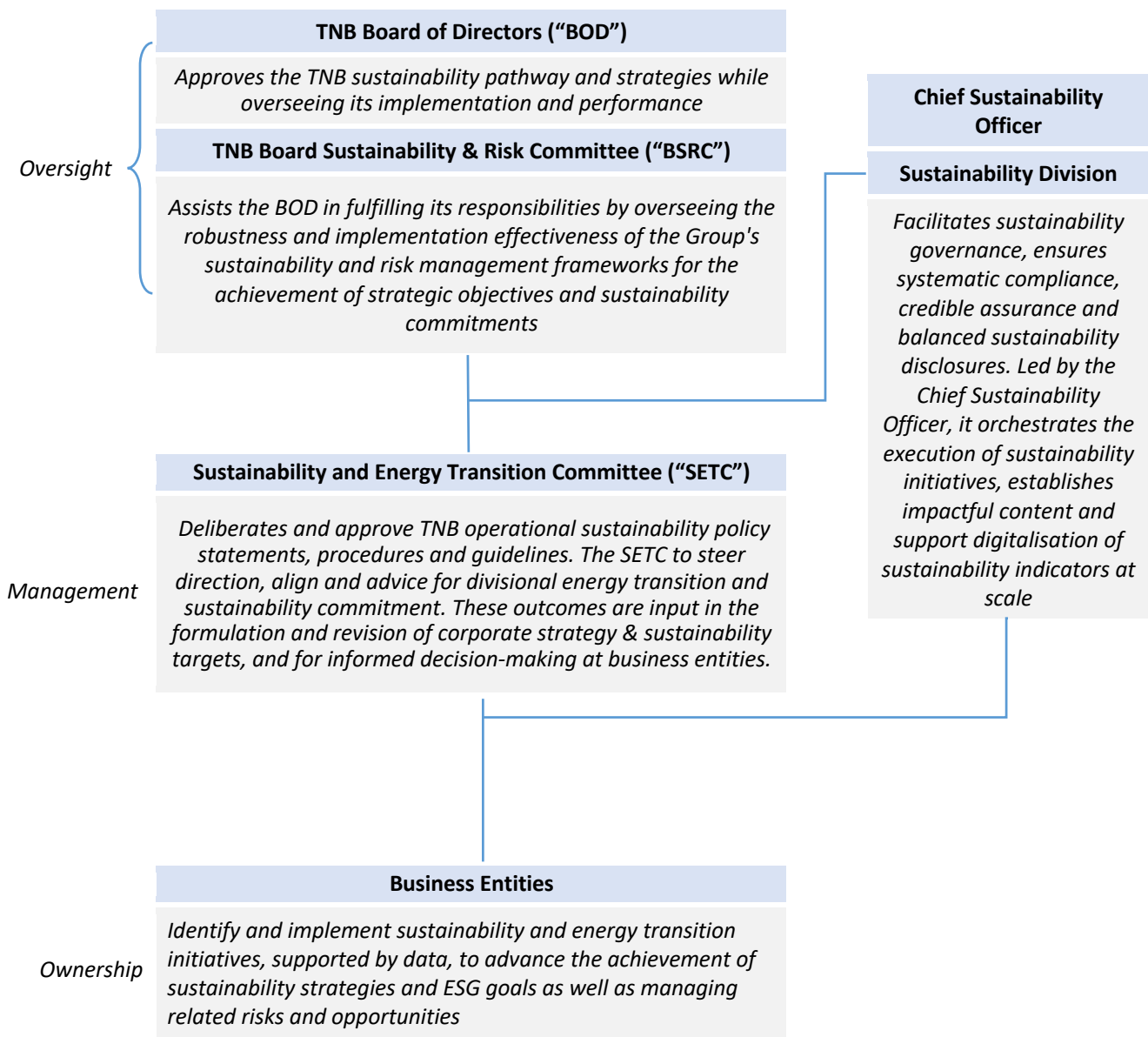




1.5 TNB's Sustainability Governance and Disclosure

TNB's sustainability governance forms a part of the TNB's Governance Framework that is aligned with the principles of the Malaysian Code on Corporate Governance ("MCCG").

