



# Second-Party Opinion

## The Norinchukin Bank Green Bond Framework

### Evaluation Summary

Sustainalytics is of the opinion that the Norinchukin Bank 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, Clean Transportation, Green Buildings 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 7, 9 and 11.



**PROJECT EVALUATION / SELECTION** The Norinchukin Bank's internal process in evaluating and selecting projects is managed by the Treasury and Forex Division. The front business units select the eligible projects. The Treasury and Forex Division double-checks the lists against the Framework criteria and oversees the implementation of the allocation and selection process. The Corporate Planning Division (Sustainability Management Department), together with the front business units as well as Treasury and Forex Divisions, jointly provides the final authorization over the selected projects. The Norinchukin Bank's Environmental and Social Risk Management ("ESRM") is applicable to all allocation decisions made under the Framework. Sustainalytics considers these risk management systems to be adequate. Sustainalytics considers the project evaluation and selection process in line with market practice.



**MANAGEMENT OF PROCEEDS** The Norinchukin Bank's processes for management of proceeds is overseen by Treasury and Forex Division. The Norinchukin Bank intends to track and monitor the allocation of proceeds to eligible projects via an internal tracking system. Pending allocation, unallocated proceeds will be temporarily held in cash, cash equivalents or in a bank account or invested in current funds. This process is in line with market practice.



**REPORTING** The Norinchukin Bank intends to report on the allocation and impact of proceeds on its website on an annual basis until full allocation of the net proceeds, or an amount equal to the net proceeds. Post full allocation, the Norinchukin Bank will report when there are any changes in the allocation. In addition, The Norinchukin Bank is committed to reporting on relevant impact metrics and is committed to receiving post issuance reports from an independent provider. Sustainalytics views the Norinchukin Bank's allocation and impact reporting as aligned with market practice.

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**Issuer Location** Tokyo, Japan

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## Introduction

The Norinchukin Bank (“Nochu”, or the “Bank”), founded in 1923, is a national-level financial institution for agricultural, fishery and forestry (“AFF”) cooperatives in Japan. In accordance with the Norinchukin Bank Act, Nochu is engaged in three business areas: the food and agriculture business, the retail business, and the investment business.

Nochu has developed the Norinchukin Bank Green Bond Framework (the “Framework”) under which it intends to issue green bond and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future projects that deliver positive environmental outcomes and advance the Bank’s sustainability objectives. The Framework defines eligibility criteria in three areas:

1. Renewable Energy
2. Clean Transportation
3. Green Buildings

Nochu engaged Sustainalytics to review the Norinchukin Bank 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)<sup>1</sup>. A summary overview of the Framework has been provided in Appendix 1.

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

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent<sup>2</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 Nochu’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. Nochu representatives have confirmed (1) they understand it is the sole responsibility of Nochu 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 Nochu.

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 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.

<sup>1</sup> 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/>.

<sup>2</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.

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 Nochu has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the Norinchukin Bank Green Bond Framework

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

- Use of Proceeds:
  - The eligible categories, Renewable Energy, Clean Transportation, Green Buildings, are aligned with those recognized by the GBP.
  - Nochu has established a 24 months look-back period for its refinancing activities, which Sustainalytics considers to be in line with market practice.
  - Under the Renewable Energy category, Nochu intends to finance or refinance the construction, maintenance, and/or operation of solar, solar thermal, onshore and offshore wind, and biomass power plant. These projects, including power generation and transmission, are limited to a threshold of 100g gCO<sub>2</sub>/kWh or less.
    - Regarding solar thermal projects, Nochu clarified that more than 85% of energy generated will come from solar energy sources, which Sustainalytics considers to be in line with market practice.
    - Regarding biomass power plants, Nochu intends to invest in facilities using virgin wood (chips and pellets) from sustainable forest operations. Nochu confirmed that virgin wood will not origin from land with high biodiversity and high amount of carbon. The Bank also communicated to Sustainalytics that it will use Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) and other forest certification sources. Sustainalytics notes that it is market expectation to specify all eligible schemes and encourages the Bank to report on any other forest certification schemes it intends to include.
  - Under the Clean Transportation category, Nochu intends to finance or refinance projects with an energy intensity of 50 gCO<sub>2</sub>/p-km or less.<sup>3</sup> Projects may include construction, maintenance, and/or operation of light rail lines and high-speed rail line project and clean transportation infrastructure such as tunnels for electric trains. Nochu may also finance the manufacture of electric trains, including replacement parts and components that are dedicated to clean transportation applications. Sustainalytics views this to be in line with market practice.
  - Under the Green Buildings category, Nochu intends to finance or refinance residential and commercial properties and logistics facilities certified by green building schemes. Certification scheme may include LEED Gold or above, BREEAM Excellent or above, CASBEE for Real Estate or CASBEE for Buildings A or above or DBJ Green Building Certification 4 stars or above. Sustainalytics views these certifications as credible, and the levels selected as impactful (see Appendix 2 for further information on the referenced building standards).
- Project Evaluation and Selection:
  - Nochu's internal process in evaluating and selecting projects is managed by Nochu's Treasury and Forex Division. The process starts with Nochu's front business units, which consists of Project Finance Division and Real-estate Investment and Solution Division, by putting together

