# **Second-Party Opinion**

# Marubeni Corporation Green Bond Framework



#### **Evaluation Summary**

Sustainalytics is of the opinion that the Marubeni Corporation Green Bond Framework is credible and impactful and aligns to the four core components of the Green Bond 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, Sustainable Water and Wastewater Management, and Pollution Prevention and Control, 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 SDGs 6, 7,12 and 15.



**PROJECT EVALUATION / SELECTION** Marubeni Corporation's process for evaluating and selecting projects is managed by the Finance Department. The Finance Department, in consultation with the Sustainability Management Department as well as relevant business units, checks the eligible green project candidates and confirms the alignment between the projects and the eligible criteria defined in the Framework. The CFO makes the final decision regarding the projects selected through this process. The process of prior assessment of environmental and social risks using Marubeni's sustainability assessment tool is applied to all allocation decisions made under the Framework. Sustainalytics considers this risk management system to be adequate. Sustainalytics considers the project selection process in line with market practice.



**MANAGEMENT OF PROCEEDS** Marubeni Corporation's process for the management of proceeds is implemented through the Finance Department. Using an internal management system, Marubeni Corporation tracks and manages the status of proceeds' allocation to eligible projects at least once a year. In cases where any proceeds remain unallocated, the amount equal thereto will be managed in cash and cash equivalents. Marubeni Corporation's processes for management of proceeds is in line with market practice.



**REPORTING** Until full allocation of the proceeds, Marubeni Corporation intends to report on the proceeds' allocation status and positive environmental impacts on its website once a year. Marubeni Corporation is also committed to reporting relevant impact indicators and obtaining post issuance reviews from an independent reviewer. Sustainalytics views Marubeni Corporation's allocation and impact reporting as aligned with market practice.

Evaluation Date	August 26, 2021
Issuer Location	Tokyo, Japan

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#### Introduction

Marubeni Corporation (hereinafter "Marubeni" or the "Company") is Japan's leading trading company founded in 1858, with over 100 locations across more than 60 countries and regions in the world and with 45,470 Group employees (as of March 31, 2021). The company is engaged in diversified business activities, including importing and exporting, as well as domestic business, and offers various services, and makes internal and external investments, and is involved in resource development in a wide range of fields, including lifestyle, ICT & real estate business, forest products, food, agribusiness, chemicals, energy, metals & mineral resources, power business, infrastructure project, aerospace & ship, finance & leasing business, construction, industrial machinery & mobility, and next generation business development.

Marubeni has developed the Marubeni Corporation Green Bond Framework (the "Framework") under which it intends to issue green bond and use the proceeds to finance and/or refinance, projects that deliver environmental benefits. The Framework defines eligibility criteria in four areas:

- Renewable Energy
- 2. Environmentally Sustainable Management of Living Natural Resources and Land Use
- 3. Sustainable Water and Wastewater Management
- 4. Pollution Prevention and Control

Marubeni engaged Sustainalytics to review the Marubeni Corporation Green Bond Framework, dated August 2021, and provide a Second-Party Opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2021 (GBP). This Framework has been published in a separate document.

#### Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent<sup>3</sup> 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;
- 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 1.10.1, 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 Marubeni's Finance Department 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. Marubeni representatives have confirmed (1) they understand it is the sole responsibility of Marubeni 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.

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 Marubeni.

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

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

<sup>&</sup>lt;sup>2</sup> The Marubeni Corporation Green Bond Framework is available on Marubeni Corporation's website at: https://www.marubeni.com/en/sustainability/greenbond/

<sup>&</sup>lt;sup>3</sup> 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.



standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond 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.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond 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 Marubeni has made available to Sustainalytics for the purpose of this Second-Party Opinion.

# Sustainalytics' Opinion

# Section 1: Sustainalytics' Opinion on the Marubeni Corporation Green Bond Framework

Sustainalytics is of the opinion that the Marubeni Corporation Green Bond Framework is credible and impactful, and aligns to the four core components of the GBP. Sustainalytics highlights the following elements of Marubeni's Green Bond Framework:

