MARC RATINGS BERHAD
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TNB POWER GENERATION SDN BHD

PRE-ISSUANCE SUSTAINABILITY SUKUK FRAMEWORK ASSESSMENT

JULY 2024

GOLD

SUSTAINABILITY SUKUK FRAMEWORK ASSESSMENT

MARC Ratings Berhad has been engaged by TNB Power Generation Sdn Bhd (Company Registration No: 201901027074 (1336401-D)) as an independent external reviewer for its Sustainability Sukuk Framework. This external review was conducted according to the analytical framework in MARC Ratings' Impact Bond Assessment (IBA) methodology that is published on its website.

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SUMMARY

TNB Power Generation Sdn Bhd (TPGSB or "the company") (Company Registration No: 201901027074 (1336401-D)) has engaged MARC Ratings to review its Sustainability Sukuk Framework.

The review consists of three parts: an impact significance analysis based on TPGSB's framework; an assessment of alignment with the Social Bond Principles (SBP), Green Bond Principles (GBP), and Sustainability Bond Guidelines (SBG) of the International Capital Market Association (ICMA); or Social Bond Standards (SBS), Green Bond Standards (GBS), and Sustainability Bond Standards (SUS) of the ASEAN Capital Markets Forum (ACMF); or Sustainable and Responsible Investment (SRI) Sukuk Framework of the Securities Commission Malaysia (SC) or as they may be subsequently updated or amended; and an evaluation of TPGSB's sustainability implementation capacity and performance.

The framework has been established to set out clear and transparent guidelines and principles for the issuance of Sustainability Sukuk from TPGSB's Sukuk Wakalah Programme of RM10.0 billion in nominal value. In assigning the assessment, we have relied on pre-issuance information provided by associated parties and information gathered from public domains.

The proceeds raised from the issuance of Sustainability Sukuk shall be utilised by TPGSB to finance and/or refinance loans obtained to fund investments in accordance with the eligible project, which comprises the construction, development, acquisition, installation, maintenance, operation of renewable energy projects/assets, and/or existing hydropower generation works, including the Nenggiri Hydroelectric Power Plant Project (Project Nenggiri) and the Hydro Life Extension Programme of the Sungai Perak Hydroelectric Scheme Project (Project HLEP). These projects are expected to deliver multiple environmental and socioeconomic benefits, including increasing the company's renewable energy capacity and avoiding greenhouse gas (GHG) emissions from energy generation activities.

Progress of the projects will be reported on a regular basis to TPGSB's Executive Committee (GEXCOM), chaired by the Managing Director. The GEXCOM is responsible for monitoring the project's performance, safety, and risk management, as well as providing direction and advice on matters related to governance, initiatives, and best practices, ensuring that mitigation actions are properly planned and executed. The Board of Directors of TPGSB (the Board) will be overseeing the implementation of the project to ensure that the project benefits are aligned with TPGSB's sustainability goals, in accordance with the framework.

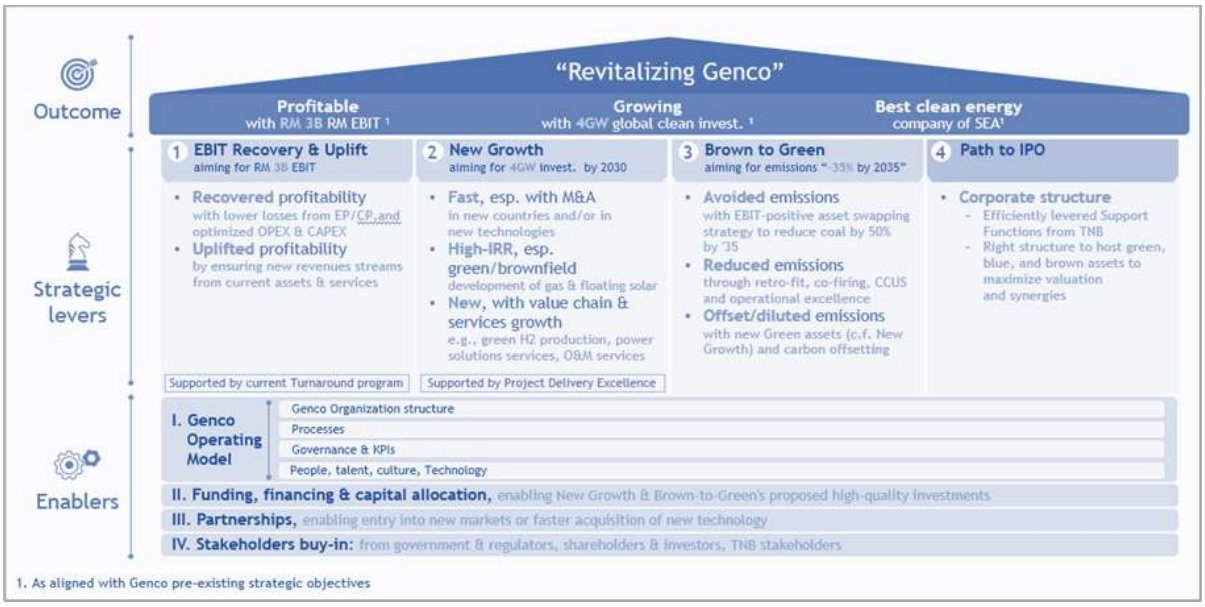
Net proceeds from the financing will be managed internally by TPGSB's treasury team through a dedicated process. The framework aligns TPGSB's post-issuance tracking and reporting on the Use of Proceeds with the applicable guidelines and/or principles. It provides for annual reporting of the amount of proceeds allocated to the eligible projects, a broad description of the projects, the placement of balance, if any, of unallocated proceeds pending utilisation at the end of the reporting period, as well as project impact indicators. Where feasible, TPGSB will disclose qualitative performance indicators, and any assumptions made in relation to the units used or the relevant benchmark emissions. MARC Ratings considers the proceeds management process to be in line with market practice.

Based on our review of the relevant documentation and assessment as per our IBA methodology, we have assigned a "**Gold**" assessment to the framework. We also opine that the framework aligns with the core components of the GBP/SBP/SBG, ASEAN GBS/SBS/SUS, and the SRI Sukuk Framework.

Introduction

Tenaga Nasional Berhad (TNB or "the group") is the largest electricity utility provider in Malaysia which also operates internationally. TNB initiated its Energy Transition Plan (ET Plan) in 2021 to achieve net zero by 2050. Incorporated as a wholly-owned subsidiary of TNB on August 1, 2019, TPGSB supports TNB's role in energy provision by operating and maintaining TNB's domestic power plants, including the latter's renewable energy portfolio.

TPGSB's strategic plan consists of a five-year business plan that aligns with the group's corporate strategy: Reimagining TNB. The company's "Revitalizing Genco" programme outlines strategic levers to achieve profitability, growth, and clean energy, as detailed below:



Supporting TNB's Sustainability Agenda

TNB announced its sustainability pathway in 2021, aspiring to achieve net zero emissions by 2050 by transitioning towards decarbonisation and renewable energy. In line with TNB's commitment to reduce 35% of its emission intensity and lower 50% of its coal generation capacity by 2035, the group has announced that it will cease to invest in greenfield coal plants, with Jimah East Power (JEP) plant, commissioned in 2019, being the last. Existing coal plants will be gradually phased out as their respective power purchase agreements (PPA) expire.

TPGSB, in support of TNB's progressive transition towards sustainable energy, is working to adopt greener, cleaner, and more efficient power generation technology, which includes hydropower. Hydropower plants can supply and store electricity to meet real-time energy needs, stabilise the grid by addressing peak demand, as well as maintain proper voltage and frequency levels across the national grid. TPGSB owns and operates three main hydroelectric schemes in Peninsular Malaysia with total installed capacity of 1.9GW. With the upcoming transfer of Stesen Janakuasa (SJ) Hulu Terengganu and SJ Ulu Jelai hydroelectric power plants from TNB to TPGSB's portfolio, TPGSB's installed capacity of clean energy is expected to increase by 637MW. TNB also plans to expand its hydroelectric assets portfolio with a new 300MW hydroelectric power plant project in Nenggiri and refurbish its Sungai Perak Hydroelectric Scheme to extend the power stations' operating life.

