



Second-Party Opinion
Sumitomo Corporation
Green Finance Framework

Evaluation Summary

Sustainalytics is of the opinion that the Sumitomo Corporation Green Finance Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2021. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, Energy Efficiency, are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 11 and 15.



PROJECT EVALUATION / SELECTION Sumitomo Corporation’s Finance Department selects eligible projects based on the eligibility criteria with the support of the Corporate Sustainability Department. The final decision is made by the Chief Financial Officer. Sumitomo Corporation has in place processes for managing environmental and social risks associated with the eligible projects. These processes are applicable to all allocation decisions made under the Framework. Sustainalytics views that Sumitomo Corporation’s processes for evaluating and selecting projects are in line with market practice.



MANAGEMENT OF PROCEEDS The Finance Department tracks and monitors the proceeds once a year, using an internal management system. Sumitomo Corporation intends to allocate, the full amount of the proceeds to projects that meet the eligibility criteria within approximately three years from the green bond’s issuance date and/or the green loan’s execution date. Sumitomo Corporation intends to manage an amount equal to the unallocated proceeds in cash or cash equivalents. Sumitomo Corporation’s management of proceeds is in line with market practice.



REPORTING Sumitomo Corporation intends to report on the allocation of the proceeds and environmental benefits annually on its website until the full allocation of green finance proceeds. This report will include the amount of allocated and unallocated proceeds, planned timing of allocation and management method for unallocated proceeds, as well as quantitative or qualitative environmental performance indicators. Sustainalytics considers Sumitomo Corporation’s reporting is in line with market practice.

Evaluation date	February 21, 2022
Issuer Location	Tokyo, Japan

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Introduction

Sumitomo Corporation (“Sumitomo Corporation” or the “Company”) is a major Japanese trading company established in 1919. Sumitomo Corporation and its affiliated companies constitute the Sumitomo Corporation Group (“Sumitomo Corporation Group” or “the Group”). The Company has 134 offices in 65 countries and regions with 75,383 employees on a consolidated basis (as of September 30, 2021). Its businesses span metal products, transportation and construction systems, infrastructure, media and digital, living related and real estate, and mineral resources, energy, chemical and electronics. Moreover, the Company launched the Energy Innovation Initiative to engage in the next-generation businesses to contribute to the realization of a carbon-neutral society.

Sumitomo Corporation has developed the Sumitomo Corporation Green Finance Framework (the “Framework”) under which it intends to issue green bonds and loans and use the proceeds to finance and/or refinance, projects that deliver environmental benefits. The Framework defines eligibility criteria in four areas:

1. Renewable Energy
2. Environmentally Sustainable Management of Living Natural Resources and Land Use
3. Clean Transportation
4. Energy Efficiency

Sumitomo Corporation engaged Sustainalytics to review the Sumitomo Corporation Green Finance Framework, dated February 2022, and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP)¹ and the Green Loan Principles 2021 (GLP).² This Framework has been published in a separate document.³

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁴ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the GBP, as administered by ICMA, and the GLP, as administered by LMA, APLMA and LSTA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.11.2, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of Sumitomo Corporation’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Sumitomo Corporation representatives have confirmed (1) they understand it is the sole responsibility of Sumitomo Corporation to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

¹ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

² The Green Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications & Trading Association and are available at <https://www.lsta.org/content/green-loan-principles/>.

³ The Sumitomo Corporation Green Finance Framework will be available on Sumitomo Corporation’s website at (After March 2022): <https://www.sumitomocorp.com/en/jp/sustainability/greenfinance>

⁴ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Sumitomo Corporation.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond and loan proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date set stated herein, Sumitomo Corporation is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond and loan proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Sumitomo Corporation has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Sumitomo Corporation Green Finance Framework