- Use of Proceeds:
  - The eligible categories Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Sustainable Water and Wastewater Management, and Pollution Prevention and Control – are aligned with those recognized by the GBP.
  - For existing projects, Marubeni does not set a look-back period, as refinancing is limited to equity investments and CAPEX. Sustainalytics considers this to be aligned with market practice.
  - The company has committed to Sustainalytics that when it makes equity investments, it will only
    invest in pure players who engage exclusively in, or generate at least 90% of their sales from the
    businesses that meet the eligibility criteria defined in the Framework.
  - In the Renewable Energy category, Marubeni intends to allocate the proceeds to financing or refinancing to investment, development, construction, management, and/or operation & maintenance of solar, wind, geothermal, biomass, and hydro power generation facilities. Sustainalytics positively assesses the Company's use of proceeds, considering the following elements:
    - All Renewable Energy projects are limited to those with the CO<sub>2</sub> emission amount of less than 100 q CO<sub>2</sub>/kWh.
    - Regarding biomass power generation, Marubeni intends to invest in facilities that use virgin wood (wood pellets) from sustainable forest management certified by Forest Stewardship Council (FSC).
    - Hydro projects are limited to those with up to 25 MW in installed capacity.
  - In the Environmentally Sustainable Management of Living Natural Resources and Land Use category, Marubeni intends to allocate the proceeds to tree planting, management, operation & maintenance, and research & development in relation to afforestation that has received international third-party forest certifications: FSC certification and Programme for the Endorsement of Forest Certification (PEFC). Sustainalytics positively assesses this use of proceeds. Please see Appendix 1 for how Sustainalytics assesses each of these forest certifications.
  - In the Sustainable Water and Wastewater Management category, Marubeni intends to allocate the proceeds to investment, development, construction, management, and/or operation & maintenance related to water and sewage projects. Sustainalytics views that water and sewage projects help reduce natural environment pollution in local communities and mitigate negative impacts on human health from unpurified water. Sustainalytics positively assesses the Company's environmentally friendly water and sewage projects.
  - In the Pollution Prevention and Control category, Marubeni intends to focus the proceeds on investment, research & development, and equipment investment related to magnesium refining business. Recycling methods will include (1) extracting magnesium components from mine



tailings and producing virgin metal by electrolytic smelting, and (2) producing recycled alloy by recycling magnesium scraps.

- Sustainalytics notes that Marubeni intends to finance a specific project of magnesium extraction from tailings deposited in an abandoned mine site, and that primary magnesium will be derived from electrolysis process powered by renewable energy (i.e., low-carbon hydro) with an estimate of substantially lower GHG emissions than (approximately 95% lower than) conventional process<sup>4</sup>. Nonetheless, Sustainalytics encourages the Company to monitor and report on emissions intensity.
- With regard to (2), Marubeni procures magnesium scraps derived from manufacturing and processing plants from external scrap dealers, and recycles them. Sustainalytics considers this use of proceeds to be aligned with market practice.

#### Project Evaluation and Selection:

- Marubeni Corporation's process for evaluating and selecting projects is managed by the Finance Department. The Finance Department, in consultation with the Sustainability Management Department as well as relevant business units, checks the eligible green project candidates and confirms the alignment between the projects and the eligiblility criteria defined in the Framework. The CFO makes the final decision regarding the projects selected through this process. Sustainalytics considers this process to be aligned with market practice.
- Marubeni has a process in place for the prior assessment of environmental and social risks related to investment, loans, and development projects by using its Sustainability Assessment Tool. This process is applied to all allocation decisions made under the Framework. With regard to human rights, the Company sets out its Human Rights Policy<sup>5</sup> and manages relevant risks under the Sustainability Assessment Tool. Sustainalytics views that the Company's system for managing environmental and social risks is adequate and is aligned with market practice. Please see Section 2 for details.

#### Management of Proceeds:

- Using an internal management system, the Finance Department tracks and manages the status of proceeds' allocation to eligible projects at least once a year. Marubeni intends to complete the allocation of proceeds within 12 months after the bond issuance. In cases where any proceeds remain unallocated, the amount equal thereto will be managed in cash and cash equivalents.
- Sustainalytics views that the Company's regular tracking and management of the proceeds, the
  expected allocation period of the proceeds, and the method for managing unallocated proceeds
  are all aligned with market practice.

#### Reporting:

- After the green bond issuance, until full allocation of the proceeds, Marubeni intends to report
  on the proceeds' allocation status and positive environmental impacts on its website once a
  year.
- Regarding the proceeds' allocation status, the amount of allocation and the outstanding balance of unallocated funds will be disclosed on a project portfolio basis.
- Regarding positive environmental impacts, Marubeni is committed to reporting relevant quantitative metrics, such as the amount of CO<sub>2</sub> emissions reduced and the planting area of afforestation, depending on project categories.
- It is also committed to obtaining post issuance reviews from an external review provider.
- Based on the proceeds' allocation status, the frequency and availability of impact reporting, and Marubeni's commitment to obtaining post issuance reviews, Sustainalytics considers the Company's reporting to be aligned with market practice.