While the operation of coal power plants is still required as an affordable energy source to ensure cheaper tariff for consumers, TPGSB is utilising ultra-supercritical technology which consumes less fuel, as it transitions towards sustainable operations and business. Ultra-supercritical plants generate 40% more electricity per metric tonne of burned coal compared to traditional coal-fired plants, contributing to lower GHG emissions. This technology is adopted in TPGSB's current coal power plants — Manjung 4, Manjung 5 and JEP.

To further reduce its GHG emissions, TPGSB employs H-class gas turbines in a single-shaft configuration at both Southern Power Generation and Prai Power Station, achieving approximately 60% efficiency, compared to the older gas turbines with efficiencies ranging from 40% to 50%. TPGSB has also initiated its "Asset Turnaround Program" to improve the overall energy efficiency of its existing generating plants. The programme aims to reduce losses caused by plant degradation and defective equipment, especially in brownfield assets, through the optimisation of auxiliary power consumption, usage of innovative digitalisation technologies and automation, and execution of a business turnaround plan.

Additionally, TPGSB is exploring new energy business ventures, where it intends to forge partnerships with other related sectors, such as the oil and gas industry, to pilot several industrial-scale projects that would help accelerate the production of new energy sources, including green hydrogen and ammonia.

Besides its environmental commitment, TPGSB also provides training and career advancement opportunities for its employees, while creating new prospects for local job candidates. Occupational health and safety is also part of TPGSB's focus, whereby the company supports TNB's goal to achieve zero workplace fatalities and maintain a Lost Time Injury Frequency Rate (LTIFR) of less than 1.0.

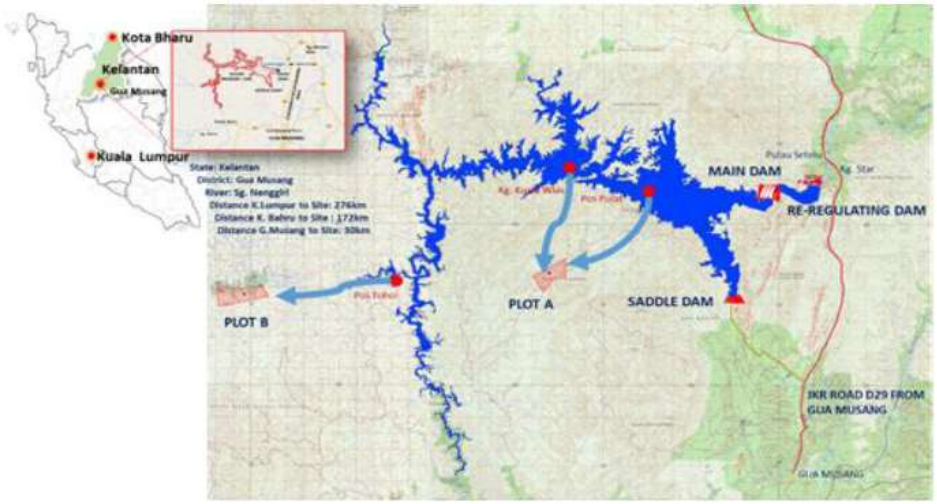
TPGSB's Sustainability Framework is as illustrated below:

Sukuk Wakalah Programme

TPGSB's Sukuk Wakalah Programme was established on April 5, 2022, and is aligned with TPGSB's Sustainability Framework. On June 2, 2022 and March 29, 2023, TPGSB issued RM1.5 billion and RM2.0 billion Sustainability Sukuk from the RM10.0 billion Sukuk Wakalah Programme. As of May 31, 2024, the proceeds have been solely allocated to Project Nenggiri, the eligible project identified in the Sustainability Sukuk Framework, and unutilised proceeds are placed in permitted investments. The allocation reporting is summarised as follows:

Nenggiri Hydroelectric Power Plant Project (Project Nenggiri)

Project Nenggiri is an impoundment hydroelectric power plant, located in the district of Gua Musang, Kelantan, and is within the Sg Nenggiri catchment, approximately 30km from Gua Musang town. TPGSB's wholly-owned subsidiary, TNBPG Hydro Nenggiri Sdn Bhd (Project Co), is set to undertake Project Nenggiri.



The project consists of three dams, namely Main Dam, Saddle Dam and Re-regulating Dam. The inundation areas of the Main Dam and Re-regulating Dam are approximately 5,384ha and 97ha. The project's key technical information is shown in the table below:

No.	Description	Value		
1.	Number of Dams	3		
		Main Dam	Saddle Dam	Re-regulating Dam
2.	Dam Type	RCC	RCC & Embankment (Composite)	Concrete Gravity
3.	Dam Height (m)	88.1	56	29
4.	Plant Nett Capacity (MW)	300 (150 x 2 unit)	-	-
5.	Average Annual Energy (GWh/yr)	599.5	-	-

Note: RCC: Roller Compacted Concrete, MW: Megawatt, GWh/yr: Gigawatt-hour per year

The primary construction works of Project Nenggiri will be divided into three main segments: Civil Works (Lot 1), Electrical & Mechanical Works (Lot 2), and Resettlement & Plantation (Lot 3), with an estimated total cost of RM5.0 billion. These construction works are expected to take five years, with the Scheduled Commercial Operation Date (SCOD) targeted for June 1, 2027.

The Sustainability Sukuk proceeds will be channelled by TPGSB to the Project Co through the provision of shareholders' loans, advances and/or through the subscription of any equity instruments as mutually agreed upon.

Life Extension Programme of Sungai Perak Hydroelectric Scheme (Project HLEP)

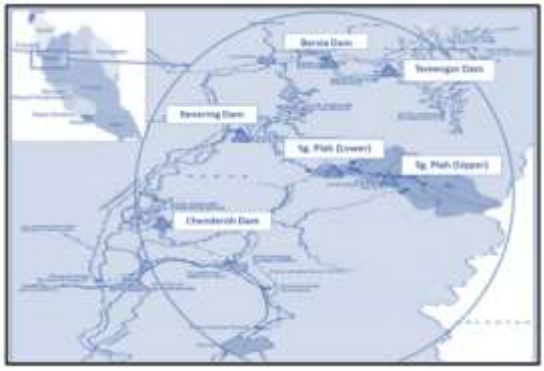
Project HLEP aims to refurbish the Sungai Perak Hydroelectric Scheme to extend the operating life of the power stations and enhance their performance over the next 40 years after the expiry of the existing PPA in August 2027. TPGSB will directly undertake Project HLEP without establishing a special purpose vehicle, hence the Sustainability Sukuk proceeds will be utilised by TPGSB directly for the project.

The Sungai Perak Hydroelectric Scheme consists of the Temengor, Bersia, Kenering, Chenderoh, and Sungai Piah (Upper & Lower) hydroelectric stations. Together, the Temengor, Bersia, Kenering, and Chenderoh hydroelectric stations form a cascade system along the Perak River to generate electricity, while the upper and lower hydroelectric stations of Sungai Piah drain into the Kenering reservoir.

The current mechanical and electrical equipment at the Sungai Perak Hydroelectric Scheme have reached their life expectancy, which is typical of the equipment's design life of 30 to 40 years. As a result, the scheme's components have become obsolete, and spare parts are no longer available. Furthermore, changes in hydrological conditions require the reinforcement or reconditioning of civil structures, including the dams, spillways, and powerhouses, to enhance their safety and structural integrity. Extensive rehabilitation works are imperative to ensure safe and reliable operations and to sustain uninterrupted electricity supply to the grid for the next 40 years. These efforts also contribute to the scheme's effectiveness in its other vital functions, including flood control, irrigation, domestic water supply and tourism.