Sustainability Governance Structure





In 2023, ESG-related Key Performance Indicators (“KPIs”) were further enhanced and embedded within the Board and senior management’s performance evaluation scorecard to drive group-wide accountability in steering TNB’s sustainability performance. The ESG-related KPIs that are tied to the President/ Chief Executive Officer (“CEO”) and top management KPIs are shown below:

Key Performance Indicators		
Overall TNB ESG Rating Score		
Environmental	Renewable Energy Growth & Opportunities	Battery Storage (Grid)
	Carbon Emission Rating/Score	Data Centre Power Usage Effectiveness
Social	Lost-Time Injury Frequency Rate (LTIFR)	Human Capital Development Rating/Score
	Energy Literacy	
Governance	Integrity Health Index	Corporate Behaviour Rating/Score
	Corporate Governance Rating/Score	ESG Risk Profiling

Disclosure

TNB is committed for its disclosure and reporting to follow best market practices while also strive for furthering the extent of sustainability reporting and transparency. TNB has adopted the local and international reporting standards and recommendations set by the Bursa Malaysia’s Main Market Listing Requirements (“MMLR”) and Sustainability Reporting Guide (3rd Edition), Global Reporting Initiative (“GRI”) Standards (GRI Electric Utilities Sector Disclosures), Task Force on Climate-related Financial Disclosures (“TCFD”), and **UN SDGs**.





SUSTAINABLE FINANCE AT TNB





2 SUSTAINABLE FINANCE AT TNB

TNB views sustainable finance as an enabler towards achieving its Net Zero Emission by 2050 aspiration. The aim is to align TNB's corporate sustainability commitments to its financing to meet its goals. In support of TNB's sustainability strategies and its implementation, the establishment of this Transition Finance Framework (the "**Framework**") is to demonstrate how TNB and its subsidiaries ("**the Group**") intend to enter into Sustainable Finance Transactions ("**SFTs**") to fund projects, which will deliver most positive societal and environmental impacts that enables the ET plans under RT2025.

In April 2022, TNB Power Generation Sdn Bhd ("**TPGSB**") published its Sustainability Sukuk Framework¹¹. The Framework sets out clear and transparent guidelines and principles for the issuances of Sustainability Sukuk Wakalah from TPGSB's Sukuk Wakalah Programme of RM 10.0 billion in nominal value to fund its Nenggiri Hydroelectric Power Plant project.

Now, TNB aims to develop a Transition Finance Framework which defines the SFTs for the Use of Proceeds formats of new and/or existing specific investments, assets and projects that adhere to the Eligibility Criteria (as defined below) on a case-by-case basis, retaining full flexibility in terms of specific sustainability objectives and projects that the Group and its subsidiaries intend to support.

The SFTs may be issued in any currency and for any tenor and may include other terms and conditions (including covenants) to reflect the financing strategy and plans of the Group, as well as the outcome of the commercial discussions between the Issuer/Borrower and Manager/Arranger/Lender. The SFTs may be issued in any jurisdiction and market reflecting the Group's current and future business needs.

Under this Framework, TNB will be able to undertake different types of Use of Proceeds financing instruments and currencies, but are not limited to, the following:

- Sustainable and Responsible Investment ("**SRI**") Green, Social and Sustainability ("**GSS**") and Transition Sukuk;
- GSS and Transition Bonds; or
- GSS and Transition Loans;

This Framework adopts the principles and guidelines set by the International Capital Market Association¹² ("**ICMA**"), ASEAN Capital Markets Forum¹³ ("**ACMF**"), Securities Commission Malaysia ("**SC**")¹⁴, Loan Market Association ("**LMA**")/Asia Pacific Loan Market Association ("**APLMA**")/Loan Syndications and Trading Association ("**LSTA**")¹⁵ as specified below. These documents provide a set of voluntary guidelines that recommend transparency and disclosure to promote integrity in the development of the sustainable finance market.

¹¹ Available at: www.tnbgenco.com.my

¹² Available at: www.icmagroup.org

¹³ Available at: www.theacmf.org

¹⁴ Available at: www.sc.com.my

¹⁵ Available at: www.lsta.org





With respect to Sukuk/Bonds, issuance will be aligned with the following frameworks as appropriate for the type of bond issued or as they may be subsequently amended:

- Green Bond Principles (“**GBP**”) 2021, Social Bond Principles (“**SBP**”) 2023, Sustainability Bond Guideline 2021 and Guidance on Green, Social and Sustainability Sukuk 2024 issued by ICMA;
- ASEAN Green Bond Standards 2018, ASEAN Social Bond Standards 2018 and ASEAN Sustainability Bond Standards 2018 issued by ACMF; and
- SRI Sukuk Framework 2019 issued by SC.