<sup>3</sup> CO<sub>2</sub> emissions per passenger kilometer travelled

lists of Eligible Green Projects. The Bank's Treasury and Forex Division double-checks the lists against the framework criteria and oversees the implementation of the allocation and selection process. Nochu's Corporate Planning Division (Sustainability Management Department), together with the front business units and Treasury and Forex Divisions, jointly provides the final authorization over the selected projects.

- Nochu has in place the Environmental and Social Risk Management (ESRM) Framework which is applicable to all allocation decisions made under the Framework. With regard to human rights, Nochu sets out its Human Rights Policy<sup>4</sup> and manages relevant risks based on the ESRM framework. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with market expectation. For additional detail see Section 2.
- Sustainalytics considers this selection process to be in line with market practice.
- Management of Proceeds:
  - Nochu's process for management of proceeds is overseen by Treasury and Forex Division. Nochu intends to track and monitor the allocation of proceeds to eligible projects via an internal tracking system.
  - Sustainalytics encourages the Bank to complete the allocation of the proceeds within 36 months of the green bond issuance to be consistent with the market practice.
  - Pending allocation, unallocated proceeds will be temporarily held in cash, cash equivalents, or a bank account or invested in current funds.
  - Sustainalytics considers Nochu's process for management of proceeds to be in line with market practice.
- Reporting:
  - Nochu will report annually the allocation and impact of proceeds in its Green Bond Report until full allocation of the net proceeds, or an amount equal to the net proceeds, from Nochu's Green Bond issuance. Post full allocation, Nochu will report if and when there are any changes in the allocation. Nochu will publish the reports publicly on its website<sup>5</sup>.
  - The Bank is committed to reporting on relevant impact metrics, such as GHGs emissions avoided in tonnes of CO<sub>2</sub> equivalent.
  - Nochu is committed to receiving post issuance reports from an independent provider until the proceeds are full allocated.
  - Based on the frequency and accessibility of the allocation and impact reports, as well as its commitments on receiving post issuance reports, Sustainalytics considers this process to be in line with market practice.

### Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Norinchukin Bank Green Bond Framework aligns to the four core components of the GBP. For detailed information please refer to Appendix 3: Green Bond/Green Bond Programme External Review Form.

## Section 2: Sustainability Sustainability Strategy of Nochu

### Contribution of framework to The Norinchukin Bank's sustainability strategy

Sustainalytics is of the opinion that Nochu demonstrates a commitment to sustainability through the implementation of environmental and social considerations in the Bank's business activities. Based on Nochu's Medium-Term Management Plan (FY2019-2023), the Bank established its "Sustainability Topics" that are comprised of five Focus Areas and 14 Topics.<sup>6</sup> The Focus Areas are: (i) Create a positive impact on the agriculture, fishery and forestry industries, food, and local communities, (ii) Promote responsible finance, (iii) Promote sustainability management, (iv) Secure highly capable human resources and (v) Maintain customer trust as a financial institution. In addition, Nochu set the Long and Medium-Term Goals of reducing GHG emissions of its investees and financial customers by 50% by the end of FY2030 (compared to FY2013).