#### **Alignment with Green Bond Principles 2021**

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

<sup>&</sup>lt;sup>4</sup> Marubeni Corporation, Press release, at: https://www.marubeni.com/en/news/2019/release/20191212E.pdf

<sup>&</sup>lt;sup>5</sup> Marubeni Corporation, "Respect for Human Rights", at: <a href="https://www.marubeni.com/en/sustainability/social/human\_rights/">https://www.marubeni.com/en/sustainability/social/human\_rights/</a>



#### Section 2: Sustainability Strategy of Marubeni

#### Contribution of framework to Marubeni Corporation's sustainability strategy

In its Management Philosophy,<sup>6</sup> Marubeni is committed to contributing to solving environmental and social issues through business activities. It is working on sustainability with focus on the following four categories of Environmental and Social Materiality: (1) Climate Change, (2) Sustainable Forestry, (3) Human Rights and Co-development with Communities, and (4) Sustainable and Resilient Value Chains.<sup>7</sup>

As efforts to address climate change, Marubeni has formulated a long-term vision on climate change,  $^8$  which aims for achieving net-zero GHG emissions by 2050 and contributing to low-carbon/carbon-free goals through business activities. Within the Action Plans towards 2030,  $^9$  consistent with these goals, Marubeni has set the following targets: Against the 2019 level, halve the  $CO_2$  emissions emitted by Marubeni and its consolidated subsidiaries (Scope 1 and Scope 2); and, against the 2019 level, reduce by one fifth the  $CO_2$  emissions emitted by associate investees of the Marubeni Group (Scope 3, Category 15 (Investments)). Another target is to expand the volume of carbon stocks in its forests from about 11 million tons of  $CO_2$  equivalents in 2021 to 19 million tons. This will be achieved by enlarging afforestation, growing stock of forest per unit area, and through the proper management of managed forests.

As its climate change countermeasures, the Company aims to double its "Green Revenue" to 1.3 trillion yen by FY2023 compared with FY2017. <sup>10</sup> Green revenue is defined as sales from six businesses, including businesses dealing in power generation from renewable energy sources; products certified as contributing to sustainable forestry, fisheries, etc.; businesses (recycling-related, etc.) contributing to waste reduction; businesses (water business, etc.) contributing to efficient use of resources; businesses (real estate, etc.) contributing to environmental impact; and businesses that contribute to the dissemination of EVs (electric vehicles). In terms of renewable energy business, Marubeni engages in solar, wind, geothermal, biomass, and micro-scale hydro-power generation. It aims to increase the proportion of renewable energy power generation in the net generation capacity by its asset to approximately 20% by 2023.<sup>11</sup>

Based on Marubeni's abovementioned policies and goals, Sustainalytics is of the opinion that the use of proceeds defined in the Framework is in alignment with the Company's sustainability strategy and supports its initiatives to address key environmental and social issues.

#### Well-positioned to address common environmental and social risks associated with the projects

Sustainalytics recognizes that while eligible projects defined in the Framework are expected to provide positive environmental impacts, they are exposed to environmental and social risks. Major risks include adverse effects on ecosystems, noise and vibration, air pollution, workers health and safety, associated with the development and operation of large-scale facilities such as power generation and recycling facilities, as well as environmental and social risks related to production sites for biomass fuel. In addition, as some of eligible projects under the Renewable Energy category are located in Saudi Arabia, there might be risks associated with the human rights issues that the country is having. Sustainalytics is of the opinion that Marubeni is well positioned to manage and reduce environmental and social risks associated with eligible projects through the following policies and measures:

Before embarking on new business loans and investments and pushing forward with development projects, Marubeni uses a sustainability assessment tool<sup>12</sup> to identify environmental and social risks associated with each project. For environmental risk assessment, the Company examines the implementation status of environmental impact assessment required by laws and regulations in the countries and regions where it operates and, based on its own standards, assesses items such as climate change, environmental pollution, biodiversity, resource management, countermeasures, and management procedures. Social risk assessment mainly covers occupational safety and health and

<sup>&</sup>lt;sup>6</sup> Marubeni Corporation, "Marubeni Management Philosophy", at: https://www.marubeni.com/en/company/policy/

<sup>7</sup> Marubeni Corporation, "Materiality for Marubeni Group", at: https://www.marubeni.com/en/sustainability/group/materiality/

<sup>&</sup>lt;sup>8</sup> Marubeni Corporation, "The Marubeni Long-Term Vision on Climate Change: Towards Net-Zero GHG Emissions", at: <a href="https://www.marubeni.com/en/news/2021/release/data/20210309E.pdf">https://www.marubeni.com/en/news/2021/release/data/20210309E.pdf</a>

<sup>&</sup>lt;sup>9</sup> Marubeni Corporation, "The Marubeni Long-Term Vision on Climate Change: Towards Net-Zero GHG Emissions", at: https://www.marubeni.com/en/news/2021/release/data/20210309E.pdf

<sup>&</sup>lt;sup>10</sup> Marubeni Corporation, "Materiality for Marubeni Group", at: https://www.marubeni.com/en/sustainability/group/materiality/

<sup>&</sup>lt;sup>11</sup> Marubeni Corporation, "Climate Change", at: https://www.marubeni.com/en/sustainability/environment/approach/

<sup>12</sup> Marubeni Corporation, "Our Views on Sustainability and Organization", at: https://www.marubeni.com/en/sustainability/group/index.html



human rights. If any risk is identified, the Company conducts additional examination and sees how the situation is improved until all concerns are gone.