The main construction work packages of Project HLEP are segmented into four main engineering, procurement, construction and commissioning (EPCC) contracts, which are for (i) Temengor, Bersia, and Kenering Hydroelectric Stations as well as Bersia Group Control Centre (BGCC), (ii) Chenderoh Hydroelectric Station, (iii) Sungai Piah Hydroelectric Stations, and (iv) Civil Works for Non-Original Equipment Manufacturer (OEM) Scope. These construction works are anticipated to be completed in eight years, with total project cost estimated to be RM6.7 billion. The key technical information of the hydroelectric stations is shown in the following figures:

Location and Cascading System of the Hydroelectric Stations



Temengor Hydroelectric Station

Parameter	Data
Date of construction	1974 - 1978
Full Supply Level (FSL)	248.41m.asl
Catchment Area	3,420 km^2
Main Dam	
Type	Earth core rockfill dam
Max. dam height	128.02 m.asl
Powerhouse	
Type	Surface
No. and type of generating units	4 Francis
Maximum discharge (All units)	390 m^3/s
Installed Capacity (MW)	348 (4×87)
Rated Head	100.89 m
Annual average energy output (GWh)	896

Bersia Hydroelectric Station

Parameter	Data
Date of construction	1980-1983
Full Supply Level (FSL)	141.43m asl
Min Operating Level (MOL)	139.90 m asl
Main Dam	
Type	Concrete gravity with central overflow section earth core rockfill dam
Max. dam height	33.00 m asl
Powerhouse	
Type	Surface, at dam toe
No. and type of generating units	3 Kaplan
Maximum discharge (All units)	311 m^3/s
Installed Capacity (MW)	72 (3×24)
Rated Head	26.5 m
Annual average energy output (GWh)	238

Kenering Hydroelectric Station

Parameter	Data
Date of construction	1980-1984
Full Supply Level (FSL)	111.25m asl
Min Operating Level (MOL)	108.20 m asl
Main Dam	
Type	Composite dam (concrete & earth core rockfill)
Max. dam height	47.00 m asl
Powerhouse	
Type	Surface, at dam toe
No. and type of generating units	3 Francis
Maximum discharge (All units)	396 m^3/s
Installed Capacity (MW)	120 (3×40)
Rated Head	34.7 m
Annual average energy output (GWh)	456

Chenderoh Hydroelectric Station

Parameter	Data
Date of construction	1927-1930
Full Supply Level (FSL)	60.45m asl
Min Operating Level	57.90 m asl
Main Dam	
Type	Concrete hollow buttress and gravity dam
Max. dam height	23.00 m
Powerhouse	
Type	Surface, at dam toe on right abutment
No. and type of generating units	3 Francis; 1 Propeller
Maximum discharge (All units)	303 m^3/s
Installed Capacity (MW)	38 (3×10 + 1×8)
Rated Head	19.6 m
Annual average energy output (GWh)	248

Sungai Piah Upper and Lower Hydroelectric Stations

Upper Scheme	Data
Date of construction	1987-1993
Type of powerhouse	Surface
Installed capacity (MW)	15 (2×7.5)
No and type of generating unit	2 horizontal Pelton (2-jet)
Annual average energy output (GWh)	80
Lower Scheme	**Data**
Date of construction	1987-1992
Type of powerhouse	Underground
Installed capacity (MW)	55 (2×27.5)
No and type of generating unit	2 vertical Pelton(4-jet)
Annual average energy output (GWh)	300

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01 IMPACT SIGNIFICANCE ANALYSIS

Our qualitative analysis of the Use of Proceeds impact is conducted in the context of the United Nations Sustainable Development Goals (UN SDGs or SDGs). As a globally accepted guidepost for transition to sustainable development, the SDGs serve as a useful framework of reference for impact analysis. The 17 SDGs are at the heart of the global sustainability agenda covering three broad areas of economic, social, and environmental developments to be achieved by 2030.

The framework has been established to set out clear and transparent guidelines and principles for the issuances of Sustainability Sukuk to fund renewable energy projects, particularly Project Nenggiri and Project HLEP, that aim to deliver environmental and social benefits and contribute to TPGSB's sustainability goals. It is worth noting that Project Nenggiri and Project HLEP's significance lies in the scale of the plants and their ability to generate high capacity of hydropower, while delivering environmental, social, and economic benefits. The benefits of these two projects will be further elaborated within this section.

The proceeds from the respective financing instruments will be utilised to support the transition towards a more inclusive and resource-efficient economy that is aligned with the UN SDGs and circular economy concept.

The framework defines the eligible category, Renewable Energy, for the Use of Proceeds which supports six of the 17 UN SDGs:

1. Affordable and clean energy
2. Decent work and economic growth
3. Climate action
4. Clean water and sanitation
5. Sustainable cities and communities
6. Partnerships for the goals

ELIGIBLE CATEGORY FOR USE OF PROCEEDS

1	**Renewable Energy**

	Eligibility Criteria:
	Construction, development, acquisition, installation, maintenance, and/or operation of new projects including but not limited to:
	• Renewable energy projects/assets including:
	  ○ Onshore solar, such as solar roofs and solar farms; and offshore solar, such as floating solar and concentrated solar power (CSP) plants
	  ○ Hydropower[1] meeting any one of the following criteria:
	  ▪ Run-of-river without artificial reservoir, or with low storage capacity
	  ▪ Power density of more than 5W/m^2
	  ▪ Lifecycle GHG emissions of less than 100 gCO_2e/kWh from the entire facility's electricity generation
	  ○ Biomass energy from waste feedstock, including forestry and agriculture residues, wastewater and sewage sludge, and sustainably sourced used cooking oil
	  ○ Anaerobic digestion of bio-waste in dedicated facilities
	  ○ Waste-to-energy (WTE) from the incineration of mixed residual waste
	  ○ Green hydrogen production by electrolysis powered by renewables
	  ○ Project Nenggiri

[1] *TPGSB seeks credible third-party environmental and social impact assessments for all its hydropower projects, and only utilises the Sustainability Sukuk proceeds for projects with no significant risk, controversies or expected negative impact.*

- Energy storage technologies/equipment connected to renewables or grid infrastructure including:
  - Pumped storage hydropower
  - Battery and Energy Storage System (BESS) facilities
- Construction, development, acquisition, installation, maintenance, and/or operation of existing hydropower[2] generation works including but not limited to:
  - Rehabilitation of large electrical and mechanical components
  - Refurbishment of electrical facilities and control systems
  - Upgrading of existing facilities to enhance generation efficiency
  - Environmental refurbishment of generation facilities, e.g. protection of biodiversity
  - Project HLEP

Sustainability Objective	Sustainability Benefit	Corresponding to the UN SDGs
• To produce clean and sustainable energy and reduce the reliance on fossil fuels • To reduce GHG emissions and other pollutants that lead to climate change • To drive innovation and technological advancements in the renewable energy sector • To increase the operational efficiency of energy utilities and infrastructure for the effective use of natural resources • To mitigate climate change and reduce environmental impact.	• Lowering and avoiding carbon emissions, mitigating climate change. • Enhancing energy security through the diversification of energy mix with renewables, reducing vulnerability to supply disruptions. • Reducing air pollutants and its associated health impacts by enhancing operational efficiency of energy infrastructures. • Driving innovation and advancements in energy generation and storage. • Promoting sustainable economic growth by creating jobs and business opportunities.	Alignment to the UN SDGs:  **UN SDG: 7** Ensure access to affordable, reliable, and sustainable energy for all while increasing the source of renewable energy. **UN SDG: 8** Enable decent job creation to promote inclusive economic growth for the local community and the nation. **UN SDG: 13** Integrate climate change adaptation in energy generation activities and strengthen resilience to natural disasters. **Indicative measurement:** • Renewable energy capacity installed (MW) • Annual renewable energy generation (TWh) • Percentage of contract value awarded to domestic contractors • Annual CO_2 emission reduction/avoidance (tonnes of CO_2)

Note: Indicative measurements stated represent examples only and are not exhaustive.

[2] *The eligible project relating to existing hydropower generation should satisfy one of the following criteria: (1) a power density threshold above 5W/m2; or (2) run-of-river without artificial reservoir or low storage capacity.*

Impact Significance Analysis of Project Nenggiri and Project HLEP

Project Nenggiri and Project HLEP are important asset development and refurbishment projects for TPGSB. In addition to the provision of more sustainable power supply, these projects also contribute to flood mitigation, provision of clean water supply, social infrastructure, and job opportunities for the local communities. These projects are in line with the UN SDGs as illustrated in the following table:

Alignment to UN SDGs	Sustainability Objectives	Sustainability Benefits
 **UN SDG: 7** Ensure access to affordable, reliable, and sustainable energy for all while increasing the source of renewable energy.	• To adopt energy-efficient technologies and designs while prioritising cleaner and more efficient energy sources over conventional power plants. • To enhance diversification of generation fuel mix by increasing the hydropower capacity in Peninsular Malaysia. • To utilise clean energy harnessed from nature, thereby reducing the country's reliance on fossil fuels, enhancing energy security. • To increase the stability of the transmission grid.	• Generating electricity in a clean, safe, and reliable manner. The projected GHG emissions from Project Nenggiri is 72.7 gCO_2e/kWh, while a gas-fired power plant's emissions is estimated at 490 gCO_2e/kWh[3]. • Enhancing energy security through diversification of generation fuel mix. Project Nenggiri is anticipated to increase Peninsular Malaysia's hydropower plant capacity by 1.1% to 10.9% in 2027 after the SCOD, in comparison with 9.8% in 2021, while Project HLEP, with a capacity of 650.75 MW, will help TPGSB maintain its current level of renewable energy generation. • Offering ancillary services, such as fast frequency response, black start, voltage support, and reactive power, to support the high voltage transmission grid, with the fast start-up nature of hydroelectric plants.
 **UN SDG: 6** Enable equitable access to safe and affordable water for all, avoiding water scarcity.	• To provide sources of clean water and sustainable water management consistently throughout the year. • To enable continuous water supply to improve irrigation for agriculture.	• Providing consistent clean water supply to the locals for their daily usage. The dams' reservoirs have huge water capacity, and will release water downstream in a regulated and consistent manner all year long. • Improving the irrigation for agriculture as water released from the reservoir to the rivers will ensure continuous water supply for downstream agricultural activities, especially during the dry season.
 **UN SDG: 13**	• To provide disaster control capabilities, with dams functioning as flood mitigation mechanisms.	• Reducing the frequency of flooding downstream with dams controlling the water flow from upstream. As part of TNB's standard operation, the water level in the Main Reservoir is lowered to provide space for

[3] *"Hydropower's carbon footprint", International Hydropower Association, https://www.hydropower.org/factsheets/greenhouse-gas-emissions*

Integrate climate change adaptation in energy generation activities and strengthen resilience against natural disasters.	• To mitigate climate change and reduce environmental impact.	rainwater prior to the monsoon period. • Lowering carbon emissions stemming from electricity generation activities.
 **UN SDG: 8** Enable decent job creation to promote inclusive economic growth for the local community and the nation.	• To stimulate the local economy, generating new jobs and business opportunities for locals. • To improve the local community's standard of living. • To improve TPGSB's and TNB's sustainable revenue, ultimately benefitting the government and the entire nation.	• Benefitting the local community whereby approximately 2,000 workers are needed for Project Nenggiri and Project HLEP, respectively, during construction. • Creating opportunities for local contractors. TPGSB has reserved up to 10% of Project Nenggiri's and 30% of Project HLEP's contract value to local contractors. • Creating aquaculture opportunities, particularly with the increased demand for farmed fish, such as freshwater fish from Temenggor Lake, which is part of the Aquaculture Industrial Zone (AIZ). • Generating sources of revenue for the local communities and the states through ecotourism and recreation activities, e.g. Temengor Fish Farming Synergy Program in the AIZ and Royal Belum State Park.
 **UN SDG: 11** Enhance the inclusivity, sustainability, and resiliency of human settlements, and protect the nation's cultural and natural heritage.	• To enhance the standard of living for the community affected by the project. • To conserve the cultural heritage and historical value of the project site. • To support gross domestic product (GDP) growth and significantly increase the GDP shares of Kelantan and Perak.	• Improving the socioeconomic state of the local community. Project Nenggiri will relocate the *Orang Asli* (indigenous people) to resettlement areas with modern facilities and a better source of income, i.e. rubber plantations. • Preserving the artefacts and ecofacts restored from the archaeological rescue and excavation programmes prior to the reservoir impoundment, whereby they will be displayed in an upcoming gallery. • Enhancing economic activities in Kelantan and Perak, while attracting new investors to these states.
 **UN SDG: 17** Strengthen partnerships and enhance policy coherence for sustainable development.	• To involve relevant authorities and stakeholders, including national and state governments, local communities, and non-governmental organisations (NGOs), in the project to achieve mutual benefits.	• Supporting the national energy transition goal to increase renewable energy mix in the long term. • Fostering a collaborative relationship between TPGSB and the relevant authorities and stakeholders.

Overall Impact Significance

The list of eligible categories defined in the framework demonstrates TPGSB's commitment to supporting energy transition and climate action, in line with the ICMA's GBP/SBP/SBG, ACMF's ASEAN GBS/SBS/SUS, and SC's SRI Sukuk Framework. Importantly, the framework also exhibits TNB's support, as the largest electricity utility provider in Malaysia, towards the National Energy Transition Roadmap (NETR). TNB participates in the NETR through involvement in several flagship catalyst projects, in alignment with Malaysia's energy transition efforts to achieve Net Zero by 2050, and the shifting of the nation's generation mix from fossil fuel-driven energy to renewable energy. This shift, motivated by the Paris Agreement, is expected to attract investments, create job opportunities, and lower GHG emissions.

Overall, the anticipated impact of the Use of Proceeds is assessed to be "Very Significant", considering its potential to contribute to an advanced and transformative sustainable development. The expected sustainability benefits of the Use of Proceeds are aligned with TPGSB's sustainability approach, the UN SDGs, and national sustainable development priorities.

Exclusion Criteria

The Sustainability Sukuk Proceeds are excluded from financing projects or activities related to the following industries (Exclusion List):

1. Fossil fuel
2. Alcohol
3. Gambling
4. Tobacco
5. Weaponry

☒	**Very Significant**	**This level of impact significance is assigned where underlying projects are expected to generate very visible positive ground level impact. Projects at this level support the realisation of long-term integrated visions of sustainable development that are consistent with global sustainability goals, as well as national sustainable development goals and priorities.**
☐	**Significant**	**This level of impact significance is assigned where underlying projects are expected to generate a visible positive ground level impact. Projects at this level have the potential to facilitate adjustments towards a more sustainable development trajectory and to meaningfully advance national level sustainable development goals.**
☐	**Fairly Significant**	**This level of impact significance is assigned where underlying projects are expected to generate a ground level impact which, although at a lower magnitude than that expected for higher assessment levels, is still considered noteworthy.**
☐	**Marginal**	**This level of impact significance is assigned where underlying projects are expected to generate a positive but limited ground level impact.**
☐	**Not Significant**	**This level of impact significance is assigned where underlying projects are expected to have negligible ground level impact.**

02 ASSESSMENT OF ALIGNMENT WITH ICMA GBP/SBP/ SBG, ASEAN GBS/SBS/SUS, AND SC SRI SUKUK FRAMEWORK

A summary of the findings of our review is given below. A detailed review is attached in this assessment's appendix.

Principle One: Utilisation of Proceeds

The proceeds raised from the issuance of the Sustainability Sukuk will be fully utilised for the financing and/or the refinancing, in whole and/or in part, of eligible projects and/or loans obtained to finance investments in relation to the eligible projects that comply with the eligibility criteria recognised by ICMA GBP/ SBP/ SBG, ASEAN GBS/ SBS/ SUS, and the SRI Sukuk Framework.

Eligible projects may require expenditures encompassing value of fixed assets investments and other associated expenditure, capital expenditures (capex) and operational expenditures (opex), including related research and development (R&D) expenditures. TPGSB commits to comply with the relevant ESG standards and best practices relating to the eligible projects.

In cases of refinancing, TPGSB shall endeavour for refinanced opex to have a look-back period of no more than 36 months from the date of issuance of the Sustainability Sukuk. A specific look-back period is not assigned for asset values and capex.

The Eligible Category outlined in the framework is aligned with the following project categories specified in the SRI Sukuk Framework:

- Renewable energy
- Climate change adaptation
- Employment generation

Principle Two: Process for Project Evaluation and Selection

TPGSB works to ensure projects are appropriately identified and assessed in line with the framework, which has obtained approval from the Board. The Board is responsible for overseeing the implementation of the eligible projects to ascertain that the projects achieve the sustainability objectives as identified in the framework, in alignment with the company's sustainability goals.

GEXCOM, chaired by TPGSB's Managing Director, puts in place necessary governance processes to address environmental and social risks associated with the eligible projects, guided by the TNB Risk Assessment Process. GEXCOM oversees, reviews, and monitors the implementation, allocation, performance, and risks related to the eligible project set forth in the framework.

Besides ensuring the proper planning and execution of the project and relevant mitigation actions, GEXCOM also validates the allocation and

impact reporting. Progress of the eligible project will be reported to GEXCOM regularly.

Several assessments were conducted to ensure that the projects comply with the relevant standards and regulations, including:

- Potential Mineral Source Study
- Wildlife Management Plan
- Environmental Impact Assessment
- Environmental Management Plan

Additionally, clear exclusion criteria have been defined by the framework.