Sustainalytics is of the opinion that the Framework is credible and impactful, and aligns with the four core components of the GBP and GLP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The four eligibility categories for the green finance use of the proceeds– Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, and Energy Efficiency are recognized by the GBP and GLP as project categories that provide clear environmental benefits. Please see Section 3 for Sustainalytics' assessment on impact of the use of proceeds.
 - For refinancing of existing projects, Sumitomo Corporation has set a look-back period, limiting the allocation of proceeds to expenditures for projects implemented within 36 months from the green bond's issuance date and/or the green loan's execution date. Sustainalytics views this to be in line with market practice.
 - Within the Renewable Energy category, the Company has defined that the proceeds raised by green bonds and/or loans will be used to finance the investment, development, construction, operation, and maintenance of renewable energy generation by wind, solar, and geothermal power. In this category, Sustainalytics positively assesses the following points as being aligned with market practice:
 - Financing of solar and wind energy projects.
 - With regard to geothermal power generation projects, the proceeds will be allocated only to projects with direct CO₂ emissions of less than 100 g/kWh.
 - Regarding investment to corporations, allocation of proceeds is limited to pure players who engage exclusively in, or generates at least 90% of their sales from renewable energy business that meets the eligibility criteria set under the Framework.
 - In the category of the Environmentally Sustainable Management of Living Natural Resources and Land Use, Sumitomo Corporation intends to allocate the proceeds to finance acquisition of forests that have obtained FSC certifications from the Forest Stewardship Council (FSC), an international organization that certifies forests. Sumitomo Corporation Group operates a

forestry business for owning forests, logging, selling timber, and planting/growing forests. Certified forests will be acquired in order to engage in sustainable forest management and to expand sales of certified timber. Sustainalytics views the setting of the eligibility criteria based on this forestry certification program to be in line with market practice. Please see Appendix 1 for more details on Sustainalytics' evaluation.

- In the Clean Transportation category, Sumitomo Corporation intends to allocate the proceeds to the operation and maintenance of urban passenger railway projects. Sumitomo Corporation commits to Sustainalytics that the proceeds will be allocated only to projects related to railway vehicles that are powered by electricity or with direct CO₂ emissions less than 50g CO₂/per passenger-km. Sustainalytics views the setting of such restriction to be in line with market practice.
- In the Energy Efficiency category, the Company intends to allocate proceeds for upgrading mobile network to 5G from the existing 4G or earlier generation, with investment in construction and operation of poles and antennas that telecommunication carriers commonly utilize for their 5G network. With the investment, this service of sharing 5G base stations enables a certain level of network coverage with fewer base stations compared to when each operator installs poles and antennas individually, which leads to less required resource including lower power consumption. While Sustainalytics recognizes that the expansion of 5G networks will potentially increase the overall demand for electricity, it positively evaluates the use of proceeds, considering that the technology contributes to improve energy efficiency. Sustainalytics also encourages Sumitomo Corporation to report on estimated or achieved energy efficiency gains though its service of 5G base stations sharing, where feasible.
- Project Evaluation and Selection:
 - Sumitomo Corporation's Finance Department creates a list of candidate projects and based on the eligibility criteria, selects the eligible projects with the support of the Corporate Sustainability Department. The final decision is made by the Company's Chief Financial Officer.
 - The Company has due diligence and monitoring processes for managing environmental and social risks associated with the eligible projects. These processes are applicable to all allocation decisions made under the Framework. Sustainalytics considers that the Company's processes for managing environmental and social risks to be adequate. For more details, please see Section 2.
 - Based on the clear delineation of responsibility for project evaluation and selection, Sustainalytics considers these processes to be in line with market practice.
- Management of Proceeds:
 - The Finance Department tracks and monitors the proceeds once a year, using an internal management system. The Company intends to allocate the full amount of the proceeds to projects that meet the eligibility criteria within approximately three years from the green bond's issuance date and/or the green loan's execution date. Sumitomo Corporation commits that any unallocated proceeds generated from the sale of assets or for other reasons will be reallocated to other projects that meet the eligibility criteria. The Company intends to manage an amount equal to the unallocated proceeds in cash or cash equivalents.
 - Based on the defined allocation timeframe and disclosure around management method for unallocated proceeds, Sustainalytics views this process to be in line with market practice.
- Reporting:
 - Sumitomo Corporation intends to report on the allocation of the proceeds and environmental benefits annually on its website until the full allocation of green finance proceeds.
 - Allocation Reporting will include the amount of allocated proceeds and number of financed projects by project category, amount of unallocated proceeds and planned timing of allocation, and management method for unallocated proceeds.
 - Impact Reporting will include quantitative and qualitative indicators by category to the extent reasonably practicable. Specifically, achieved annual reduction in CO₂ emissions (t-CO₂) and power generation capacity (MW) for Renewable Energy; forest area acquired (ha); the number of stations and route distance (Km) for Clean Transportation; and case studies of facilities installed with 5G base stations, will be disclosed.
 - Based on the Company's commitment to report on the allocation as well as environmental benefits, Sustainalytics consider the Company's reporting to be in line with market practice.