- The Company has formulated its Basic Policy on Human Rights<sup>13</sup> and is committed to complying with human rights-related international standards, such as the UN's Universal Declaration of Human Rights,<sup>14</sup> and applicable laws and regulations of the countries and regions where it operates.
- The Company has formulated its Basic Policy on Occupational Health and Safety, 15 which commits to (1) Continuous improvement of occupational health and safety management system, (2) Compliance with applicable laws and regulations, (3) Fostering safety awareness through training, (4) Risk reduction and continuous improvement of work environment, (5) Support for maintaining and promoting health, and (6) Highly transparent information disclosure. In this way, it is working to ensure healthy, safe working environments for all Group employees and executives, as well as contractors, business partners, other relevant stakeholders working at labor sites.
- To reduce environmental and social risks throughout its supply chain, the Company has formulated its Basic Supply Chain Sustainability Policy, 16 which sets forth guidelines on (1) Observance of laws, (2) Respect for human rights, (3) Conservation of the environment, (4) Fair transactions, (5) Safety and health, (6) Quality control, and (7) Disclosure of information, and requires business partners to comply with them. In an event that a vendor has failed to meet labor standards specified in these guidelines, the Company requires the vendor to make improvements and, based on the progress of improvement measures taken, examines whether to continue its relationship with the vendor.
- Marubeni has formulated its Forest Management Policy,<sup>17</sup> which applies to woodchip manufacturing and forest plantation operations. Based on this policy, the Company commits to complying with international standards relevant to the forestry industry and has set 12 guidelines on sustainable forest management, including forbiting forest plantation operations in forests with high conservation value (HCV) and on peatland. It also commits to not tolerating any form of child labor or forced labor and to following the principle of Free, Prior and Informed Consent (FPIC) when starting new forestry operations on the lands where indigenous and local communities hold legal or customary rights. Regarding the procurement of woodchips for biomass fuel, the Company commits itself, in its Procurement Policy for forest-derived products, <sup>18</sup> to not handling procured products produced from illegally logged timber, products procured from suppliers involved in severe environmental and social controversies, such as the destruction of HCV forests, and products from genetically modified wood. The Company also commits itself to promoting the handling of materials certified by credible international forest certification systems. It also conducts due diligence on its suppliers in order to achieve product procurement based on the Procurement Policy.

#### **Section 3: Impact of Use of Proceeds**

All four use of proceeds categories are aligned with those recognized by the GBP as project categories that generate positive environmental impacts. Sustainalytics has focused on two below where the impact is specifically relevant in the local context.

#### Importance of promoting renewable energy

 $CO_2$  emissions from the global power sector in 2019 was 13.6 Gt, accounting for 41% of energy-related  $CO_2$  emissions. Paccording to the International Energy Agency (IEA)'s Sustainable Development Scenario (SDS), a scenario in line with climate targets of the Paris Agreement, the power sector needs to reduce  $CO_2$  emissions by 4% annually on average by 2030. In 2019, however, the sector reduced  $CO_2$  emissions only by 1.3%, significantly lower than the level suggested by the SDS. The SDS also requires the sector to dramatically increase the proportion of renewable energy in power generation from 27% in 2019 to approximately 50% by 2030.

In the Renewable Energy category, Marubeni intends to allocate the green bond proceeds to projects related to solar, wind, geothermal, biomass, and hydro power generation inside and outside Japan. In Japan in FY2019,

<sup>13</sup> Marubeni Corporation, "Respect for Human Rights", at: https://www.marubeni.com/en/sustainability/social/human\_rights/

<sup>&</sup>lt;sup>14</sup> Office of the High Commissioner for Human Rights (UN Human Rights), "The Universal Declaration of Human Rights", at: <a href="https://www.ohchr.org/EN/UDHR/Pages/UDHRIndex.aspx">https://www.ohchr.org/EN/UDHR/Pages/UDHRIndex.aspx</a>

<sup>15</sup> Marubeni Corporation, "Ensuring Occupational Health and Safety", at: https://www.marubeni.com/en/sustainability/social/safety/

<sup>16</sup> Marubeni Corporation, "Basic Supply Chain Sustainability Policy", at: https://www.marubeni.com/en/sustainability/social/supply\_chain/

<sup>&</sup>lt;sup>17</sup> Marubeni Corporation, "Sustainable Forestry", at: <a href="https://www.marubeni.com/en/sustainability/environment/forest/">https://www.marubeni.com/en/sustainability/environment/forest/</a>

<sup>&</sup>lt;sup>18</sup> Marubeni Corporation, "Sustainable Forestry", at: <a href="https://www.marubeni.com/en/sustainability/environment/forest/">https://www.marubeni.com/en/sustainability/environment/forest/</a>

<sup>&</sup>lt;sup>19</sup> International Energy Agency (IEA), "Tracking Power 2020", at : <a href="https://www.iea.org/reports/tracking-power-2020">https://www.iea.org/reports/tracking-power-2020</a>