Principle Three: Management of Proceeds

The proceeds of the Sustainability Sukuk are being managed internally by TPGSB's treasury team. TPGSB has established a dedicated In-House Cash (IHC) banking and settlement process to track the utilisation of the proceeds through a specific IHC general ledger. The IHC ledger differentiates the source of funds for Sustainability Sukuk proceeds from TPGSB's other source of funds.

TNB's Information, Communication and Technology division governs the eligible project's and/or TPGSB's accounting system, namely the Enterprise Resource Management System. A dedicated cost centre is embedded in the accounting system, which tracks the expenses of the eligible projects, whereby the utilisation of Sustainability Sukuk will be recorded in their respective financial statements. As and when required, proceeds will be disbursed to the eligible projects, in line with TPGSB's Limits of Authority. The flow of the proceeds is demonstrated in the diagram below:

TNB, on behalf of TPGSB, will invest proceeds pending utilisation in Shariah-compliant marketable instruments and fixed deposits in the interim, in accordance with TNB's liquidity and investment policy.

Principle Four: Reporting

A Sustainability Sukuk Report containing the allocation and impact reporting will be published annually as long as the Sustainability Sukuk remains outstanding, and such reporting will be made available at www.tnbgenco.com.my.

Allocation Reporting

The section on allocation in the Sustainability Sukuk Report will include:

- A broad description of the eligible projects
- Amount of proceeds allocated to the eligible projects
- Remaining balance, if any, of unallocated proceeds at the end of the reporting period; and
- Where the unallocated proceeds are placed/invested pending utilisation.

Impact Reporting

Subject to data availability, TPGSB will report on the environmental and social impacts associated with the eligible projects. TPGSB also commits to indicate any assumptions made in relation to the units used or the relevant benchmark emissions in its impact reporting. The Impact Indicators may include, but are not limited to:

- Renewable energy capacity installed (MW)
- Annual renewable energy generation (TWh)
- Expected avoided CO_2 emissions (tonnes of CO_2 per year)
- A qualitative description of environmental benefits
- Percentage of contract value awarded to domestic contractors
- Annual CO_2 emission reduction/avoidance (tonnes of CO_2).

Overall, we consider the framework to be aligned with the core components of the respective standard regarding the Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds and Reporting (including Disclosures).

Overall Assessment

	Clarity of Issuance Process and Disclosure	Total Score
☒	High	10- 12 points
☐	Good	7 -9 points
☐	Satisfactory	4 – 6 points
☐	Low	Below 4 points

Equal weighting is given to each of the four principles in arriving at the total score which is then expressed on the above four-point descriptive scale which ranges from High to Low.

Assessment Grade	High	Good	Satisfactory	Low
	3	2	1	0

03 ANALYSIS OF SUSTAINABILITY PERFORMANCE

TPGSB's relatively short corporate history is mitigated by the established operations that collectively make up TNB's electricity generation business. TNB's core business encompasses an end-to-end electricity value chain comprising of generation, grid, distribution, and retail. As TNB's wholly-owned subsidiary, TPGSB operates and maintains TNB's portfolio of power generating assets in Peninsular Malaysia, including thermal generation facilities and large hydro-generation schemes. As at the end of FY2022, TNB sold 118,838 GWh of electricity, providing energy to more than nine million customers in Peninsular Malaysia, with a total domestic installed capacity of 13,842.53MW. TNB recorded 3,780 MW total renewable energy capacity in FY2022, making up 27.3% of its total installed capacity.

Sustainability Governance and Risk Management

TNB's sustainability governance outlines sustainability-related roles and responsibilities for each level of leadership. To catalyse its energy transition initiatives, TNB has reformed its sustainability governance framework by establishing the Sustainability & Energy Transition Council (SETC) in 2022.

The reform was intended to strengthen the governance of TNB's sustainability agenda, including energy transition and climate-related matters. With the Board's oversight, the SETC and Management Committees are accountable for risk management on sustainability and climate-related matters. The SETC supervises the progress and implementation of sustainability and energy transition initiatives. Business units are accountable for the implementation of sustainability initiatives, monitoring the performance of related initiatives in their respective units, and reporting to SETC on a regular basis. The Corporate Strategy and Sustainability Department serves the SETC secretariat and is responsible to ensure comprehensive communication regarding sustainability-related decisions.

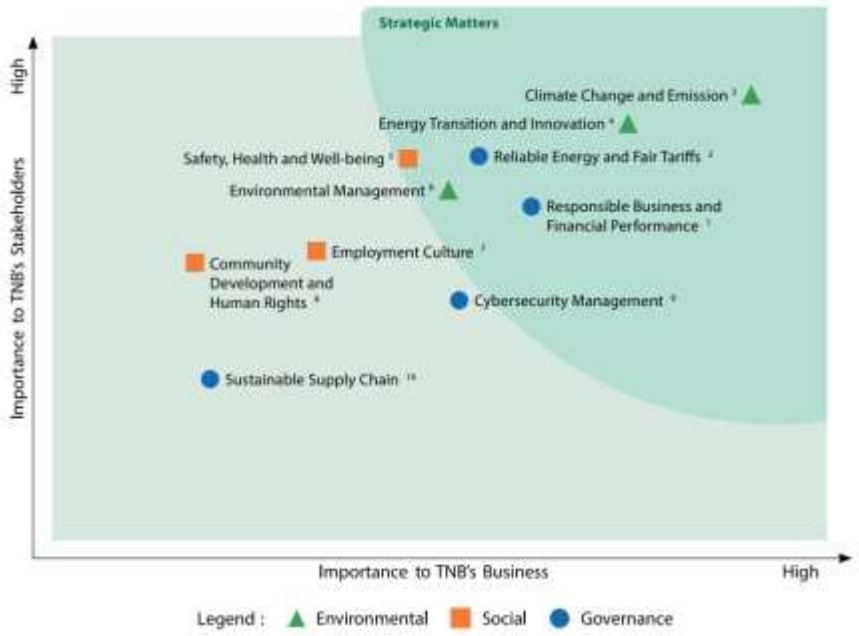
TNB's Risk Management Framework, which aligns with ISO 31000:2018 Risk Management – Guidelines, serves as guidance documents for the business entities across the group. In 2018, TNB received ISO 37001:2016 Anti-Bribery Management System (ABMS) certification and launched the TNB Corporate Integrity Management System (TCIMS) to instil integrity and anti-bribery culture across the group.

Sustainability and climate risks have been integrated into TNB's enterprise risk management process. The group manages its climate-related risks and opportunities based on the ISO 14001:2018 Environmental Management System. TNB's climate action are in accordance with the ISO 50001:2011 Energy Management System, ASEAN Energy Management System (AEMAS) and Grid Green Code of Conduct. The group's Health Safety and Environmental Management System (HSEMS) also outlines environmental risk identification and control requirements, reinforcing the governance of environmental management across the group.

As TNB's wholly-owned subsidiary, TPGSB is guided by TNB's company policies which include Occupational Health and Safety Policy, Environmental Policy, Risk Management Policy, Electrical Safety Policy and Anti-Bribery Policy. Established in August 2023, TPGSB's Environmental Policy outlines the company's commitment to protect and minimise its impact on the environment. In line with the policy, TPGSB works to control and prevent pollution, reduce waste, consume natural resources sustainably, adopt climate change mitigation actions, and align with relevant regulations, standards, and best management practices.

Material Matters

TNB's sustainability strategy is centred around material matters identified and prioritised through stakeholder engagement, whereby a review is conducted biennially. In the most recent materiality assessment, TNB consolidated their material matters from 18 in FY2021 to 10 in FY2022, enabling a more focused approach in addressing the sustainability topics. Through this assessment, "Climate Change and Emission" has been identified as the topic of highest priority among TNB's stakeholders, and environmental-related matters remain the key focus for TNB.



Energy Transition

Acknowledging the need for transition, TNB has embarked on its Energy Transition Plan since 2021 and has allocated RM14 billion of 2025 capex for energy transition initiatives. The strategies that TNB has taken to achieve decarbonisation include phasing out coal plants, upgrading existing power plants with cleaner technology, and diversifying its power generation portfolio towards cleaner and renewable sources through strategic partnerships. Clean energy technologies such as hydropower, Carbon Capture, Utilisation and Storage (CCUS), and hydrogen fuel are among TNB's priorities, as they are expected to expedite the economic feasibility of green technology adoption.