Alignment with Green Bond Principles 2021 and Green Loan Principles 2021

Sustainalytics has determined that the Sumitomo Corporation Green Finance Framework aligns to the four core components of the GBP and GLP. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of Sumitomo Corporation

Contribution of framework to Sumitomo Corporation's sustainability strategy

In accordance with its corporate mission⁵, Sumitomo Corporation aims to “enhance its sustainability management” to achieve sustainable growth while working to solve environmental and social issues.⁶ In June 2020, the Company selected the following six key environmental and social areas that it should prioritize:⁷ (i) Mitigation of Climate Change; (ii) Circular Economy; (iii) Respect for Human Rights; (iv) Development of Local Society and Economy; (v) Improvement of the Living Standard; And (vi) Quality Education. Under each area, the Company set long-term goals. In May 2021, the Company set medium-term goals along with action plans.⁸

Within the Mitigation of Climate Change area, the Company set the long-term goal of achieving carbon neutrality in 2050 for the entire Group.⁹ As a medium-term goal, the Group aims to reduce its CO₂ emissions by 50% or more by 2035 from the level in 2019.¹⁰ It also aims to reduce indirect CO₂ emissions from its fossil fuel upstream business by 90% or more and to reduce CO₂ emissions from its power generation business by 40% or more respectively by 2035 from the level in 2019. Intending to gradually shift its power generation portfolio toward energy sources with low environmental loads, the Company aims to increase the share of renewable energy generation capacity (net ownership basis) in its portfolio from 20% in 2020 to 30% by 2035.¹¹

Furthermore, as one of the medium-term goals to realizing sustainable energy cycles, it aims to increase the supply of renewable energy to 3GW or more by 2030.¹² In Japan, the Company operates six solar power plants and two wind power plants in the renewable energy business.¹³ Additionally, the Company engages in geothermal power operations in Indonesia¹⁴ and offshore wind power operations in Europe.¹⁵ The Company engages in sustainable forestry management and has obtained FSC (Forest Stewardship Council) certificates from the FSC for part of its 2.66 million hectares of forest areas in Russia and a large part of its 52,000 hectares of forest areas in New Zealand.¹⁶

To enhance the business structures for contributing to the realization of a carbon-neutral society, in April 2021, the Company launched the “Energy Innovation Initiative (EII)” for building decarbonating/recycling energy systems across the organization, as a high-priority measure in its medium-term management plan.¹⁷

Given the above, Sustainalytics is of the opinion that the Framework by Sumitomo Corporation aligns with its sustainability policies, goals, and initiatives, and promotes the Company's contribution to the mitigation of climate change through its business.

⁵ Sumitomo Corporation, “Corporate Mission Statement”, at: <https://www.sumitomocorp.com/en/jp/about/policy/principles>

⁶ Sumitomo Corporation, “Enhancing Sustainability Management”, at: <https://www.sumitomocorp.com/en/jp/sustainability/management>

⁷ Sumitomo Corporation, “Enhancing Sustainability Management”, at: <https://www.sumitomocorp.com/en/jp/sustainability/management>

⁸ Sumitomo Corporation, “New Medium-Term Management Plan 2021–2023”, at: https://www.sumitomocorp.com/jp/-/media/Files/hq/ir/report/summary/2020/en/2103_0510Presentaion-ENG_X1nM.pdf?la=en

⁹ Sumitomo Corporation, “New Medium-Term Management Plan 2021–2023”, at: https://www.sumitomocorp.com/jp/-/media/Files/hq/ir/report/summary/2020/en/2103_0510Presentaion-ENG_X1nM.pdf?la=en

¹⁰ Sumitomo Corporation, “New Medium-Term Management Plan 2021–2023”, at: https://www.sumitomocorp.com/jp/-/media/Files/hq/ir/report/summary/2020/en/2103_0510Presentaion-ENG_X1nM.pdf?la=en

¹¹ Sumitomo Corporation, “Response to Climate Change”, at: <https://www.sumitomocorp.com/en/jp/sustainability/environmental-management/climate>

¹² Sumitomo Corporation, “New Medium-Term Management Plan 2021–2023”, at: https://www.sumitomocorp.com/jp/-/media/Files/hq/ir/report/summary/2020/en/2103_0510Presentaion-ENG_X1nM.pdf?la=en

¹³ Sumitomo Corporation, “Contributing to the sustainable development of local communities and the global environmental protection through the renewable energy business in Japan”, at: <https://www.sumitomocorp.com/en/jp/business/case/group/photovoltaic>