Loan transactions will be aligned with the following frameworks developed by LMA as of 2023 or as they may be subsequently amended:

- Green Loan Principles (“**GLP**”) and Social Loan Principles (“**SLP**”)

This Framework has been developed in line with the four disclosure guidelines of the Climate Transition Finance Handbook 2023 (“**CTFH**”)¹⁶ as published by the ICMA:

1. Issuer’s climate transition strategy and governance;
2. Business model environmental materiality;
3. Climate transition strategy to be ‘science-based’: including targets and pathways; and
4. Implementation transparency.

In addition, it also references the ASEAN Taxonomy¹⁷ for Sustainable Finance Version 2 and the ASEAN Transition Finance Guidance¹⁸.

The Framework may be updated from time to time to include other sustainable debt instruments that may be issued in the future. TNB retains the option to issue sustainability financial instruments separate from this Framework i.e., TPGSB’s Sustainability Sukuk Framework dated April 2022.



¹⁶ Available at: www.icmagroup.org

¹⁷ Available at: www.theacmf.org

¹⁸ Available at: www.theacmf.org





OVERVIEW OF TNB'S TRANSITION FINANCE FRAMEWORK





3 OVERVIEW OF TNB'S TRANSITION FINANCE FRAMEWORK

TNB's Framework for Use of Proceeds is based upon the four core components of the above-mentioned market guidelines, principles and standards:

1. Use of Proceeds;
2. Project Evaluation and Selection;
3. Management of Proceeds; and
4. Reporting.

For Sukuk transactions, TNB will ensure that proceeds are utilised for Shariah-compliant purposes only. For the avoidance of doubt TNB will comply with internationally recognised sustainability best practices on the use of Sustainability Sukuk Proceeds, subject to the exclusion list in the Annexure.

The additional exclusion categories/ineligible project shall be aligned with the ACMF's ASEAN GBS (e.g. fossil fuel generations projects), ACMF's ASEAN SBS and the SC's SRI Sukuk Framework (e.g., activities that pose a negative social impact related to alcohol, gambling tobacco and weaponry).





3.1 Use of Proceeds

TNB is committed that the proceeds of each transaction will be used exclusively for financing and/or refinancing projects, assets or activities that meet the eligibility criteria set out below. SRI GSS financing proceeds will be used to finance Eligible Green, Transition and Social Projects (as defined in “Eligible Projects” below).

In order to be earmarked as eligible, Projects must align with all of the following criteria:

- i. **Eligible Types of Investments**
 - Eligible Projects may include value of fixed assets, investments and capital expenditures (“CAPEX”) and operational expenditures (“OPEX”) as well as of physical assets meeting the eligibility criteria outlined below
 - Research and Development (“R&D”) expenditures, including CAPEX and associated OPEX related to Eligible Projects categories
- ii. **Financing and Refinancing**
 - New financing is defined as allocated amounts to Eligible Projects financed within or after the issuance year and refinancing is defined as allocated amounts to Eligible Projects financed prior to the issuance year
- iii. **Lookback Period**
 - Assets and CAPEX will qualify for refinancing without specific look back period while OPEX qualify with maximum three-year lookback period prior to the issuance year


TNB has identified the following major categories of contributions to its sustainability strategy expected to be made by Eligible Green, Transition and Social Projects:

Green Project Categories	Transition Project Categories	Social Project Categories
<ol style="list-style-type: none"> 1. Renewable energy 2. Energy efficiency 3. Green buildings 4. Clean transportation 	<ol style="list-style-type: none"> 5. Low carbon power generation 	<ol style="list-style-type: none"> 6. Affordable basic infrastructure/ services 7. Employment generation 8. Access to essential service e.g., Education