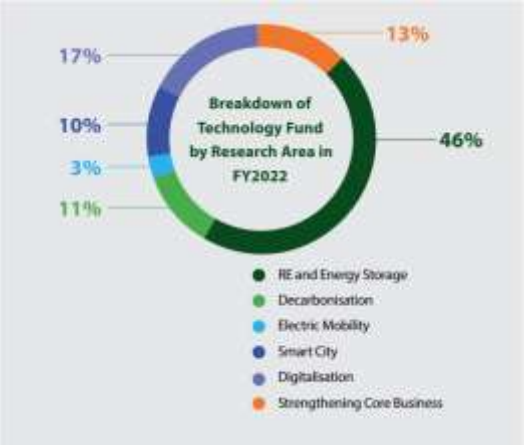
With the aspiration to achieve 8,300 MW of renewable energy installed capacity by 2025, TNB is expanding its hydro, solar and wind energy portfolio domestically and internationally. Project HLEP and Project Nenggiri have been identified as projects that are able to support TNB's renewable energy aspiration:

Project	Description	Commercial Operation Date (COD)	Emission Avoidance (Equivalent to CO_2 emission)
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 eighteen (18) generating units. with the latest technology. • The project will commence in Q3 of year 2024.	2025	0.5 million tCO_2e/ year
Nenggiri Hydro Project 300 MW	• Commencement of work since 1 March 2022.	2027	0.3 million tCO_2e/ year

TNB is also developing and investing in grid modernisation and digitalisation efforts to improve Peninsular Malaysia's grid flexibility and regional interconnections. To minimise its impact on the environment, TNB works to manage its land use, preserve forests, and utilise cleaner and greener technologies in modernising the grid.

Research & Partnerships for Sustainability

As part of its efforts to mitigate climate change, TNB has been actively investing in the research and development (R&D) of new technologies. Since 2022, TNB has set up its technology fund for R&D, innovation and technology expenditures on projects that align with its energy transition agenda. TNB allocated RM60 million towards its energy transition-related R&D efforts in 2023. The following pie chart illustrates the allocation of TNB's technology fund in FY2022:



In FY2022, TNB Research Sdn Bhd (TNBR) successfully developed two types of retrofit photovoltaic (PV) cooling systems, improving the energy yield of the PV system. TNB also conducted research on technologies related to biogas production, biodiesel processing unit, small hydropower solution, smart grid, WTE, green hydrogen, floating solar, CCUS, empty fruit bunch (EFB) co-firing and ammonia-biomass coal firing (ABC).

TNB had also collaborated with public and private entities to tap into growth opportunities beyond the conventional electric utility value chain. TPGSB, with its goal geared towards decarbonisation and energy transition, had formed several partnerships with adjacent industry sectors for industrial-scale projects related to new energy sources and improving available technology. The partnerships formed by TPGSB in FY2022 is summarised in the table below:

Organisations	Project	Description
• IHI Corporation • PETRONAS	Co-Firing Technology for Carbon-Free Ammonia	Feasibility study on ammonia co-combustion in coal-fired power generation systems, including green ammonia production from renewable energy sources and blue ammonia from natural gas.
• Malaysia Solar Resources • Sungrow	Floating solar feasibility study	Feasibility study on the potential of setting up floating solar at hydro dams.
Malaysian Space Agency (MYSA)	Remote sensing-based application using spatial database	Development of Hydro Dam Catchment Area Monitoring System (THyCAS) which has been deployed in TNB's hydroelectric catchment areas in Perak, Kelantan, Pahang, and Terengganu since 2020.

Sustainability Performance Assessment

☒	**Excellent/Highest Assurance**	**The issuer positions itself as a sustainability leader in its industry, ranking in the "top tiers" of performance across multiple categories of engagement, ranging from supply chain management to environmental performance. Sustainability-related risks and opportunities are integrated with the business strategy. Well-defined sustainability policies and practices are augmented by strong accountability systems which allow for a benchmarking of the issuer's performance against stated objectives and the incorporation of external assurance in its sustainability reporting framework.**
☐	**Very Good/High**	**The issuer has integrated risk-based sustainability considerations in its operations and has a robust process for assessing significant sustainability risks exposures to minimise adverse impacts on its business. The focus of the issuer's sustainability performance monitoring and evaluation is on managing risk exposures to minimise downside risk. Globally recognised best practice reporting frameworks guide the issuer's sustainability reporting.**
☐	**Good/Medium**	**The issuer has adopted a CSR-centric sustainability strategy that prioritises stakeholder engagement and goodwill building. Sustainability is a small part of the issuer's business strategy, nonetheless there is evidence to suggest that its sustainability performance has progressed beyond maintaining regulatory compliance. The issuer has implemented general sustainability reporting to investors.**
☐	**Fair/Basic**	**The issuer has a policy of regulatory compliance but has yet to incorporate sustainability considerations into its business operations. At this performance level, the goal of sustainability management is to achieve and maintain compliance with health, safety, and environmental requirements mandated by government laws and regulations.**
☐	**Poor/Weak**	**The issuer has a record of poor sustainability performance or operates in unsustainable industries.**

Our assessment of the issuer's sustainability implementation capabilities and performance is expressed on a five-level descriptive scale that runs from "Excellent" to "Poor" which corresponds to five levels of assurance (Highest, High, Medium, Basic, and Weak). The assurance level can be interpreted as a measure of our confidence in the issuer's continuing performance of its sustainability obligations in line with marketplace expectations and in compliance with its framework for financing issuance.

04 RATING SCALE

GRADE	DESCRIPTION
	**Bonds assessed at this level are judged to offer very significant environmental and/or social sustainability impact based on the projects supported or expected to be supported by the bond issuance. The processes used or to be used for the allocation and administration of proceeds, decision making process of eligible projects and the reporting of performance indicators are consistent with the core principles of the GBP and/or SBP and applicable market guidance or standards and should support high standards of accountability and transparency.**
	**Bonds assessed at this level are judged to offer significant environmental and/or social sustainability impact based on the projects supported or expected to be supported by the bond issuance. The processes used or to be used for the allocation and administration of proceeds, decision making process of eligible projects and the reporting of performance indicators are consistent with the core principles of the GBP and/or SBP and applicable market guidance or standards and should support good standards of accountability and transparency.**
	**Bonds assessed at this level are judged to offer fairly significant environmental and/or social sustainability impact based on the projects supported or expected to be supported by the bond issuance. The processes used or to be used for the allocation and administration of proceeds, decision making process of eligible projects and the reporting of performance indicators are consistent with the core principles of the GBP and/or SBP and applicable market guidance or standards and should support satisfactory standards of accountability and transparency. Minor shortcomings exist in the areas assessed but none of them are major concern.**

05 MARC RATINGS BERHAD

MARC Ratings Berhad was incorporated as a public limited company to undertake the business of providing credit rating services, as well as economic and fixed-income research publications, on behalf of the MARC group of companies.

MARC Ratings continues to adopt practices and procedures for Domestic Credit Rating Agencies based on the guidance on the Code of Conduct Fundamentals provided by the International Organisation of Securities Commissions (IOSCO) and the Association of Credit Rating Agencies in Asia (ACRAA). MARC Ratings continues to consult international best practices and the International Capital Market Association's Guidelines for Green, Social and Sustainability Bonds External Reviews in its conduct of external reviews, particularly in relation to the organisation and content of external reviews.

Following a series of outreach and external reviewer capacity building initiatives jointly undertaken by domestic market regulators and World Bank Group, MARC published its proposed criteria for rating green, social or sustainability bonds in April 2018. The version that was adopted in July 2018 after public consultation can be accessed on MARC's corporate website at www.marc.com.my. As explained in the criteria, the analytical framework consists of three components that provide insights to the green, social and sustainability credentials of green, social and sustainability bonds: (1) an assessment of environmental and/or social benefits of the underlying funded project(s); (2) an assessment of compliance with internationally recognised principles and market standards for the evaluation of such bonds; and (3) an evaluation of the issuer's sustainability strategy and performance. Bonds which meet the minimum thresholds in each of the three analytical components will be rated Gold, Silver or Bronze.

For more information, visit www.marc.com.my or contact us at ratings@marc.com.my.

Appendix

Review of Compliance with GBP/ SBP/ SBG, ASEAN GBS/ SBS/ SUS, and SRI Sukuk Framework

Issuer: TPGSB's Sustainability Sukuk Framework

Key Additional Features to comply with for sukuk issuance:

☒ The proceeds allocated for the Project must not be used for ineligible projects specified by the ASEAN GBS (i.e. fossil fuel power generation projects) as well as the ASEAN SBS (i.e. projects which involve activities that pose a negative social impact related to alcohol, gambling, tobacco, and weaponry).