¹⁴ Sumitomo Corporation, “Sustaining Indonesia's power supply with geothermal power generation”, at: <https://www.sumitomocorp.com/en/jp/business/case/group/geothermal>

¹⁵ Sumitomo Corporation, “Participation in European offshore wind power projects”, at: <https://www.sumitomocorp.com/en/jp/business/case/group/wind-power>

¹⁶ Sumitomo Corporation, “ESG Communication Book 2021”, at: <https://www.sumitomocorp.com/jp/-/media/Files/hq/sustainability/report/esg/esg-all.pdf?la=en>

¹⁷ Sumitomo Corporation, “New Medium-Term Management Plan 2021–2023”, at: https://www.sumitomocorp.com/jp/-/media/Files/hq/ir/report/summary/2020/en/2103_0510Presentaion-ENG_X1nM.pdf?la=en

Approach to managing environmental and social risks associated with the projects

Sustainalytics is aware that while the eligible projects defined in the Framework are expected to provide environmental benefits, they are also exposed to environmental and social risks. Major risks related to the development/operation of power generation facilities, operation of railway facilities, and construction of 5G base stations include the following: biodiversity loss and adverse impacts on scenery; noise and vibration; air pollution; safety of passengers and workers; and human right violation in supply chains for acquiring minerals. By the processes and policies described below, Sumitomo Corporation manages and mitigates environmental and social risks associated with the eligible projects:

- Sumitomo Corporation has established a companywide framework to manage the social and environmental impacts associated with the Company's business activities. Based on this framework, social and environmental risks in climate change, biodiversity, pollution, resource depletion, local residents' human rights, and workers' human rights will be assessed using a dedicated sheet for all new investments brought to the Investment Committee. The Company also considers the status and result of an Environmental Impact Assessment as part of the assessment process. The Corporate Sustainability Department participates in the deliberations of the Company Investment Committee, and investment decisions are made based on the assessed social and environmental impact.¹⁸ In addition, Sumitomo Corporation explained to Sustainalytics that when investing in railway-related businesses, it conducts technical due diligence using external consultants to identify and analyze accident and failure risks. If any problems are identified, the Company proposes improvement measures to the railway operating companies.
- Post investment, social and environmental risks will be assessed through periodic monitoring and internal auditing of the investee operating companies, and any identified problems will be addressed. If, as a result of the screening of new investments and monitoring, some action has been taken for material social/environmental problem, the matter will be reported or brought for discussion to the Management Council and the Board of Directors. Such risk will be addressed under the supervision of the Board of Directors.¹⁹
- Sumitomo Corporation Group has set the Sumitomo Corporation Group CSR Action Guidelines for Supply Chain Management,²⁰ which specify compliance requirements for the following: Prevention of human right abuses such as forced labor or child labor; Provision of safe and healthy work environments; Protection of the global environment; Ensuring of the safety of products and services; Prevention of corrupt business practices; Appropriate management of information security; Contribution to sustainable regional development; and Timely and appropriate disclosure of information. The Group also requires its suppliers and business partners to comply with the Guidelines, and if it confirms any violation of the Guidelines, it will request correction. The status of improvement leads to consideration of whether or not to continue its business with such offender. Furthermore, the Company set a policy for handling conflict minerals. The Company periodically investigates to prevent use of conflict minerals by businesses involving the Company.²¹
- Sumitomo Corporation Group has set the Environmental Policy²² and commits to the following: Compliance with environmental legislation; Considerations to the preservation of the environment for ecosystems and other ecological communities and the conservation and protection of biodiversity; Response to climate change; Efficient use of resources and energy; Initiative to reduce, reuse, or recycle waste; and Establishment and operation of environmental management systems and the prevention of environmental pollution.
- Sumitomo Corporation Group set the Human Rights Policy,²³ in compliance with the United Nations' Guiding Principles on Business and Human Rights,²⁴ and commits to the following: Implementation of human rights due diligence; Compliance with the relevant laws and international human rights norms; Engagement and dialogue with stakeholders; and In-house education. When operating businesses that involve development, it also commits to complying with the global standards pertaining to the rights of

¹⁸ Sumitomo Corporation, "ESG Communication Book 2021", at: <https://www.sumitomocorp.com/jp/-/media/Files/hq/sustainability/report/esg/esg-all.pdf?la=en>

¹⁹ Sumitomo Corporation, "ESG Communication Book 2021", at: <https://www.sumitomocorp.com/jp/-/media/Files/hq/sustainability/report/esg/esg-all.pdf?la=en>