<sup>&</sup>lt;sup>20</sup> International Energy Agency (IEA), "Report extract Sustainable Development Scenario", at: <a href="https://www.iea.org/reports/world-energy-model/sustainable-development-scenario">https://www.iea.org/reports/world-energy-model/sustainable-development-scenario</a>

<sup>&</sup>lt;sup>21</sup> International Energy Agency (IEA), "Tracking Power 2020", at: https://www.iea.org/reports/tracking-power-2020

<sup>&</sup>lt;sup>22</sup> International Energy Agency (IEA), "Renewable Power", at: https://www.iea.org/reports/tracking-power-2020/renewable-power



while the proportion of renewable energy in total power generation was 18.1%, fossil fuel-based thermal power generation accounted for 75.7%.<sup>23</sup> In April 2021, the Japanese government committed itself to reducing GHG emissions by 46% compared with FY2013 levels by FY2030.<sup>24</sup> As part of the energy mix aligned with this commitment, it is considering to increase the proportion of renewable energy to 36–38% by FY2030.<sup>25</sup> Furthermore, having committed to net-zero GHG emissions by 2050, the government has formulated a Green Growth Strategy,<sup>26</sup> which describes the policy direction and action plan towards achieving carbon neutrality in 2050. In the Strategy, the government expresses its intent to promote the use of renewable energy, setting a reference target of covering 50–60% of electric power generation with renewable energy.

Considering the above, Sustainalytics views that Marubeni's use of proceeds in the Renewable Energy category contributes to the reduction of  $CO_2$  emissions by the global power sector and Japan's achievement of medium- to long-term climate change targets.

#### Contribution to the reduction in GHG emissions through sustainable forest management

According to the UN's Intergovernmental Panel on Climate Change (IPCC), the forest sector (forestry and other land use changes) can contribute to reducing GHG emissions through prevention of emissions to the atmosphere by conserving existing carbon pools in soils or vegetation and through increasing the size of existing carbon pools and thereby extracting carbon dioxide (CO<sub>2</sub>) from the atmosphere.<sup>27</sup> On the other hand, deforestation and forest degradation may cause stored GHG to be emitted back into the atmosphere.<sup>28</sup> The forest sector accounted for 11% of the world's total GHG emissions in 2010.<sup>29</sup> The conservation and expansion of forests plays an important role in reducing GHG emissions.

In the Environmentally Sustainable Management of Living Natural Resources and Land Use category, Marubeni intends to allocate the proceeds to afforestation that have received FSC or PEFC certification mainly in Indonesia, which has been facing deforestation and forest degradation since the 1970s. <sup>30</sup> In Indonesia, 63% of GHG emissions are caused by forestry and other land use changes as well as peatland and forest fires. <sup>31</sup> In its Nationally Determined Contribution (NDC) submitted to the UN in 2021, <sup>32</sup> Indonesia expressed its determination to reduce GHG emissions by 29% by 2030, compared with those in the business-as-usual scenario (Unconditional reduction scenario 1). <sup>33</sup> Furthermore, it eyes the possibility of reducing GHG emissions even by 41% with the help of international communities (Conditional reduction scenario 2). <sup>34</sup> To those ends, Indonesia has set aggressive goals of reducing GHG emissions from the forest sector (land use change and forestry) by 66% compared with 2010 levels by 2030 in Scenario 1 and even by 89% in Scenario 2. The government aims to achieve these goals through such measures as restoring 12 million-hectare degraded land, preventing deforestation and forest degradation, afforestation and reforestation, and sustainable forest management.

<sup>&</sup>lt;sup>23</sup> "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

<sup>&</sup>lt;sup>24</sup> Press conference by the Prime Minister on the greenhouse gas reduction targets and the declaration of a state of emergency," the Office of the Prime Minister", at: <a href="https://www.kantei.go.jp/jp/99\_suga/statement/2021/0422kaiken.html">https://www.kantei.go.jp/jp/99\_suga/statement/2021/0422kaiken.html</a>

<sup>&</sup>lt;sup>25</sup> Ministry of Economy, Trade and Industry, "Outline of the Basic Energy Plan (Draft)", at:

https://www.enecho.meti.go.jp/committee/council/basic\_policy\_subcommittee/2021/046/046\_004.pdf

<sup>&</sup>lt;sup>26</sup> 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

<sup>&</sup>lt;sup>27</sup> 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

<sup>&</sup>lt;sup>28</sup> World Wide Fund for Nature (WWF) , "INDC Analysis: An Overview of the Forest Sector" , at:

https://wwfint.awsassets.panda.org/downloads/r2\_wwf\_indc\_brief.pdf

<sup>&</sup>lt;sup>29</sup> 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

<sup>&</sup>lt;sup>30</sup> Natural Environment Planning Division, Nature Conservation Bureau, Ministry of the Environment, "Forests of the World and Conservation Methods", at: <a href="http://www.env.go.jp/nature/shinrin/fpp/worldforest/index4-2.html">http://www.env.go.jp/nature/shinrin/fpp/worldforest/index4-2.html</a>

<sup>31 &</sup>quot;Updated Nationally Determined Contribution Republic of Indonesia 2021", at:

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/Updated%20NDC%20Indonesia%202021%20-%20corrected%20version.pdf

<sup>32 &</sup>quot;Updated Nationally Determined Contribution Republic of Indonesia 2021", at:

 $<sup>\</sup>frac{https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia\%20First/Updated\%20NDC\%20Indonesia\%202021\%20-\%20corrected\%20version.pdf$ 

<sup>&</sup>lt;sup>33</sup> Unconditional reduction scenario 1 is a GHG emission reduction scenario in which a county makes self-help efforts to reduce emissions without international support.