☒ Continuous accessibility of information on Use of Proceeds, process for project evaluation and selection, and management of proceeds to investors throughout the tenure of the sukuk.

☒ Periodic reporting on the allocation of the sukuk proceeds.

☒ The external reviewer's credentials and scope of review conducted to be made publicly accessible from a website designated by the Issuer throughout the tenure of the sukuk.

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
Issuer *ASEAN GBS/ SBS/ SUS* *3.1* *The issuer must be an ASEAN issuer, or the eligible green and/or social project(s) must be in an ASEAN country.*	*The issuer is an ASEAN issuer.*	
SRI Sukuk Framework *7.02* *The proceeds (of Sukuk) will be applied exclusively for funding of any activities or transactions relating to the Eligible SRI projects.*	*The sukuk proceeds will be applied exclusively for the funding of activities falling within those broad categories of eligibility recognised by the SC's SRI Sukuk Framework.*	
7.03 *An issuer must not– (a) use or adopt the term "SRI sukuk"; or (b) hold itself out as an issuer of such SRI sukuk, unless the issuance of the SRI sukuk has complied with these Guidelines.*	*The issuer intends to issue SRI sukuk that complies with the Guidelines.*	
7.04 *An issuer who wishes to issue an SRI sukuk must establish policies and processes to ensure compliance with the SRI Sukuk Framework as set out in these Guidelines.*	*The issuer commits to establish policies and processes as needed to ensure compliance with the SRI Sukuk Framework.*	
7.05 *The information relating to the issuer and the details of the issuer's SRI Sukuk Framework must be made publicly accessible via a designated website to be disclosed by the issuer. Such information in the designated website must be made available at the point of issuance and throughout the tenure of the SRI sukuk.*	*The issuer's framework will be made available at the point of issuance and throughout the tenure of the SRI sukuk via its website as indicated in the framework.*	

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
Eligible Projects		
SRI Sukuk Framework *7.07* *An eligible SRI project refers to a project that seeks to achieve any one or a combination of the following objectives:* *a) Preserving and protecting the environment and natural resources;* *b) Conserving the use of energy;* *c) Promoting the use of renewable energy;* *d) Reducing greenhouse gas emission;* *e) Addressing or mitigating a specific social issue or seeking to achieve positive social outcomes especially but not exclusively for a target population; or* *f) Improving the quality of life of society.*	*The net proceeds of the sukuk will be solely allocated to a single eligible category that seeks primarily to achieve a combination of objectives set out in paragraph 7.07 of the SRI Sukuk Framework, in particular, (c) promoting the use of renewable energy, (d) reducing greenhouse gas emission and (f) improving the quality of life of the society.*	*The framework identified renewable energy as the eligible SRI project, which specifically included Project Nenggiri and Project HLEP.*
7.08 *The Eligible SRI projects may include but not limited to the following:* *a) Green projects that relate to– renewable energy; energy efficiency; pollution prevention and control; environmentally sustainable management of living natural resources and land use; terrestrial and aquatic biodiversity conservation; clean transportation; sustainable water and wastewater management; climate change adaptation; eco-efficient and/ or circular economy adapted products, production technologies and processes; and green buildings which meet regional, national or internationally recognised standards or certifications.* *b) Social projects that relate to, amongst others–affordable basic infrastructure; access to essential services; affordable housing; employment generation including the potential effect of SME financing and microfinance; food security; and socioeconomic advancement and empowerment.* *c) Projects which are the combination of Green and Social projects as described in (a) and (b) above; and* *d) Waqf projects that relate to the development of waqf properties or assets.*	*The eligible categories outlined in the framework are aligned to the following green and social project categories specified in paragraph 7.08 (a) and (b) of the SRI Sukuk Framework: renewable energy; climate change adaptation and employment generation.*	
ASEAN GBS/ SBS/ SUS *4.1* *4.1.1* *The utilisation of issue proceeds must be described in the documentation for issuance.*	*The utilisation of proceeds is clearly described in the framework.*	
4.1.2 *The Issuer must disclose the following information: The categories of eligible Green and/or Social Projects to which the issue*	*The proceeds from the issuance of the Sustainability Sukuk will fund a single eligible category that delivers both environmental and socioeconomic benefits.*	

Criteria	Compliance with criteria	Remarks/Scope of Work Undertaken
proceeds will be allocated; and/or the information on specific Green and/or Social Projects in the case where the issuer has identified the specific Green and/or Social Projects to which the issue proceeds will be allocated.		
4.1.3 *All designated Green and/or Social Projects must provide clear environmental/social benefits, which will be assessed and, where feasible, quantified by the Issuer.*	*The eligible project category set out in the framework provides clear environmental/social benefits.*	
4.1.4 *In the event that all or a proportion of the proceeds are or may be used for refinancing, it is recommended that Issuers provide an estimate of the share of financing and refinancing, and where appropriate, also clarify which investments or project portfolios may be refinanced and, to the extent relevant, the expected look-back period for refinanced projects.*	*The issuer has disclosed that the proceeds may be used for value of fixed assets investments and other related capex and opex of physical assets meeting the eligibility criteria. R&D expenditures related to the eligible project categories account as opex. In cases of refinancing, the issuer shall endeavour for refinanced opex to have a look-back period of no more than 36 months from the date of issuance of the Sustainability Sukuk. A specific look-back period is not assigned for asset values and capex.*	*We have reviewed the Social and Green Eligible Categories and concluded that the eligible projects/financing fulfil the applicable criteria to be considered green and/or social for the purposes of the GBP/SBP, ASEAN GBS/SBS and SC's SRI Sukuk Framework.*

Criteria	Compliance with criteria	Remarks/Scope of Work Undertaken
Process for Project Evaluation and Selection *<u>SRI Sukuk Framework</u>* *7.12* *An issuer must establish internal processes for evaluation and selection of the Eligible SRI projects as identified in paragraph 7.08 above.*	*The issuer has established internal processes for project evaluation and selection which provide for the Board and senior management's involvement.*	
<u>ASEAN GBS/ SBS/ SUS</u> *4.2.1* *The issuer must clearly communicate to investors:* *(i) The environmental/ social sustainability objectives; The Eligible Categories are framed in the context of SDGs with specific E&S objectives;*	*The eligible categories in the framework are framed in the context of SDGs with specific social and environmental objectives.*	*The eligibility criteria are clearly communicated in the framework.*
(ii) The process by which the Issuer determines how the projects fit within the identified eligible project categories; and	*The framework outlines an internal process by which eligible projects are assessed and selected to ensure fulfilment of criteria.*	*The framework details the information on the eligible projects, including their roles, benefits and relevant SDGs.*
(iii) The related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social (E&S) risks associated with the selected projects.	*The exclusion criteria and process applied to identify and manage potentially material E&S risks associated with the selected projects have been detailed in the framework.*	

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
4.2.2 *The Issuer must establish the process for project evaluation and selection prior to the issuance of the Bonds and disclose the same to investors in the documentation for the issuance of the Bonds.*	*The framework details the process for project evaluation and selection, and these details will be available to investors prior to the issuance of the bonds.*	*The issuer's GEXCOM is responsible for monitoring the risk management. The issuer has also undertaken an EIA, EMP and WMP to identify potential environmental and social impacts associated with the eligible projects.*
4.2.3 *Issuers are encouraged to position this information within the context of the Issuer's overarching objectives, strategy, policy and/or processes relating to environmental and social sustainability. Issuers are also encouraged to disclose any green and social standards or certifications referenced in project selection.*	*The issuer has positioned this information within the context of the issuer and its parent company's sustainability strategies. The Issuer has also provided information on approvals received for mandatory environmental and social impact assessments related to the selected project.*	
4.2.4 *It is recommended that the Issuer's process for project evaluation and selection be supported by an external review.*	*The issuer has appointed MARC Ratings as the external reviewer for its framework.*	
4.2.5 *The Issuer must make the following publicly available on a website designated by the Issuer at the time of the issuance and throughout the tenure of the Bonds:* *(i) The process for project evaluation;* *(ii) The Use of Proceeds; and* *(iii) External review report on the process (if any)*	*The issuer has committed to make the required information available in a Sustainability Sukuk Report to be published on its corporate website.*	*The framework will provide information on the process for project evaluation, and the issuer will issue a Sustainability Sukuk Report on an annual basis that will provide information on the allocation and impacts throughout the tenure of the sukuk. The external review assessment will also be made available on its corporate website indicated in the framework.*