²⁰ Sumitomo Corporation, "Corporate Social Responsibility", at: <https://www.sumitomocorp.com/en/jp/sustainability/csr>

²¹ Sumitomo Corporation, "ESG Communication Book 2021", at: <https://www.sumitomocorp.com/jp/-/media/Files/hq/sustainability/report/esg/esg-all.pdf?la=en>

²² Sumitomo Corporation, "Environmental Policy and Management Structure, Objectives and Results", at: <https://www.sumitomocorp.com/en/jp/sustainability/environment-policy>

²³ Sumitomo Corporation, "Corporate Social Responsibility", at: <https://www.sumitomocorp.com/en/jp/sustainability/csr>

²⁴ United Nations Information Centre, "Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework" (Japanese only), at: https://www.unic.or.jp/texts_audiovisual/resolutions_reports/hr_council/ga_regular_session/3404/

indigenous peoples and local communities, including the United Nations Declaration on the Rights of Indigenous Peoples,²⁵ and the principle of “free, prior and informed consent (FPIC).”²⁶

Considering the above overall, Sustainalytics views Sumitomo Corporation has in place adequate systems to manage and mitigate risks associated with the eligible projects.

Section 3: Impact of Use of Proceeds

All four use of proceeds categories are aligned with those recognized by the GBP and GLP. Sustainalytics has focused on three below where the impact is specifically relevant in the local and global context.

Importance of increased use of renewable energy

In 2019, the global electricity sector emitted 13.6 Gt of CO₂, accounting for 41% of energy-related CO₂ emissions.²⁷ According to the Sustainable Development Scenario (SDS),²⁸ in which the International Energy Agency (IEA) depicted the steps to achieve the Paris Agreement climate goals, the electricity sector needs to reduce CO₂ emissions by an average of 4% per year until 2030. Meanwhile, the sector’s reduction of CO₂ emissions in 2019 was 1.3%, far below the level specified by the SDS.²⁹ The Scenario also requires the electricity sector to significantly increase the renewable energy ratio from 27% of the electric power generation in 2019 to about a half by 2030.³⁰

In the category of Renewable Energy, Sumitomo Corporation intends to allocate the green finance proceeds to solar, wind, and geothermal power generation projects in and outside Japan. In Japan, while renewable energy accounted for 18.1% of the total electric power generated in FY2019, fossil-fuel-based thermal power generation accounted for 75.7%.³¹ In April 2021, the Japanese government has committed to reducing greenhouse gas (GHG) emissions by 46% from the level of FY2013 by FY2030,³² and aims to increase the ratio of renewable energy to 36-38 % by FY2030 as a part of the energy mix that is consistent with this commitment.³³ Additionally, the government pledged to achieve net-zero GHG emissions by 2050, and formulated the “Green Growth Strategy,”³⁴ which sets out policy directions and action plans to achieve carbon neutrality by 2050. In this strategy, the government states that it will promote the use of renewable energy, with the reference goal of reaching 50-60% renewable energy share in the country’s energy supply by 2050.

Considering the above, Sustainalytics considers that Sumitomo Corporation’s use of proceeds in the Renewable Energy category will contribute to the reduction of CO₂ emissions by the global electricity sector and to the achievement of the medium- and long-term climate change goals of Japan.

Contribution to the reduction of GHG emissions by sustainable forest management

According to the United Nation’s Intergovernmental Panel on Climate Change (IPCC), the forestry sector (forestry and other land-use changes) can contribute to the reduction of GHG emissions through prevention of emissions to the atmosphere by conserving existing carbon pools accumulated in soils or vegetation, and increasing the size of existing carbon pools and thereby extracting carbon dioxide (CO₂) from the atmosphere.³⁵ On the other hand, deforestation and forest degradation may cause stored GHG to be emitted back into the atmosphere.³⁶ Therefore, preservation and expansion of forests play an important role in reducing GHG emissions. In its special report, “Climate Change and Land,” IPCC considers that sustainable

²⁵ “United Nations Declaration on the Rights of Indigenous Peoples (provisional translation)” (Japanese only), at:

https://www.un.org/esa/socdev/unpfii/documents/DRIPS_japanese.pdf

²⁶ Sumitomo Corporation, “Corporate Social Responsibility”, at: <https://www.sumitomocorp.com/en/jp/sustainability/csr>