3.1.1 Eligible Green Projects

Eligible Green Project Category	Eligibility Criteria	Alignment with UN SDGs
Renewable Energy Sustainability Benefits: <i>Climate change mitigation</i>	<p>Investments relating to the construction, research and development, acquisition, installation, maintenance, and/or operation including:</p> <ul style="list-style-type: none"> ▪ Renewable energy projects/assets including: <ul style="list-style-type: none"> ○ Solar (onshore e.g., solar roofs and solar farm and offshore e.g., floating solar, concentrated solar pant (“CSP”)¹⁹, ○ Wind power (onshore and offshore) ○ Hydropower²⁰ satisfying any one of the following criteria for generation facilities becoming operational pre-2020: <ul style="list-style-type: none"> - (1) Run-of-river without artificial reservoir or low storage capacity; - (2) Power density >5 W/m²; - (3) Lifecycle GHG emissions from the generation of electricity by the entire facility <100 gCO₂e/kWh. ○ Hydropower satisfying any one of the following criteria for generation facilities becoming operational during or post-2020: <ul style="list-style-type: none"> - (1) Run-of-river without artificial reservoir or low storage capacity; - (2) Power density >10 W/m²; - (3) Lifecycle GHG emissions from the generation of the electricity by the entire facility <50 gCO₂e/kWh. ○ Biomass energy from waste feedstock including forestry and agriculture residues such as wood chips, sawdust straw, cane trash, palm kernel shells or palm oil mill effluent from Roundtable on Sustainable Biomaterials (“RSB”) or Roundtable on Sustainable Palm Oil (“RSPO”)–certified palm oil operations, wastewater²¹ and sewage sludge, and sustainably sourced used cooking oil ○ Waste-to-energy from incineration of mixed residual waste, in particular, Municipal Solid Waste where majority of recyclables are segregated before energy conversion ○ Green hydrogen production by electrolysis powered by renewables ▪ Associated grid infrastructure development, construction, installation and maintenance to integrate VRE and DER which is 1) dedicated to renewables to the power grid; or 2) supports the integration of at least 90% renewable electricity; or 3) if the percentage of renewables is less than 90% but is expected to increase, a pro-rata approach will be used to determine green allocation to grid development/ maintenance ▪ Energy storage technologies/equipment connected to renewables or grid infrastructure including: <ul style="list-style-type: none"> ○ Battery and Energy Storage System (“BESS”) Facilities 	

¹⁹ CSP with more than 85% generated from the facility is derived from solar energy resources

²⁰ All hydropower projects to have an environmental and social impact assessment conducted by a credible third-party with no significant risk, controversies or expected negative impact identified

²¹ Wastewater and sewage from fossil fuel operations will be excluded






	<ul style="list-style-type: none"> Carbon capture, utilization and/or storage (“CCU”/“CCS”) including end-use carbon technology converting CO2 emissions to produce: <ul style="list-style-type: none"> Habitat restoration and rehabilitation as carbon sequestration; Bioenergy and carbon capture and storage (“BECCS”) e.g., direct carbon utilisation from flue gas emission through microalgae photosynthesis process 	
Energy Efficiency Sustainability Benefits: <i>Climate change mitigation and adaption</i>	Investments and expenditures related to the development, manufacture, R&D, installation of technologies/components that enable more efficient Transmission & Distribution (“T&D”) and/or end-user efficiency and demand management, including: <ul style="list-style-type: none"> Advanced metering infrastructure (“AMI”) Grid of the Future i.e., Smart grid e.g., Digitalisation Distribution Network – GIS/DA Smart transformers Smart meters via myTNB App Monitoring and control automation devices LED Streetlight Replacement Programme High efficiency windows, energy efficient HVAC systems, building management systems 	<div>7 AFFORDABLE AND CLEAN ENERGY</div> <div>13 CLIMATE ACTION</div>
Green Building Sustainability Benefits: <i>Natural resource conservation</i>	Acquisition or construction, or retrofit of commercial and residential buildings that meet these recognised green building certifications at the minimum: <ul style="list-style-type: none"> Green Building Index (“GBI”) (Gold or above) Leadership in Energy and Environmental Design (“LEED”) (Gold or above) Building Research Establishment Environmental Assessment Method (“BREEAM”) (Excellent or above) GreenRE (Gold or above) Refurbishment/retrofit of building to achieve a 30% improvement in energy efficiency and/or 30% reduction in GHG over initial performance	<div>11 SUSTAINABLE CITIES AND COMMUNITIES</div>
Clean Transportation Sustainability Benefits: <i>Climate change mitigation</i>	Expenditures related to the acquisition, modernization, research and development, and maintenance of our transport fleet, including transportation with zero direct GHG emissions e.g., <ul style="list-style-type: none"> TNB fleet EV conversion for corporate vehicle, pool vehicles, and operational vehicles EV charging infrastructure including equipment and stations, power supply, charging speed, maintenance of the infrastructure, safety standards Analytical tools for EV infrastructure planning e.g., EV telematics and Internet of Things (“IoT”) as part of developing EV ecosystem EV charging station network e.g., fast charging points, installation of energy efficiency monitoring and solar photovoltaic systems at selected Rest and Service Areas (“RSA”) along the PLUS highway network 	<div>7 AFFORDABLE AND CLEAN ENERGY</div> <div>11 SUSTAINABLE CITIES AND COMMUNITIES</div> <div>13 CLIMATE ACTION</div>