<sup>4</sup> The Norinchukin Bank, "Human Rights Policy", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/Human\\_Rights\\_Policy\\_e.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/Human_Rights_Policy_e.pdf)

<sup>5</sup> <https://www.nochubank.or.jp/en/>

<sup>6</sup> The Norinchukin Bank, "Sustainability Report 2020", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all\\_en.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all_en.pdf)

Nochu also aims to execute JPY 10 trillion (USD 90.9 billion)<sup>7</sup> of new Sustainable Finance loans and investments by the end of FY2030.<sup>8</sup>

Considering the forementioned goals, Nochu commits to promoting sustainable finance and contributing to sustainable energy utilization. The Bank also aims to promote responsible investments and loans that include environmental, social, and governance aspects. Examples of these initiatives include establishing a Sustainability Linked Loan and investments in World Banks' Sustainable Development Bonds and ESG-theme J-REITs.<sup>9,10,11</sup> In FY2020, Nochu aimed to implement JPY 250 billion (USD 2.3 billion)<sup>7</sup> worth of new ESG investments and loans.<sup>12</sup> By the end of March, 2021, the target was achieved with new investments and loans amounted to JPY 609.1 billion (USD 5.5 billion)<sup>7</sup> surpassing the original goal. In addition, Nochu had partnered with four renewable energy companies to encourage the adoption of agricultural solar energy. Past projects financed include domestic solar projects of JPY 128.1 billion (USD 1.2 billion)<sup>7</sup> and international offshore wind and undersea power transmission lines, and other renewable energy projects of JPY 408.0 billion (USD 3.7 billion).<sup>7,13</sup>

Sustainalytics is of the opinion that the Norinchukin Bank Green Bond Framework is aligned with the Bank's overall sustainability strategy and initiatives and will further the Bank's action on its key environmental priorities.

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

While Sustainalytics recognizes that the net proceeds from the bonds issued under the Framework will be directed towards eligible projects that are recognized by the GBP to have positive environmental impact, Sustainalytics is aware that the eligible projects may also lead to negative environmental and social outcomes, which may damage Nochu's reputation as a lender to projects. Some key environmental and social risks associated with the eligible projects, could include risks related to biodiversity and land use change, water, land and air pollution, health and safety, and community relations due to large scale infrastructure and construction projects. 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.

To assess and manage environmental and social risks associated with its investments and loans, Nochu applies an Environmental and Social Risk Management (ESRM) Framework which includes the following policies and procedures for its due diligence and monitoring:

- The Sector Policies for Investment and Loan<sup>14</sup> are applied to all financing and investment activities and sets out restrictions and exclusionary criteria for sectors and business that are associated with significant negative impact on the environment and society. Following the policies, Nochu has set exclusionary criteria under its Green Bond Framework, committing not to allocate green bond proceeds to projects related to following: deforestation, palm oil, coal-fired power generation, coal mining, projects with an adverse impact on high conservation value areas (IUCN Category I-IV), wetlands designated as Wetlands of International Importance under Ramsar Convention, UNESCO World Heritage sites, indigenous peoples' communities, or projects involving land expropriation leading to involuntary resettlement, or child/forced labor, cluster bombs/munitions, and inhumane weapons.
- Nochu adopted the Equator Principles ("EP")<sup>15</sup> in 2017, a globally recognized risk management framework that aims to manage environmental and social risks in project finance. The Bank has formulated its basic policy and administration guidelines in accordance with the EP. The scope of EP's evaluation includes potential adverse impacts on human rights, climate change, and biodiversity. In Nochu's due diligence process, a dedicated sub-team from the Credit Risk Management Division verifies the compliance with the EP and investments and loans.<sup>16</sup>

<sup>7</sup> Conversion by Sustainalytics (110 JPY per 1 USD)

<sup>8</sup> The Norinchukin Bank, "Long and Medium-term Goals for 2030 (Japanese only)", at: <https://www.nochubank.or.jp/sustainability/manegement/2030/>

<sup>9</sup> The Norinchukin Bank, "Annual Report 2020", at: [https://www.nochubank.or.jp/en/ir/annual\\_report/pdf/ar\\_2020.pdf](https://www.nochubank.or.jp/en/ir/annual_report/pdf/ar_2020.pdf)

<sup>10</sup> A J-REIT, Japan Real Estate Investment Trust, is a financial instrument taking funds collected from investors and purchasing office buildings, commercial facilities, condominiums, logistics facilities, and other real estate, and distributing leasing income and sale profit to investors.