<sup>&</sup>lt;sup>34</sup> Conditional reduction scenario 2 is a GHG emission reduction scenario in which a county makes self-help efforts and receives international support to reduce emissions.



Based on the above, Sustainalytics is of the opinion that Marubeni's use of proceeds in the Environmentally Sustainable Management of Living Natural Resources and Land Use category contributes to restoring forests and soil in Indonesia, helps it achieve its climate targets, and contributes to global GHG emission reduction through international forest conservation.

#### 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 bond(s) issued under the Marubeni Corporation Green Bond 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
Sustainable Water and Wastewater Management	6. Clean water and sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
Pollution Prevention and Control	12. Responsible consumption and production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

#### Conclusion

Marubeni has developed the Marubeni Corporation Green Bond Framework under which it may issue green bonds and use the proceeds to finance and/or refinance projects related to Renewable Energy, Environmentally Sustainable Management of Living Natural Resources and Land Use, Sustainable Water and Wastewater Management, and Pollution Prevention and Control. Sustainalytics considers that the projects funded by the green bond proceeds are expected to have provide positive environmental impact.

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 Company's sustainability strategy and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 6, 7, 12 and 15. Additionally, Sustainalytics is of the opinion that Marubeni has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is of the opinion that Marubeni is well-positioned to issue green bonds and that the Framework is robust, transparent, and in alignment with the four core components of the GBP.



# **Appendices**

# Appendix 1: Sustainalytics' Analysis of FSC and PEFC Certifications

	FSC	PEFC
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.	PEFC was founded in 1999 in response to the specific requirements of small- and family forest owners as an international umbrella organization providing independent assessment, endorsement and recognition of national forest certification systems.
Basic Principles	<ul> <li>Compliance with laws and FSC principles</li> <li>Tenure and use rights and responsibilities</li> <li>Indigenous peoples' rights</li> <li>Community relations and workers' rights</li> <li>Benefits from the forests</li> <li>Environmental impact</li> <li>Management plans</li> <li>Monitoring and assessment</li> <li>Special sites - high conservation value forests (HCVF)</li> <li>Plantations</li> </ul>	<ul> <li>Maintenance and appropriate enhancement of forest resources and their contribution to the global carbon cycle</li> <li>Maintenance and enhancement of forest ecosystem health and vitality</li> <li>Maintenance and encouragement of productive functions of forests (wood and no-wood)</li> <li>Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems</li> <li>Maintenance and appropriate enhancement of protective functions in forest management (notably soil and water)</li> <li>Maintenance of socioeconomic functions and conditions</li> <li>Compliance with legal requirements</li> </ul>
Governance	The General Assembly, consisting of all FSC members, constitutes the highest decision-making body.  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.  Members apply to join one of three chambers — environmental, social, or economic — that are further divided into northern and southern sub-chambers.  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.  The votes of all individual members in each sub-chamber represent 10% of the total vote of the sub-chamber, while the votes of	PEFC's governance structure is formed by the General Assembly (GA) which is the highest authority and decision-making body. It is made up of all PEFC members, including national and international stakeholders.  Members vote on key decisions including endorsements, international standards, new members, statutes and budgets. All national members have between one and seven votes, depending on membership fees, while international stakeholder members have one vote each.  The Board of Directors supports the work of the GA and together the GA and the Board make the formal approval of final draft standards. Standards are developed by working groups.  In general, PEFC's governance structure is more representative of industry and government stakeholders than of social or environmental groups, which gives industry and governments more influence in the decision-making process. However, the organization does include stakeholders from all sectors.



