Sembcorp Industries Ltd

Green Financing Framework (2024)

October 2024

Introduction

Sembcorp Industries (Sembcorp) is a leading energy and urban solutions provider, driven by its purpose to play its part in driving energy transition towards a low-carbon future responsibly.

Headquartered in Singapore, we leverage our sector expertise and global track record to deliver innovative solutions that support the energy transition and sustainable development.

Sembcorp is listed on the main board of the Singapore Exchange. It is a constituent stock of FTSE Russell Index, MSCI Singapore Index, Straits Times Index as well as sustainability indices including FTSE4Good Index, iEdge SG ESG indices and several MSCI ESG indices. For more information, please visit www.sembcorp.com.

Sembcorp's Approach to Sustainability

Energy companies play a transformative role in an inclusive energy transition. At Sembcorp, we are committed to supporting Asia's shift to a clean and responsible energy future for all.

Our Sustainability Framework reflects material sustainability factors imperative for us to focus on and manage well, to drive improved performance and impact. The material factors and aspects are reviewed annually and are determined by our Board as part of their oversight in the management and monitoring of our material factors and priorities.

Sembcorp is a supporter of the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD) and a member of the Carbon Pricing Leadership Coalition (CPLC).

Responding to climate change is central to Sembcorp's strategy

Sembcorp launched its climate change strategy in 2018 and unveiled our inaugural strategic transformation plan in 2021. Since then, we have made significant progress against our 2025 strategic targets, with gross installed renewables capacity of 10GW as of June 2024, and achieved our 2025 emissions intensity reduction target two years ahead of time. We remain committed to achieving our net zero emissions target (Scope 1 and 2) by 2050.

Building on this strong momentum, Sembcorp announced its 2024-2028 strategic plan in November 2023, reaffirming our commitment to drive energy transition.

Sembcorp is committed to the following targets and plans for the next phase of growth:

- **Accelerate renewables growth** - Sembcorp is a leading renewables player in Asia and aims to grow its gross installed renewables capacity to 25GW by 2028.
- **Strengthen commitment to decarbonisation** - Sembcorp has met its 2025 emissions intensity target of 0.40 tCO_2e/MWh (Scope 1 and 2) with 0.29 tCO_2e/MWh (Scope 1 and 2) achieved in 2023. By 2028, we aim to halve our emissions intensity to 0.15 tCO_2e/MWh from 2023 levels of 0.29 tCO_2e/MWh. We are also committed to achieve our targets of reducing absolute emissions to 2.7 million tCO_2e[1] by 2030, and net-zero emissions[1] by 2050.

[1] 2030 and 2050 targets cover the Group's absolute Scope 1 and Scope 2 emissions.

- **Continue to leverage gas as a transition fuel to fund renewables growth** - Sembcorp's existing gas assets support Asia's need for energy. The contracted gas portfolio provides cash flow visibility and will continue to contribute meaningfully through 2028. This cash flow will be used to fund the growth of Sembcorp's Renewables segment.
- **Invest in decarbonisation solutions** – Sembcorp will invest in low-carbon alternatives to drive energy transition beyond 2028. This includes the production and consumption of low carbon feedstock (including green hydrogen and ammonia), power imports as well as carbon capture, utilisation and storage (CCUS) business.

In line with our strategic plan, we also reaffirmed our commitment towards SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action).

Green Financing Framework

To demonstrate our commitment to a more sustainable future and to drive the energy transition, Sembcorp launched our first Green Financing Framework (Framework 2021) in 2021. This is an update of our Green Financing Framework (Framework 2024) which will apply to all Green Finance Transactions (GFTs) raised or issued from 1st October 2024.

The Framework outlines the criteria and guidelines on the key components for raising or issuing credible GFTs. The Framework 2024 supports investments that drive the energy transition, encourages the use of GFTs for our projects. The Framework 2024 references the relevant international market standards and guidelines listed below.