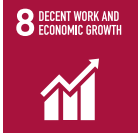

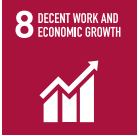

3.1.2 Eligible Transition Projects

Eligible Transition Project Category	Eligibility Criteria	Alignment with UN SDGs
<p>Low Carbon Power Generation</p> <p>Sustainability Benefits: <i>Climate change mitigation</i></p>	<p>Investments relating to the construction, development, R&D, acquisition, maintenance, installation and/or operation at:</p> <p>New Gas-fired Power Plants (incl. cogeneration and Combined Heat Power (“CHP”))</p> <ul style="list-style-type: none"> ▪ New Gas-fired power generation facilities with: <ul style="list-style-type: none"> ○ lifecycle GHG intensity below 100 gCO₂e/kWh or direct GHG emissions below 288 gCO₂e/kWh ▪ CCUS for new gas-fired power (incl. CHP) with <ul style="list-style-type: none"> ○ lifecycle GHG intensity from generation of electricity by the entire facility below 100gCO₂e/kWh or direct GHG emissions below 288 gCO₂e/kWh ▪ For avoidance of doubt, the New Gas-fired Power Plants will: <ul style="list-style-type: none"> ○ have intent to switch away from coal/oil power, OR to deliver services for seasonal peaks, storage, or high-temperature heat for industries; and ○ include methane leakage measurement/estimates from their supply chain if any <p>Existing Gas-fired Power Plants (incl. cogeneration and CHP)</p> <ul style="list-style-type: none"> ▪ Retrofitting of existing Gas-fired power plants having lifecycle GHG intensity from generation of electricity by the entire facility below 100gCO₂e/kWh or direct GHG emissions below 288 gCO₂e/kWh with the application of CCUS technology to reduce lifecycle emissions by at least 50% over conventional (unabated) natural gas fired power or with carbon capture efficiency of at least 90% ▪ For avoidance of doubt, the Existing Gas-fired Power Plants will: <ul style="list-style-type: none"> ○ have intent to switch away from coal/oil power, OR to deliver services for seasonal peaks, storage, or high-temperature heat for industries; and ○ include methane leakage measurement/estimates from their supply chain if any <p>Hydrogen Production under Steam Reforming</p> <ul style="list-style-type: none"> ▪ Production of hydrogen through steam reforming process using natural gas/biogas with CCUS technology having a life cycle GHG emissions threshold of 3 tCO₂e/tH₂ <p>Utilization of CO₂ from CCUS for Biomass Productions</p> <ul style="list-style-type: none"> ▪ Production of biomass as a by-product based on: <ul style="list-style-type: none"> ○ end-use carbon technology for converting CO₂ from CCUS facilities connected to existing or new gas-fired power (incl. CHP) with lifecycle GHG intensity below 100 gCO₂e/kWh or direct GHG emissions below 288 gCO₂e/kWh 	





3.1.3 Eligible Social Projects

Eligible Social Project Category	Target Population	Eligibility Criteria	Alignment with UN SDGs
Affordable basic infrastructure/ services	Underserved ²² owing to a lack of quality access to essential goods and services; Excluded and/or marginalised populations and/or communities including rural communities ²³ , and indigenous people	<ul style="list-style-type: none"> Development of T&D infrastructure of renewable energy sourced electricity that improves access to electricity in those areas where there is no access or access is substantially inadequate to underserved and unserved areas e.g., <ul style="list-style-type: none"> Rural Electrification Programme (“BELB”) Village Street Lighting (“LJK”) programme Development and/or provision of affordable and low-income housing, shelters, halfway homes, community housing, student housing for low income families e.g., <ul style="list-style-type: none"> Better Brighter Shelter Homes for the Needy 	 
Employment Generation	Unemployed ²⁴ low-income (B40)	Funding of initiatives that provide job matching opportunities to unemployed low-income (B40) members of the public as well as training them in necessary skills for their new roles.	
Access to essential service e.g., Education	All students particularly the most vulnerable ²⁵ and low income under-educated students	Investments in the provision of financial assistance through the award of scholarships and study loans to suitable candidates based on merit to pursue higher education locally and abroad.	