<sup>11</sup> The Norinchukin Bank, "Sustainability Report 2020", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all\\_en.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all_en.pdf)

<sup>12</sup> The Norinchukin Bank, "Sustainability Report 2020", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all\\_en.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all_en.pdf)

<sup>13</sup> The Norinchukin Bank, "Sustainability Report 2020", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all\\_en.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/2020/all_en.pdf)

<sup>14</sup> The Norinchukin Bank, "Revision of the Policy on Environmental and Social Considerations in Financing and Investment Activities", at: [https://www.nochubank.or.jp/en/news\\_release/uploads/2021/20210331\\_Revision%20of%20the%20Policy%20on%20Environmental%20and%20Social%20Considerations%20in%20Financing%20and%20Investment%20Activities.pdf](https://www.nochubank.or.jp/en/news_release/uploads/2021/20210331_Revision%20of%20the%20Policy%20on%20Environmental%20and%20Social%20Considerations%20in%20Financing%20and%20Investment%20Activities.pdf)

<sup>15</sup> The Equator Principles, "The Equator Principles", at: <https://equator-principles.com/about/>

<sup>16</sup> The Norinchukin Bank, "The Norinchukin Bank's Initiatives to the Equator Principles", at: <https://www.nochubank.or.jp/en/about/equatorprinciples.html>

- Nochu regularly monitors environmental and social incidents of investments and loans, to which the Sector Policies for Investment and Loan applies. Information relating to such incidents are gathered through media reports, data from external information vendors and interviews with borrowers during the life of investments and loans and is discussed with the Credit Risk Management Division and front-line departments.

With regard to human rights, Nochu sets out its Human Rights Policy<sup>17</sup> which pledges to support international standards related to human rights including the Universal Declaration of Human Rights (UDHR)<sup>18</sup> and the Guiding Principles on Business and Human Rights (UNGPs)<sup>19</sup> by the United Nations. Through the policy, Nochu commits to conducting impact assessments for human rights within its entire organization and business activities to prevent or mitigate negative impacts on human rights that its financial services may cause.

Moreover, Nochu has in place a Code of Ethics<sup>20</sup> that mandates all board members and employees to comply with laws and regulations and provide disclosure on business information to ensure transparency.

Based on the above policies and procedures, Sustainalytics is of the opinion that Nochu has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible projects.

### Section 3: Impact of Use of Proceeds

All three use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics explains why those project categories produces positive environmental impacts in the world, including Japan, as follows:

#### Importance of promoting renewable energy

In 2019, global CO<sub>2</sub> emissions from the power sector amounted 13.6 Gt, and accounted for 41% of all energy-related CO<sub>2</sub> emissions.<sup>21</sup> According to International Energy Agency (IEA)'s Sustainable Development Scenario (SDS)<sup>22</sup>, which outlines a scenario that is consistent with the Paris Agreement climate goal, CO<sub>2</sub> emissions in the power sector, should be reduced by an average 4% per year by 2030. However, the decline in CO<sub>2</sub> emissions in the sector in 2019 was 1.3%, well below the level of decline called for by the SDS.<sup>23</sup> Moreover, the SDS requires significant increase in the share of renewable energy which was 27% as of 2019, to about half of electricity production by 2030.<sup>24</sup>

Under the Renewable Energy category, Nochu intends to allocate green bond proceeds to projects related to solar, solar thermal, wind, geothermal, and biomass power generation globally including Japan. In Japan, renewable energy accounted for 18.1% of total electricity generation, while thermal power from fossil fuels accounted for 75.7% in FY2019.<sup>25</sup> In April 2021, the Japanese government has committed to reduce greenhouse gas (GHG) emissions by 46% by FY2030 compared to FY2013,<sup>26</sup> and is considering to raise the share of renewable energy to 36-38% by FY 2030, as part of its energy mix consistent with its FY2030 GHG reduction target.<sup>27</sup> Furthermore, the government pledged to achieve net-zero GHG emissions by 2050, and launched the "Green Growth Strategy"<sup>28</sup> which sets out policy directions and action plans to support the achievement of carbon neutrality by 2050. In the strategy, the government states that it will promote the use of renewable energy, with the reference goal of achieving 50%-60% renewable energy share in the country's energy supply by 2050.