²⁷ International Energy Agency (IEA), “Tracking Power 2020”, at: <https://www.iea.org/reports/tracking-power-2020>

²⁸ International Energy Agency (IEA), “Report extract Sustainable Development Scenario (SDS)”, at: <https://www.iea.org/reports/world-energy-model/sustainable-development-scenario>

²⁹ International Energy Agency (IEA), “Tracking Power 2020”, at: <https://www.iea.org/reports/tracking-power-2020>

³⁰ International Energy Agency (IEA), “Tracking Renewable Power 2020”, at: <https://www.iea.org/reports/tracking-renewable-power-2020>

³¹ Agency for Natural Resources and Energy, “FY2019 Energy Supply and Demand Report (Final Figures) (Japanese only)”, at:

<https://www.meti.go.jp/press/2021/04/20210413004/20210413004-1.pdf>

³² “Japan’s Nationally Determined Contribution (NDC)” at: https://www.env.go.jp/earth/ndc/JAPAN_NDC.pdf

³³ Ministry of Economy, Trade and Industry, “Outline of Strategic Energy Plan” (Japanese only), at:

<https://www.meti.go.jp/press/2021/10/20211022005/20211022005-1.pdf>

³⁴ Ministry of Economy, Trade and Industry, “Green Growth Strategy through Achieving Carbon Neutrality in 2050” (Japanese only), at:

<https://www.meti.go.jp/press/2021/06/20210618005/20210618005-3.pdf>

³⁵ Intergovernmental Panel on Climate Change (IPCC), “Climate Change 2014 Synthesis Report”, at:

https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

³⁶ World Wildlife Fund (WWF), “INDC Analysis: An Overview of the Forest Sector”, at:

https://wwfint.awsassets.panda.org/downloads/r2_wwf_indc_brief.pdf

forest management aimed at providing timber, fiber, biomass, non-timber resources and other ecosystem functions and services can lower GHG in the atmosphere by maintaining or enhancing forest carbon stocks. The Panel also believes that sustainable forest management can contribute to climate change adaptation by preventing and reducing land degradation, maintaining land productivity, and reversing the adverse impacts of climate change on land degradation.³⁷

Sumitomo Corporation engages in sustainable forest management within its forestry business. Under the Framework, the Company explains that in the Environmentally Sustainable Management of Living Natural Resources and Land Use category, it will allocate green finance proceeds to acquire FSC-certified forests. Given the above, Sustainalytics is of the opinion that the use of the proceeds contributes to the restoration of forests and soils and to the reduction of GHG emissions by preserving forests.

Contribution to reduction of CO₂ by promoting clean transportation

In 2018, CO₂ emissions from the global transportation sector were approximately 8.2 Gt, accounting for 24% of energy-related CO₂ emissions.³⁸ By means of transportation, road vehicles (passenger and freight) accounted for nearly three-quarters of the sector's CO₂ emissions.³⁹ According to the International Transport Forum (ITF), even if existing commitments by countries to the transportation-related decarbonization efforts is completely fulfilled, CO₂ emissions from the transport sector are expected to increase by 16% by 2050 from the 2015 levels due to increase in transport demand.⁴⁰ The ITF requires that, in order to limit the global average temperature rise to 1.5°C, CO₂ emissions from the transportation sector be reduced by 70% from the 2015 level by 2050.⁴¹ The IEA's "Net Zero by 2050—A Roadmap for the Global Energy Sector" calls for railway transportation, with least consumption of energy and CO₂ emissions among all motorized transportation means, to account for 20% of all passenger transport by 2050 in order to achieve the goal of net-zero emissions by 2050.⁴²

Within the Clean Transportation category, Sumitomo Corporation intends to allocate green finance proceeds to urban passenger railway projects. Given the above, Sustainalytics is of the opinion that Sumitomo Corporation's use of proceeds is expected to promote low-carbon means of transportation and contribute to the emission reduction in the global transportation sector.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bonds and loans issued under the Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Environmentally Sustainable Management of Living Natural Resources and Land Use	15. Life on land	15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
Clean Transportation	11. Sustainable cities and communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in

³⁷ Intergovernmental Panel on Climate Change (IPCC), "Climate Change and Land", at: https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf

³⁸ International Energy Agency (IEA), "Tracking Transport 2020", at: <https://www.iea.org/reports/tracking-transport-2020>

³⁹ International Energy Agency (IEA), "Transport", at: <https://www.iea.org/topics/transport>