²² This is for the low-income population, unemployed, underserved or disadvantaged groups (which are as defined by Low income B40). Low income populations are defined as the B40 income population. The [Household Income](#) and [Expenditure Survey](#) and Basic Amenities 2022 defines the B40 population as the bottom 40% household income group. The monthly income of the B40 population is less than MYR 4,850 in 2019 and less than MYR 5,250 in 2022 per the latest government definition.

²³ The monthly income of the B40 population in Rural Area (population of <9,999) is <RM 3,510 in 2022 based on the strata are listed as follows by the Department of Statistics in Malaysia, and as it is updated from time to time

²⁴ Unemployed is defined as those who did not work during the reference week but were interested to work and seeking for a job. Classified into two groups which are actively and is inactively unemployed per definition from [Department of Statistic, Malaysia](#). Actively unemployed: Persons who were available for work and were actively looking for work during the reference week. Inactively unemployed: Did not look for work because they believed no work was available or that they were not qualified; Would have looked for work if they had not been temporarily ill or had it not been for weather condition; and had looked for work prior to the reference week and were waiting for result of job applications

²⁵ This is for the low-income population, unemployed, underserved or disadvantaged groups (which are as defined by Low income B40). Low income populations are defined as the B40 income population. The [Household Income](#) and [Expenditure Survey](#) and Basic Amenities 2022 defines the B40 population as the bottom 40% household income group. The monthly income of the B40 population is less than MYR 4,850 in 2019 and less than MYR 5,250 in 2022 per the latest government definition. The monthly income of the B40 population in Rural Area (population of <9,999) is <RM 3,510 in 2022 based on the strata are listed as follows by the Department of Statistics in Malaysia, and as it is updated from time to time





3.2 Project Evaluation and Selection

TNB has established processes and procedures to ensure that projects are properly identified and assessed in compliance with this Framework. Under the direction of the Board, BSRC and GEMC, the SETC reviews, evaluates, and advises on sustainability and green energy-related initiatives as well as oversees TNB's sustainable development.

TNB has a Sustainable Finance Committee ("**SFC**") in charge to select, review, evaluate and monitor the Eligible Projects financed by TNB's GSS and Transition Finance Instruments and to verify their compliance with the commitments described under the Framework. The SFC is chaired by the Head of Corporate Finance and Treasury ("**CFT**") and/or chaired by the Lead of Corporate and Project Finance ("**CPF**") and is responsible for:

- Reviewing, selecting and monitoring allocation to the pool of Eligible GSS and Transition Projects to ensure it meets the Eligibility Criteria set forth in the Framework;
- Overseeing the Framework implementation and allocation process including reviewing and approving allocation;
- Monitoring the approved Eligible GSS and Transition Projects and any related ESG issues (in the context of the Eligible GSS and Transition Projects);
- Reviewing and validating the relevant reports, including Allocation and Impact Reports for annual reporting
- Reviewing and updating the Framework, including expansion to the list of Eligible Categories;
- Monitoring the ongoing evolution related to the Sustainable Capital Markets in terms of disclosure and reporting to be in line with market best practices e.g., appointment of an independent auditor to provide an annual assurance report, to extent where feasible.

The SFC members include representatives from across the business functions:

- Sustainability Division
- Group Finance Division

Please refer to [Section 1.5](#) for further details.

Eligibility Criteria include a set of both exclusion criteria and selection of environmental and social criteria which the Eligible Project must meet to be financed or refinanced by GSS and Transition Financing Instruments.

Moreover, the eligible projects are also subject to ESG standards that are defined in TNB's Environmental Policy²⁶, 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's Green Code of Conduct. TNB business entities are guided by the TNB Risk Assessment Process that provides a structured approach to identify, analyse, evaluate and treat risks. Climate related risks are integrated in TNB's twelve (12) strategic risks covering external, sustainability, market, customer, finance, capabilities and regulatory risk categories.