<sup>17</sup> The Norinchukin Bank, "Human Rights Policy", at: [https://www.nochubank.or.jp/en/about/sustainability/pdf/Human\\_Rights\\_Policy\\_e.pdf](https://www.nochubank.or.jp/en/about/sustainability/pdf/Human_Rights_Policy_e.pdf)

<sup>18</sup> United Nations, "Universal Declaration of Human Rights", at: <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

<sup>19</sup> United Nations, "Guiding Principles on Business and Human Rights", at: [https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr\\_en.pdf](https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf)

<sup>20</sup> The Norinchukin Bank, "Code of Ethics", at: <https://www.nochubank.or.jp/en/about/ethics.html>

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

<sup>22</sup> International Energy Agency (IEA), "Report extract Sustainable Development Scenario", at: <https://www.iea.org/reports/world-energy-model/sustainable-development-scenario>

<sup>23</sup> International Energy Agency (IEA), "Tracking Power 2020", at: <https://www.iea.org/reports/tracking-power-2020>

<sup>24</sup> International Energy Agency (IEA), "Renewable power", at: <https://www.iea.org/reports/tracking-power-2020/renewable-power>

<sup>25</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>26</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: [https://www.kantei.go.jp/jp/99\\_suga/statement/2021/0422kaiken.html](https://www.kantei.go.jp/jp/99_suga/statement/2021/0422kaiken.html)

<sup>27</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](https://www.enecho.meti.go.jp/committee/council/basic_policy_subcommittee/2021/046/046_004.pdf)

<sup>28</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>

Considering the above, Sustainalytics is of the opinion that Nochu's use of proceeds in the Renewable Energy category will contribute to reduce CO<sub>2</sub> emissions in the power sector globally and to the achievement of Japan's medium- to long-term climate goals.

### **Contribution to carbon reduction through promotion of clean transportation**

In 2018, CO<sub>2</sub> emissions from the transportation sector globally was approximately 8.2 Gt, accounting for about 24% of all energy-related CO<sub>2</sub> emissions.<sup>29</sup> By mode of transportation, road vehicles for both passenger and freight accounted for nearly three-quarters of the sector's CO<sub>2</sub> emissions.<sup>30</sup> According to the International Transport Forum, even under the condition that current commitments by countries to decarbonize transportation in are fully implemented, CO<sub>2</sub> emissions from the sector are estimated to increase by 16 % by 2050 compared to the 2015 level due to an increase in demand for transport.<sup>31</sup> To limit the global average temperature increase to 1.5°C, it is required to reduce CO<sub>2</sub> emissions from the transportation sector by nearly 70% by 2050 compared to the 2015 level.<sup>32</sup>

Under the Clean Transportation category, Nochu intends to allocate the green bond proceeds to railways with direct emissions 50gCO<sub>2</sub>/p-km or less and related facilities in Japan and other countries. In FY2019, Japan's transportation sector emitted 206 Mt of CO<sub>2</sub>, accounting for 18.6 % of the country's total emissions.<sup>33</sup> In conjunction with its current NDC submitted in 2020, Japan set a goal to reduce the CO<sub>2</sub> emissions in the transportation sector by 28% by FY2030 compared to the FY2013 levels.<sup>34</sup> As railways emit less CO<sub>2</sub> than other transportation means, with CO<sub>2</sub> emissions per passenger about 87% less compared to automobiles and about 81.3% less than airplanes, and CO<sub>2</sub> emissions per ton of freight about 91% less than freight cars and about 43.6% less than vessels,<sup>35</sup> the Japanese government plans to achieve the sector's FY2030 reduction target by curbing automobile use through modal shift to railways as well as improving energy efficiency of railways.<sup>36</sup>

In consideration of the above, Sustainalytics is of the opinion that Nochu's use of proceeds will contribute to the reduction of carbon emissions in the transportation sector globally through enhancement of railway facilities as well as achievement of Japan's climate target.