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
Management of Proceeds <u>*SRI Sukuk Framework*</u> *7.13* *An issuer must ensure that the proceeds allocated for the Eligible SRI projects are credited into a designated account or otherwise tracked in an appropriate manner.*	*The issuer will monitor the allocation of the sukuk proceeds and the eligible projects portfolio internally.*	*The issuer's treasury team manage the proceeds through a dedicated In-House Cash (IHC) banking and settlement process, and the disbursement for the eligible projects will be tracked via established internal accounting system.*
<u>*ASEAN GBS/ SBS/ SUS*</u> *4.3.1* *Prior to the issuance of the Bonds, the Issuer must disclose to investors in the documentation for the issuance of the Bonds the process for managing the net proceeds from the Bonds.*	*Prior to issuance, the issuer will make the framework available to investors. The framework describes the process for managing the net proceeds from the financing.*	
4.3.2 *The net proceeds of the Bonds, or an amount equal to these net proceeds, must be credited into a sub-account, moved to a sub-portfolio or otherwise tracked by the Issuer in an appropriate manner and attested to by a formal*	*The net proceeds from the issue of the Sukuk will be internally tracked. The issuer's parent company will invest the balance of unallocated proceeds to Shariah-compliant instruments in the interim,*	

Criteria	Compliance with criteria	Remarks/Scope of Work Undertaken
internal process. The total amount deployed from the net proceeds for the eligible projects need not occur simultaneously.	*pending utilisation in accordance with TNB's liquidity/investment policy.*	
4.3.3 *If the Bonds are outstanding, the balance of the tracked net proceeds must be periodically adjusted to match allocations to eligible projects made during that period.*	*The issuer will disclose the amount of proceeds allocated to the eligible projects and the balance of unallocated proceeds in its allocation reporting to be published annually.*	*An area of improvement will be to state in the framework that the issuer will undertake periodic reconciliation of the tracked proceeds to allocations made to eligible projects.*
4.3.4 *The Issuer must also disclose to investors in the documentation for the issuance of the Bonds the intended types of temporary placement for the balance of unallocated net proceeds.*	*The framework discloses the intended temporary placement for the balance of unallocated net proceeds.*	
4.3.5 *It is recommended that the Issuer's management of proceeds be supplemented by the use of an auditor, or other third party, to verify the internal tracking method and the allocation of funds from the Bonds proceeds.*	*The issuer will track the allocation of funds internally.*	*The appointment of a third party to verify the internal tracking method and the allocation of funds from the Sukuk proceeds is encouraged by the ASEAN Standards to provide a high level of transparency.*
4.3.6 *Where the Issuer appoints an auditor or other third party to verify the Issuer's management of proceeds, the Issuer must make the report produced by the auditor or other third party publicly available on a website designated by the Issuer at the time of the issuance of the Bonds.*		

Criteria	Compliance with criteria	Remarks/Scope of Work Undertaken
Reporting *<u>ASEAN GBS/ SBS/ SUS</u>* *4.4.1* *Issuers must report to investors at least on an annual basis and are encouraged to make more frequent reporting on the Use of Proceeds until full allocation, and on a timely basis in the case of material developments. The annual report should include a list of the projects to which the Bonds proceeds have been allocated, as well as a brief description of the projects and the amounts allocated, and their expected impact.* *4.4.2* *Where confidentiality agreements, competitive considerations, or a large number of underlying projects limit the amount of detail that can be made available, the Issuer may present the information in generic terms or on an aggregated portfolio basis (e.g., percentage allocated to certain project categories).*	*The issuer has committed to publish a Sustainability Sukuk Report on its corporate website, which includes allocation reporting and impact reporting.* ***(a) Allocation Reporting*** *The section on allocation in the Sustainability Sukuk Report will include, among others:* • *A broad description of the eligible projects;* • *Amount of proceeds allocated to the eligible projects ;* • *Remaining balance, if any, of unallocated proceeds at the end of the reporting period; and* • *Where the unallocated proceeds are placed/invested pending utilisation.*	

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
4.4.3 *It is recommended that Issuers use qualitative performance indicators, and where feasible, quantitative performance measures and disclose the key underlying methodology and/or assumptions used in the quantitative determination.*	***(b) Impact Reporting*** *Where possible, the issuer will report on the environmental and social impacts associated with the eligible projects, including assumptions made in relation to the units used or the relevant benchmark emissions to determine the impact or expected impact, subject to data availability.*	
4.4.4 *It is recommended that the Issuer's annual reporting on the Use of Proceeds be supplemented by a confirmation of such Use of Proceeds by an external reviewer along with any relevant updates of the external review.*	*The framework has not disclosed that the issuer's annual reporting on the Use of Proceeds will be supplemented by an external reviewer's confirmation.*	*Updates of the external review are encouraged by the ASEAN Standards but are strictly voluntary.*
4.4.5 *The Issuer must provide to investors the annual reporting and the external review on the annual reporting, if any, through a website designated by the Issuer and/or annual reports throughout the tenure of the Bonds.*		
Disclosure Requirements		
<u>SRI Sukuk Framework</u> *7.16* *The following information must be included:* *a) The overall SRI objectives that the issuer intends to achieve;* *b) The utilisation of proceeds from the issuance of the SRI sukuk. Where all or part of the proceeds are used for refinancing, an issuer must provide the amount of proceeds being allocated for refinancing and which Eligible SRI projects to be refinanced;* *c) The Eligible SRI projects in which the proceeds will be allocated;* *d) The details of the Eligible SRI projects and to the extent possible, impact objectives from the Eligible SRI projects;* *e) The processes used by the issuer to evaluate and select the Eligible SRI projects;* *f) The criteria used by the issuer to identify and manage material environmental or social risks associated with the Eligible SRI projects;* *g) The processes used by the issuer to manage the proceeds from the issuance of the SRI sukuk; and* *h) A statement that the issuer has complied with the relevant environmental, social and governance standards or recognised best practices relating to the Eligible SRI projects.*	*The issuer has committed to providing information items (a) through (h) within its Sustainability Sukuk Framework.*	

Criteria	*Compliance with criteria*	*Remarks/Scope of Work Undertaken*
External Review *SRI Sukuk Framework* *7.17* *If an external reviewer is appointed to assess and provide report on the Eligible SRI projects or the issuer's compliance with the requirements under these Guidelines, such external reviewer's report must be made available on the designated website.* *ASEAN GBS/ SBS/ SUS* *5.1* *Issuers are recommended to appoint external review providers for the bond issuances or programmes.* *5.2* *The external review may be partial, covering only certain aspects of the bonds framework or full, assessing alignment with all four core components as stated in the relevant standards.* *5.3* *The external review provider must have the relevant expertise and experience in the components of the Bonds which they are reviewing.* *5.4* *The external review provider must also disclose their relevant credentials and exp7ertise, and the scope of the review conducted in the external review report.*	*MARC Ratings has been engaged as the independent external reviewer for the framework. The external reviewer's report will be made available on the issuer's corporate website.* *The review conducted by MARC Ratings is a full review and addresses alignment with all four components of the relevant standards.* *MARC Ratings is registered with the Securities Commission Malaysia as a credit rating agency. The scope of MARC Ratings' external review is set out in MARC Ratings' IBA methodology that is publicly accessible from its corporate website.*	*MARC Ratings has established a transparent score-based framework for its green, social and sustainability bond assessments analysis that is published on its website. The differentiated approach taken recognises that some projects offer more environmental and/or social benefits than others.*

THE UN SUSTAINABLE DEVELOPMENT GOALS

GOAL 1: End poverty in all its forms everywhere

GOAL 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

GOAL 3: Ensure healthy lives and promote well-being for all at all ages

GOAL 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

GOAL 5: Achieve gender equality and empower all women and girls

GOAL 6: Ensure availability and sustainable management of water and sanitation for all

GOAL 7: Ensure access to affordable, reliable, sustainable and modern energy for all

GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

GOAL 10: Reduce inequality within and among countries

GOAL 11: Make cities and human settlements inclusive, safe, resilient and sustainable

GOAL 12: Ensure sustainable consumption and production patterns

GOAL 13: Take urgent action to combat climate change and its impacts

GOAL 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

GOAL 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

GOAL 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

GOAL 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

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