⁴⁰ International Transport Forum, "Executive Summary ITF Transport Outlook 2021" at: <https://www.itf-oecd.org/sites/default/files/transport-outlookexecutive-summary-2021-english.pdf>

⁴¹ International Transport Forum, "Executive Summary ITF Transport Outlook 2021" at: <https://www.itf-oecd.org/sites/default/files/transport-outlookexecutive-summary-2021-english.pdf>

⁴² International Energy Agency (IEA), "Net Zero by 2050, A Roadmap for the Global Energy Sector", at: https://iea.blob.core.windows.net/assets/beceb956-0dcf-4d73-89fe-1310e3046d68/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

		vulnerable situations, women, children, persons with disabilities and older persons
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency

Conclusion

Sumitomo Corporation has developed the Sumitomo Corporation Green Finance Framework under which it may issue green bonds and/or loans and use the proceeds to finance and/or refinance projects related to Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, and Energy Efficiency. Sustainalytics considers that the projects funded by the green finance proceeds are expected to provide environmental benefits.

The Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that the Framework is aligned with the overall sustainability strategy of the Company and that the green use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7, 11 and 15. Additionally, Sustainalytics is of the opinion that Sumitomo Corporation has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the proceeds.

Based on the above, Sustainalytics is confident that Sumitomo Corporation is well-positioned to issue green bonds and/or loans and that the Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2021.

Appendices

Appendix 1: Sustainalytics' Analysis of FSC Certification

	Forest Stewardship Council (FSC)
Background	Founded in 1993 after the 1992 Earth Summit in Rio failed to produce any international agreements to fight against deforestation, FSC aims to promote sustainable forest management practice.
Basic Principles	<ul style="list-style-type: none"> • Compliance with laws and FSC principles • Tenure and use rights and responsibilities • Indigenous peoples' rights • Community relations and workers' rights • Benefits from the forests • Environmental impact • Management plans • Monitoring and assessment • Special sites – high conservation value forests (HCVF) • Plantations
Governance	<p>The General Assembly, consisting of all FSC members, constitutes the highest decision-making body.</p> <p>At the General Assembly, motions are proposed by one member, seconded by two more, and deliberated and voted on by all members. Members are entitled to vote to amend the bylaws, initiate new policies, and clarify, amend or overturn a policy decision by the board.</p> <p>Members apply to join one of three chambers – environmental, social, or economic – that are further divided into northern and southern sub-chambers.</p> <p>Each chamber holds 33.3% of the weight in votes, and within each chamber the votes are weighted so that the North and South hold an equal portion of authority, to ensure influence is shared equitably between interest groups and countries with different levels of economic development.</p> <p>The votes of all individual members in each sub-chamber represent 10% of the total vote of the sub-chamber, while the votes of organizational members make up the other 90%.</p> <p>The members vote for the board of directors, which is accountable to the members. There is an international board elected by all members and a US board, elected by the US-based members.</p>
Scope	FSC is a global, multi-stakeholder owned system. All FSC standards and policies are set by a consultative process. There is an FSC Global standard and for certain countries FSC National standards. Economic, social, and environmental interests have equal weight in the standard setting process. FSC follows the ISEAL Code of Good Practice for Setting Social and Environmental Standards.
Chain-of-Custody	<ul style="list-style-type: none"> • The Chain-of-Custody (CoC) standard is evaluated by a third-party body that is accredited by FSC and compliant with international standards. • CoC standard includes procedures for tracking wood origin. • CoC standard includes specifications for the physical separation of certified and non-certified wood, and for the percentage of mixed content (certified and non-certified) of products. • CoC certificates state the geographical location of the producer and the standards against which the process was evaluated. Certificates also state the starting and finishing point of the CoC.
Non-certified wood sources	FSC's Controlled Wood Standard establishes requirements to participants to establish supply-chain control systems, and documentation to avoid sourcing materials from controversial sources, including:

	<ul style="list-style-type: none"> a. Illegally harvested wood, including wood that is harvested without legal authorization, from protected areas, without payment of appropriate taxes and fees, using fraudulent papers and mechanisms, in violation of CITES requirements, and others, b. Wood harvested in violation of traditional and civil rights, c. Wood harvested in forests where high conservation values are threatened by management activities, d. Wood harvested in forests being converted from forests and other wooded ecosystems to plantations or non-forest uses, e. Wood from management units in which genetically modified trees are planted.
Accreditation/verification	<p>FSC-accredited Certification Bodies (CB) conduct an initial assessment, upon successful completion companies are granted a 5-year certificate. Companies must undergo an annual audit every year and a reassessment audit every 5 years. Certification Bodies undergo annual audits from Accreditation Services International (ASI) to ensure conformance with ISO standard requirements.</p>
Conclusion	<p>Sustainalytics views FSC as a robust, credible standard that are based on comprehensive principles and criteria that are aligned with ISO. The scheme has received praise for its contribution to sustainable forest management practices⁴³ and has also faced criticism from civil society actors.⁴⁴ In certain instances, the standards goes above and beyond national regulation and are capable of providing a high level of assurance that sustainable forest management practices are in place. However, in other cases, the standard is similar or equal to national legislation and provide little additional assurance. Ultimately, the level of assurance that can be provided by the scheme is contingent upon several factors including the certification bodies conducting audits, national regulations and local context.</p>

⁴³ FESPA, "FSC, PEFC and ISO 38200", (2018), at: <https://www.fespa.com/en/news-media/blog/fsc-pefc-and-iso-38200>.

⁴⁴ Yale Environment 360, "Greenwashed Timber: How Sustainable Forest Certification Has Failed", (2018), at: <https://e360.yale.edu/features/greenwashed-timber-how-sustainable-forest-certification-has-failed>.

Appendix 2: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Sumitomo Corporation
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	Sumitomo Corporation Green Finance Framework
Review provider's name:	Sustainalytics
Completion date of this form:	February 21, 2022
Publication date of review publication:	
Original publication date <i>[please fill this out for updates]</i> :	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Clean Transportation, Energy Efficiency, are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 11 and 15.

Use of proceeds categories as per GBP:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input checked="" type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP | <input type="checkbox"/> Other (please specify): |

If applicable please specify the environmental taxonomy, if other than GBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Sumitomo Corporation's Finance Department selects eligible projects based on the eligibility criteria with the support of the Corporate Sustainability Department. The final decision is made by the Chief Financial Officer. The Company has in place processes for managing environmental and social risks associated with the eligible projects. These processes are applicable to all allocation decisions made under the Framework. Sustainalytics views that Sumitomo Corporation's processes for evaluating and selecting projects are in line with market practice.

Evaluation and selection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |

- Summary criteria for project evaluation and selection publicly available Other (*please specify*):

Information on Responsibilities and Accountability

- Evaluation / Selection criteria subject to external advice or verification In-house assessment
- Other (*please specify*):

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

The Finance Department tracks and monitors the proceeds once a year, using an internal management system. The Company intends to allocate, the full amount of the proceeds to projects that meet the eligibility criteria within approximately three years from the green bond's issuance date and/or the green loan's execution date. The Company intends to manage an amount equal to the unallocated proceeds in cash or cash equivalents. Sumitomo Corporation's management of proceeds is in line with market practice.

Tracking of proceeds:

- Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- Disclosure of intended types of temporary investment instruments for unallocated proceeds
- Other (*please specify*):

Additional disclosure:

- Allocations to future investments only Allocations to both existing and future investments
- Allocation to individual disbursements Allocation to a portfolio of disbursements
- Disclosure of portfolio balance of unallocated proceeds Other (*please specify*):

4. REPORTING

Overall comment on section (*if applicable*):

Sumitomo Corporation intends to report on the allocation of the proceeds and environmental benefits annually on its website until the full allocation of green finance proceeds. This report will include the amount of allocated and unallocated proceeds, planned timing of allocation and management method for unallocated proceeds, as well as quantitative or qualitative environmental performance indicators. Sustainalytics considers Sumitomo Corporation's reporting is in line with market practice.

Use of proceeds reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (please specify):

Information reported:

- Allocated amounts
 Green Bond financed share of total investment
- Other (please specify): Amount of unallocated proceeds and planned timing of allocation, and management method for unallocated proceeds

Frequency:

- Annual
 Semi-annual
- Other (please specify):

Impact reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (please specify):

Information reported (expected or ex-post):

- GHG Emissions / Savings
 Energy Savings
- Decrease in water use
 Other ESG indicators (please specify): Power generation capacity (MW) of renewable energy; forest area acquired (ha); the number of stations and route distance (Km) for Clean Transportation; and case studies of facilities installed with 5G base stations

Frequency

- Annual
 Semi-annual
- Other (please specify):

Means of Disclosure

- Information published in financial report
 Information published in sustainability report
- Information published in ad hoc documents
 Other (please specify): The Company's website

- Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. **Second-Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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