Scope	organizational members make up the other 90%.  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.  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	Multi-stakeholder participation is required in the governance of national schemes as well as in the standard-setting process. Standards and normative documents are reviewed periodically at intervals that do not exceed five years. The PEFC Standard Setting standard is based on ISO/IEC Code for good practice for standardization (Guide 59)35 and the ISEAL Code of Good Practice for Setting Social and
	Environmental Standards.	Environmental Standards.
Chain-of-Custody	<ul> <li>The Chain-of-Custody (CoC) standard is evaluated by a third-party body that is accredited by FSC and compliant with international standards.</li> <li>CoC standard includes procedures for tracking wood origin.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Quality or environmental management systems (ISO 9001:2008 or ISO 14001:2004 respectively) may be used to implement the minimum requirements for chain-of-custody management systems required by PEFC.</li> <li>Only accredited certification bodies can undertake certification.</li> <li>CoC requirements include specifications for physical separation of wood and percentage-based methods for products with mixed content.</li> <li>The CoC standard includes specifications for tracking and collecting and maintaining documentation about the origin of the materials.</li> <li>The CoC standard includes specifications for the physical separation of certified and non-certified wood.</li> <li>The CoC standard includes specifications about procedures for dealing with complains related to participant's chain of custody.</li> </ul>
Non-certified wood sources	FSC's Controlled Wood Standard	The PEFC's Due Diligence System requires
Non-cerunea wood sources	establishes requirements to participants to establish supply-chain control systems, and documentation to avoid sourcing materials from controversial sources, including:	participants to establish systems to minimize the risk of sourcing raw materials from:  a. forest management activities that do not comply with local, national or international laws related to:
	a. Illegally harvested wood, including wood that is harvested without legal authorization, from protected areas, without payment of appropriate taxes and fees, using	<ul> <li>operations and harvesting, including land use conversion,</li> <li>management of areas with</li> </ul>
	fraudulent papers and mechanisms, in violation of CITES requirements, and others,	designated high environmental and cultural values,
	b. Wood harvested in violation of traditional and civil rights,	<ul> <li>protected and endangered species, including CITES species,</li> </ul>

<sup>&</sup>lt;sup>35</sup> ISO, "ISO/IEC Guide 59:2019", (2019), at: <a href="https://www.iso.org/standard/23390.html">https://www.iso.org/standard/23390.html</a>.

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	<ul> <li>c. Wood harvested in forests where high conservation values are threatened by management activities,</li> <li>d. Wood harvested in forests being converted from forests and other wooded ecosystems to plantations or non-forest uses,</li> <li>e. Wood from management units in which genetically modified trees are planted.</li> </ul>	<ul> <li>health and labor issues,</li> <li>indigenous peoples' property, tenure and use rights,</li> <li>payment of royalties and taxes.</li> <li>genetically modified organisms,</li> <li>forest conversion, including conversion of primary forests to forest plantations.</li> </ul>
Accreditation/verification	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.	Accreditation is carried out by an accreditation body (AB). Like a certification body checks a company meets the PEFC standard, the accreditation body checks that a certification body meets specific PEFC and ISO requirements. Through the accreditation process PEFC has assurance that certification bodies are independent and impartial, that they follow PEFC certification procedures.  PEFC does not have their own accreditation body. Like with the majority of ISO based certifications, PEFC relies on national ABs under the umbrella of the International Accreditation Forum (IAF). National ABs need to be a member of the IAF, which means they must follow IAF's rules and regulations.
Conclusion	comprehensive principles and criteria that a praise for their contribution to sustainable for faced criticism from civil society actors. 37,38 labeyond national regulation and are capab sustainable forest management practices are similar or equal to national legislation and level of assurance that can be provided by	being robust, credible standards that are based on re aligned with ISO. Both schemes have received brest management practices <sup>36</sup> and both have also n certain instances, these standards go above and le of providing a high level of assurance that is in place. However, in other cases, the standards provide little additional assurance. Ultimately, the either scheme is contingent upon several factors audits, national regulations and local context.

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FESPA, "FSC, PEFC and ISO 38200", (2018), at: <a href="https://www.fespa.com/en/news-media/blog/fsc-pefc-and-iso-38200">https://www.fespa.com/en/news-media/blog/fsc-pefc-and-iso-38200</a>.
 Yale Environment 360, "Greenwashed Timber: How Sustainable Forest Certification Failed", (2018), at:  $\underline{\text{https://e360.yale.edu/features/greenwashed-timber-how-sustainable-forest-certification-has-failed.}}$ 

<sup>&</sup>lt;sup>38</sup> EIA, "PEFC: A Fig Leaf for Stolen Timber", (2017), at: <a href="https://eia-global.org/blog-posts/PEFC-fig-leaf-for-stolen-timber">https://eia-global.org/blog-posts/PEFC-fig-leaf-for-stolen-timber</a>.



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

#### **Section 1. Basic Information**

Issue	er name:	Marub	eni Corporation	
	en Bond ISIN or Issuer Green Bond Framewone, if applicable:	rk Marub	eni Corporation Green Bond Framework	
Revi	ew provider's name:	Sustai	nalytics	
Com	pletion date of this form:	Augus	August 26, 2021	
Publi	lication date of review publication:			
Sect	tion 2. Review overview			
SCOP	E OF REVIEW			
The fo	ollowing may be used or adapted, where appro	opriate, to s	summarise the scope of the review.	
The re	eview assessed the following elements and co	onfirmed th	eir alignment with the GBP:	
$\boxtimes$	Use of Proceeds	$\boxtimes$	Process for Project Evaluation and Selection	
	Management of Proceeds	$\boxtimes$	Reporting	
ROLE(	(S) OF REVIEW PROVIDER			
$\boxtimes$	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification	
	Verification		Rating	
	Other (please specify):			
	Note: In case of multiple reviews / differen	ıt providers,	please provide separate forms for each review	
EXECU	UTIVE SUMMARY OF REVIEW and/or LINK TO	O FULL REV	IIEW (if applicable)	
Diagos	e 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, Sustainable Water and Wastewater Management, and Pollution Prevention and Control, 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 SDGs 6, 7, 12 and 15.