- Green Bond Principles, June 2021 issued by the International Capital Market Association
- Green Loan Principles, February 2023 issued by the Loan Market Association, the Asia Pacific Loan Market Association and the Loan Syndications and Trading Association
- Singapore-Asia Taxonomy, December 2023 issued by the Green Finance Industry Taskforce convened by the Monetary Authority of Singapore

The Framework 2024 has the following four core components:

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

Sembcorp intends to raise or issue multiple GFTs under Framework 2024, including but not limited to the instruments listed below:

- Green bonds / notes / perpetual securities, collectively known as "Green bond(s)"
- Green loan(s)
- Green revolving credit facilities

For the avoidance of doubt, the GFTs may be in any currency, tenor or with other terms and conditions, including covenants, arising from Sembcorp's financing strategy as well as the outcome of the commercial discussions between Sembcorp and its lenders and investors.

The Framework 2024 applies to all subsidiaries of Sembcorp.

1.1 Use of Proceeds

The Net Proceeds raised from the GFTs will be used exclusively to finance or refinance, in whole or in part, new or existing projects which falls in the Eligible Green Projects Category and meet the Eligibility Criteria stated in Table 1. The Eligibility Criteria in Table 1 was developed referencing the Singapore-Asia Taxonomy. All Eligible Green Projects should provide clear environmental benefits which will be quantified, to the extent possible, and reported in our annual Green Finance Report (GFR).

Net Proceeds can be used for the development of assets, investments and other related and supporting expenditures such as research and development.

Eligible Green Projects Category and Eligibility Criteria

For projects to qualify as Eligible Green Projects, the relevant eligibility criteria have to be met as described in Table 1.

Table 1: List of Eligible Green Projects Category and Eligibility Criteria

Eligible Green Projects Category	Eligible Green Projects Sub-Category	Eligibility Criteria
1) Renewable energy	a) Onshore wind energy generation	All onshore wind projects are eligible for green financing
	b) Onshore solar energy generation	All onshore solar projects are eligible for green financing
	c) Hydropower	Power density is > 5W/m^2
2) Energy storage	a) Energy storage	All energy storage projects[2] are eligible for green financing
3) Hydrogen or its derivatives	a) Hydrogen or its derivatives production facilities	Lifecycle GHG emissions intensity for hydrogen production are required to meet applicable import country low-carbon hydrogen production requirements. **Or** Where there is no established low-carbon hydrogen production standard / requirement, Sembcorp will reference the Singapore-Asia Taxonomy requirements as stated below. **(i) Feedstock requirements** • Feedstock is not coal or coal derivatives; and **(ii) Emissions intensity requirements**

[2] This refers to mechanical energy storage system, thermal energy storage systems, pumped hydropower storage or electrochemical storage systems.

Eligible Green Projects Category	Eligible Green Projects Sub-Category	Eligibility Criteria
		Lifecycle GHG emissions intensity for hydrogen production[3] meet the following requirements • 2030 – 1.5 tCO_2e/tH_2 • 2040 – 0.6 tCO_2e/tH_2 • 2050 – 0 tCO_2e/tH_2 The emissions intensity threshold has to be met at the onset of the GFT; and **(iii) Electricity source requirements** • Demonstrate use of additional renewable energy; and • Demonstrate temporal (monthly basis) and geographical correlation between additional renewable energy generation and electricity consumption by electrolyser
	b) Storage of hydrogen or its derivatives[4]	All storage projects are eligible for green financing as long as the storage facility in relation to the production facilities meets 3a) requirements
	c) Electricity generation assets from hydrogen or its derivatives	**(i) Project requirements** • New power projects using hydrogen or its derivatives; and **(ii) Emissions intensity requirements** • GHG emissions intensity of the power plant is < 100 gCO_2e/kWh; and **(iii) Electricity source requirements** • The power cannot be generated from renewable energy sources, based on a comparative assessment with the most cost-effective and technically feasible renewable alternative for the same capacity identified.

[3] As per the Singapore-Asia Taxonomy, the lifecycle GHG assessment includes cradle-to-gate emissions, and transportation emissions to the site where a product will be used. It excludes hydrogen or its derivatives storage and conversion and the transportation of hydrogen or its derivatives by truck or ship.

[4] Includes the construction or conversion of existing underground gas storage facilities into storage facilities dedicated to hydrogen or its derivatives storage.

4) Green buildings	a) Green buildings	Green buildings industrial buildings that are new, existing or refurbished / retrofitted which meet any of the following criteria: • LEED Silver and above; • EDGE Certification; or • Any other Green Building certification, that is an equivalent standard as the above.