²⁶ TNB Environmental Policy 2023 is available at: www.tnb.com.my





TNB is well positioned to address environmental and climate-related risks and opportunities associated with the projects in accordance with the ISO 14001:2018 Environmental Management System and its Environmental Policy.

The **step-by-step process** for evaluation and selection of eligible project uses internal expertise as follows:

1. Project Initiator²⁷ and Division's Business Partner (Finance) ("**BP (Finance)**") or CFO of TNB's Subsidiary ("**CFO (Subsi)**") will present the details of their project to SFC.
2. SFC will evaluate and select projects that satisfy the Eligible Projects criteria set forth in the "**Use of Proceeds**" section and in accordance with TNB's Sustainability Objectives and Strategy and assessment of the project's environmental and social risks.
3. SFC will notify Project Initiator and BP (Finance)/CFO (Subsi) on SFC resolution regarding the eligibility of the projects.
4. Project Initiator and BP (Finance)/CFO (Subsi) will monitor, track and report the original amount allocated for their Eligible Projects, and the amount utilised for their Eligible Projects as well as prepare and submit Impact Report on the impact or expected impact for the Eligible Projects to SFC.
5. Treasury, Group Finance Division will prepare and submit to SFC a report on the total unutilised amount of GSS and Transition Financing Proceeds in TNB pooled bank account; and where such amount is placed or invested pending utilisation.
6. SFC will review, validate and consolidate all Reports and ensure the Reports are published on the TNB website.
7. On a quarterly basis, or as and when required before any new finance is raised, the SFC will review the assets/projects included in the Sustainable Portfolio and confirm that they meet the criteria for inclusion.

In case of divestment or an Eligible Project no longer meets the eligibility criteria, the proceeds will be allocated to other Eligible Projects as soon as practicable.

TNB's SFC will be responsible for managing any future updates of the Framework, including any expansion of the Eligibility Criteria under the use of proceeds. Any changes to the Framework will have to be approved by the President/CEO and/or Chief Financial Officer ("**CFO**") and/or their designated officers and published on TNB's website: www.tnb.com.my

²⁷ Unit/department within TNB or TNB's subsidiaries (directly or indirectly), who initiated or owned a particular project





3.3 Management of Proceeds

The proceeds from each SFTs will be deposited into TNB's bank account managed by the TNB's Treasury Team. To ensure that net proceeds from SFTs are appropriately tracked and allocated, TNB will maintain a register of Eligible Projects managed by SFC which will outline the following:

i. Type of Funding Transaction

- This includes key information such as issuer/borrower entity, transaction date, tranche(s) information, principal amount of proceeds, repayment or amortisation profile, maturity date, and interest or coupon (and in the case of bonds, the ISIN number)

ii. Allocation of Use of Proceeds Information

- This includes information such as name and description of Eligible Projects to which the proceeds of the SFT have been allocated in accordance with this Framework, amount of SFT proceeds allocated to each project, the remaining balance of unallocated proceeds, other relevant information such as information of temporary investment for unallocated proceeds

TNB's internal records will show the allocation of the net proceeds of the relevant offering to Eligible Projects as long as the offering remains outstanding. Any balance of issuance proceeds which is not yet allocated to Eligible Projects will be held in accordance with TNB's policy. Payment of principal and interest on any SFTs may be made from general funds and will not be directly linked to the performance of any Eligible Projects.

In case of asset divestment or cancellation of a project, TNB will reallocate proceeds to finance other Eligible Projects, compliant with the current Framework. TNB will aim to fully allocate the proceeds of any Use of Proceeds Financing instruments issuance within 36 months.





3.4 Reporting

On an annual basis, at least until full allocation or in case of material changes, TNB intends to transparently provide the following reporting on its SFT(s) to the extent feasible:

In the **Allocation Report**, TNB will include:

- i. The amount issued and outstanding for the SFTs;
- ii. The total amount allocated to Eligible Projects;
- iii. A description of the portfolio of Eligible Projects including a breakdown of the allocated amounts by Eligible Project categories and on an aggregate basis by year of implementation where appropriate;
- iv. The amount and/or percentage of new and existing projects (share of financing and refinancing); and
- v. Any further information on how unallocated proceeds have been held.

The **Impact Report** will provide qualitative and quantitative performance measures and examples associated with each category of Eligible Projects. The impact reporting will be aggregated at a portfolio level and disclosed annually, with the methodology of the above indicators articulated on TNB's website at www.tnb.com.my

Any material developments, such as modification of the Framework, will also be reported in a timely manner on TNB's website. Such information will be provided on an annual basis until all the net proceeds have been allocated.