Use of proceeds categories as per GBP:				
$\boxtimes$	Renewable energy		Energy efficiency	
$\boxtimes$	Pollution prevention and control	$\boxtimes$	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		Green buildings	
	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP		Other (please specify):	
If ap	plicable please specify the environmental taxono	my, i	f other than GBP:	

#### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Marubeni Corporation's process for evaluating and selecting projects is managed by the Finance Department. The Finance Department, in consultation with the Sustainability Management Department as well as relevant business units, checks the eligible green project candidates and confirms the alignment between the projects and the eligible criteria defined in the Framework. The CFO makes the final decision regarding the projects selected through this process. The process of prior assessment of environmental and social risks using Marubeni's sustainability assessment tool is applied to all allocation decisions made under the Framework. Sustainalytics considers this risk management system to be adequate. Sustainalytics considers the project selection process in line with market practice.

#### **Evaluation and selection**

☑ Credentials on the issuer's environmental sustainability objectives
 ☑ Documented process to determine that projects fit within defined categories
 ☑ Defined and transparent criteria for projects eligible for Green Bond proceeds
 ☑ Documented process to identify and manage potential ESG risks associated with the project

### **Marubeni Corporation Green Bond Framework**



	Summary criteria for project evaluation and selection publicly available		Other (please specify):
Info	rmation on Responsibilities and Accountability	,	
	Evaluation / Selection criteria subject to external advice or verification		In-house assessment
	Other (please specify):		
3. M	ANAGEMENT OF PROCEEDS		
Over	all comment on section (if applicable).		
Depa proc the a	artment. Using an internal management system eeds' allocation to eligible projects at least onc	n, Ma e a y and	of proceeds is implemented through the Finance rubeni Corporation tracks and manages the status of ear. In cases where any proceeds remain unallocated, cash equivalents. Marubeni Corporation's processes tice.
Trac	king of proceeds:		
$\boxtimes$	Green Bond proceeds segregated or tracked b	by the	e issuer in an appropriate manner
	Disclosure of intended types of temporary inv proceeds	estm	nent instruments for unallocated
	Other (please specify):		
Addi	itional 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):

Until full allocation of the proceeds, Marubeni Corporation intends to report on the proceeds' allocation status and positive environmental impacts on its website once a year. Marubeni Corporation is also committed to reporting relevant impact indicators and obtaining post issuance reviews from an independent reviewer. Sustainalytics views Marubeni Corporation's allocation and impact reporting as aligned with market practice.



Use	of proceeds r	epor	ting:			
	Project-by-p	rojec	rt	$\boxtimes$	On a proj	ect portfolio basis
	Linkage to individual bond(s)			Other (pl	lease specify):	
		Info	rmation reported:			
			Allocated amounts			Green Bond financed share of total investment
			Other (please specify): The balance of any unallocated proceeds and information how unallocated proceeds have been held in line with guideline set in the "Management of the Proceeds"	d on s, if ar the		
	Frequency:					
		$\boxtimes$	Annual			Semi-annual
			Other (please specify):			
Impa	ct reporting:					
	Project-by-p	rojec	et	$\boxtimes$	On a pro	ject portfolio basis
	Linkage to individual bond(s)			Other (p	lease specify):	
		Info	rmation reported (expected	or ex	-post):	
		$\boxtimes$	GHG Emissions / Savings			Energy Savings
			Decrease in water use			Other ESG indicators (please specify): Power generation capacity (MW) for renewable energy, planting area (ha) of afforestation certified by FSC/PEFC, water management capacity of water supply and sewage, magnesium smelting capacity (t) of magnesium refining
		Freq	uency			
		$\boxtimes$	Annual			Semi-annual
			Other (please specify):			
Mea	ns of Disclos	ure				
	Information	publ	ished in financial report		Informa report	tion published in sustainability

#### **Marubeni Corporation Green Bond Framework**



	Other (please specify):				
ш					
П	Verification / Audit		Rating		
	Consultancy (incl. 2 <sup>nd</sup> opinion)		Certification		
Тур	pe(s) of Review provided:				
SPI	SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE				
USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)					
Wh	Where appropriate, please specify name and date of publication in the useful links section.				
	Reporting reviewed (if yes, please specexternal review):	ify which p	arts of the reporting are subject to		
	documents		Company's website		

#### 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.
- 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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