All eligible green projects listed in Table 1 contribute to climate mitigation objectives.

In terms of exclusion criteria, Net Proceeds will not be used for greenhouse gas intensive projects such as coal, fossil fuel, fossil fuel electric power generation projects.

1.2 Process for Project Evaluation and Selection

Project evaluation and selection is a key process in ensuring that the projects financed by the GFTs fall under the Eligible Green Projects Category and meet the Eligibility Criteria in Table 1. Projects that fall under the Eligible Green Projects Category and meet the Eligibility Criteria are referred to as “Eligible Projects”.

The Group Corporate Finance & Treasury department will engage with the Market or Project teams to identify Eligible Green Projects. Projects will have to undergo an environmental and social risk screening assessment which is integrated as part of Sembcorp’s investment process. The Group Sustainability and Group Centre of Excellence departments will review and validate the projects’ environmental sustainability objectives, as well as its alignment with Sembcorp’s strategy and conformance to the exclusion criteria, Eligible Green Projects Category and Eligibility Criteria in Table 1. The Eligible Green Projects will be presented to Sembcorp’s Green Financing Committee for approval.

The Green Financing Committee (GFC) comprises the Group Chief Financial Officer (Chair), Head of Group Corporate Finance & Treasury, Head of Group Sustainability and Head of Group Centre of Excellence.

Projects that have been approved by the GFC are referred to as “Nominated Projects”.

1.3 Management of Proceeds

A register (Green Register), managed by the Group Corporate Finance & Treasury, is used to track the allocation and use of proceeds. Information captured in the Green Register includes:

1. Net Proceeds raised or issued from GFTs;
2. Net Proceeds allocated to Nominated Projects;
3. Share of Net Proceeds used for refinancing; and
4. Unallocated Net Proceeds.

The use of Net Proceeds will be tracked in the Treasury Management System or market specific accounting system.

Any unallocated Net Proceeds will be temporarily invested in cash or cash equivalent e.g. fixed deposits instruments until it is used to finance the Nominated Projects.

Sembcorp aims to allocate all Net Proceeds to Nominated Projects within 24 months from Green Financing Papers (GFP) approval.

1.4 Reporting

Sembcorp is committed to transparency in its GFTs and will publish a GFR annually. The GFR will be made available on our website and will be updated annually over the outstanding period of the GFTs.

The GFR will include the following components.

a) Allocation Report

- Net Proceeds raised or issued from GFTs;
- Net Proceeds allocated to Nominated Projects;
- Share of Net Proceeds used for refinancing; and
- List of Nominated Projects to which Net Proceeds have been allocated to and details of Nominated Projects.

b) Eligibility Report

- Confirmation that Nominated Projects are aligned with the Eligible Green Projects Category and Eligibility Criteria in Table 1.

c) Impact Report

Where possible[5], Sembcorp will provide qualitative or quantitative performance indicators along with methods and underlying assumptions used to derive the performance indicators for the Nominated Projects. Below are illustrative examples of impact indicators that may be reported in our GFR.

Table 2: Environmental Impact Indicators

Eligible Green Projects Category	Environmental Impact Indicators
Onshore wind energy generation	• Gross installed renewable energy capacity (MW) • Annual GHG emissions avoided (tCO_2e)
Onshore solar energy generation	
Hydropower	
Energy storage	• Energy storage capacity (MWh)
Hydrogen or its derivatives production and storage facilities	• Given the nascency of hydrogen technology, quantitative environmental impact indicators will be reported with reference to relevant industry / standard bodies' guidance (when available).
Electricity generation assets from hydrogen or its derivatives	
Green buildings	• Green building certification

[5] This excludes green revolving credit facilities where Net Proceeds may be used as a bridging facility. Due to the limited time Net Proceeds are allocated to the Nominated Projects, it may not be meaningful to report on the impact of Nominated Projects.

External Review

Pre-issuance: The Framework 2024 has been reviewed and assured by EY.

Post-issuance: Sembcorp will continue to engage an external review provider annually to review its conformance to the Framework 2024.

The pre-issuance and annual post-issuance reports will be made publicly available on our website.