Impact reporting may include, but are not limited to:

Eligible Green Project Category	Example of Impact Metrics
Renewable Energy	<ul style="list-style-type: none"> Renewable energy capacity added (MW) Annual GHG emissions reduced/avoided (tCO₂e) Annual renewable energy generation (MWh)
Energy Efficiency	<ul style="list-style-type: none"> Annual energy savings (MWh) Annual GHG emissions reduced/avoided (tCO₂e) Annual water savings in m³/a and/or in %
Green Building	<ul style="list-style-type: none"> Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings) as a result of the project Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent as a result of the project % of renewable energy generated on site Annual Waste minimised, reused, recycled in % of total waste and/or in tonnes Number of Green Buildings (per certification system) and the level/rating achieved
Clean Transportation	<ul style="list-style-type: none"> No. of electric vehicle charging stations Annual GHG emissions reduced/avoided (tCO₂e) Number of EV deployed Estimated reduction in fuel consumption

Eligible Transition Project Category	Example of Impact Metrics
Low Carbon Power Generation	<ul style="list-style-type: none"> Annual GHG emissions reduced/avoided (tCO₂e)

Eligible Social Project Category	Example of Impact Metrics
Affordable basic infrastructure/ services	<ul style="list-style-type: none"> Number of residents benefiting from Community projects Number of people provided access to clean and affordable energy Number of new household power connections Number of kilometres of new or upgraded power lines Amount of social contribution spent and others
Employment generation	<ul style="list-style-type: none"> Types and number of beneficiaries Rate of local employment (%)
Access to essential services (Education)	<ul style="list-style-type: none"> Amount of social contribution/allocated dedicated for providing such essential services Number of beneficiaries receiving access to the facilities





3.5 External Review

To allow investors to follow the information related to transactions, TNB is supported by three external reviews, depending on the type of instruments.

1. Pre-Issuance Review: Second Opinion on the Framework

The Framework will be reviewed by a Second Party Opinion (“SPO”) provider to assure its consistency with the stated market principles, guidelines and standards and best market practices. The review will take place whenever the Framework is updated.

2. Post-Issuance Review: Second Opinion on the Issuances

For any new publicly traded instrument issuance, where applicable TNB may provide the preliminary list of assets or projects to be financed to be reviewed by a third party. This review may take form of SPO.

3. Annual Assurance Report: Third Party Assurance

An independent auditor may be appointed by TNB to provide an annual assurance report, until all the proceeds of the transactions have been allocated, where applicable confirming that an amount equal to the net proceeds has been allocated in compliance with all material respects of the Eligible Green and Social Projects criteria.

3.5.1 Pre-Issuance Review

TNB has obtained an independent SPO from Sustainalytics to review the Transition Finance Framework, its transparency and governance as well as its alignment to the components of the ICMA’s Green and Social Bond Principles and Sustainability Bond Guidelines and LMA’s Green and Social Loan Principles, ACMF’s GSS Bond Standards and SC’s SRI Sukuk Framework with TNB’s overall Corporate Strategy and supporting Sustainability Governance and Strategy.

This opinion is available on TNB’s website: www.tnb.com.my

3.5.2 Post-Issuance Review

External verification of the tracking of the SFT proceeds may be provided by an independent third party appointed by TNB. The verification will include an opinion on all allocation and impact reports produced in line with [Section 3.4](#), and management of proceeds to verify our internal tracking method. The review will be included in the Allocation Report.

3.6 Update and Amendment of the Framework

TNB may review this Framework from time to time, including its alignment to updated versions of the relevant principles as and when available in the market. Any major update will be subject to the prior approval of qualified provider of a Second Party Opinion.







4 Annexure

Criteria for Non-Shariah Compliant Business Activities / Products / Goods:

1. Riba bearing financial institutions
2. Non-Shariah compliant entertainment and gambling establishments
3. Non-halal food, beverage and animal-based related activities
4. Other suspicious/immoral related activities
5. Unlicensed/illegal products including drugs, hazardous chemicals, weapons and explosive products
6. Tobacco-based product or weed (including hookahs)
7. Other activities deemed non-compliant according to Shariah principles as determined by the Shariah Advisory Council (“**SAC**”)





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