### **Importance of green buildings in Japan**

In Japan, as of FY2019, final energy consumption by buildings increased by approximately 20% compared to 1990,<sup>37</sup> and CO<sub>2</sub> emissions accounted for approx. 30% of Japan's total emissions.<sup>38,39</sup> Given the importance of buildings in the Country's energy demand and CO<sub>2</sub> emissions, the Japanese government enforced the Act on the Improvement of Energy Consumption Performance of Buildings (Building Energy Efficiency Act)<sup>40</sup> in 2015 and has been striving to improve energy efficiency of buildings. Some of these initiatives include mandating buildings to meet energy efficiency standards in stages. Moreover, in the NDC<sup>41</sup> submitted in 2020, in which Japan pledged to reduce its GHG emissions by 26% by FY2030 from the FY2013 level, the government set the

<sup>29</sup> International Energy Agency (IEA), "Tracking Transport 2020", at: <https://www.iea.org/reports/tracking-transport-2020>

<sup>30</sup> International Energy Agency (IEA), "Transport", at: <https://www.iea.org/topics/transport>

<sup>31</sup> International Transport Forum, "Executive Summary ITF Transport Outlook 2021", at: <https://www.itf-oecd.org/sites/default/files/transport-outlook-executive-summary-2021-english.pdf>

<sup>32</sup> International Transport Forum, "Executive Summary ITF Transport Outlook 2021", at: <https://www.itf-oecd.org/sites/default/files/transport-outlook-executive-summary-2021-english.pdf>

<sup>33</sup> Ministry of Land, Infrastructure, Transport and Tourism, "Carbon dioxide emissions in the transport sector", at: [https://www.mlit.go.jp/sogoseisaku/environment/sosei\\_environment\\_tk\\_000007.html](https://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000007.html)

<sup>34</sup> "Submission of Japan's Nationally Determined Contribution (NDC)", at:

[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20\(NDC\).PDF](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20(NDC).PDF)

<sup>35</sup> Ministry of Land, Infrastructure, Transport and Tourism, "Carbon dioxide emissions in the transport sector", at: [https://www.mlit.go.jp/sogoseisaku/environment/sosei\\_environment\\_tk\\_000007.html](https://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000007.html)

<sup>36</sup> Submission of Japan's Nationally Determined Contribution (NDC)", at:

[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20\(NDC\).PDF](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20(NDC).PDF)

<sup>37</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>38</sup> "Greenhouse Gas Emissions in Fiscal Year 2019 (Final Figures) (Japanese only)", at: <https://www.env.go.jp/press/files/jp/116118.pdf>

<sup>39</sup> The combined data for the residential sector and commercial and other sector are referred to as the final energy consumption and CO<sub>2</sub> emissions for buildings.

<sup>40</sup> Ministry of Land, Infrastructure, Transport and Tourism, "Overview of the Act on the Improvement of Energy Consumption Performance of Buildings", at: <http://www.mlit.go.jp/common/001134876.pdf>

<sup>41</sup> "Submission of Japan's Nationally Determined Contribution (NDC)", at:

[https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20\(NDC\).PDF](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Japan%20First/SUBMISSION%20OF%20JAPAN'S%20NATIONALLY%20DETERMINED%20CONTRIBUTION%20(NDC).PDF)

goal of reducing CO<sub>2</sub> emissions by 40% for buildings, toward the achievement of the nation's FY2030 GHG emissions reduction target.

Under the Green Building category, Nochu intends to allocate green bond proceeds to green buildings that have achieved third party green building certifications that assess energy efficiency as well as other environmental performance factors such as water use and emission of waste. Given the above, Sustainalytics is of the opinion that Nochu's intended use of proceeds in the Green Building category is expected to reduce the environmental impact of the buildings in Japan and support the achievement of Japan's climate target through the reduction of energy consumption and CO<sub>2</sub> emissions derived from buildings.

#### 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 Norinchukin Bank 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
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 vulnerable situations, women, children, persons with disabilities and older persons
Green Buildings	9. Industry, innovation and infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

#### Conclusion

Nochu has developed the Norinchukin Bank Green Bond Framework under which it may issue green bonds and use the proceeds to finance renewable energy, clean transportation and green building projects. Sustainalytics considers that the projects funded by the green bond proceeds are expected to contribute to the transition to a low carbon economy.

The Norinchukin Bank Green Bond 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 Norinchukin Bank Green Bond Framework is aligned with the overall sustainability strategy of the Bank and that the green use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7, 9 and 11. Additionally, Sustainalytics is of the opinion that Nochu 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 the Norinchukin Bank is well-positioned to issue green bonds and that the Norinchukin Bank Green Bond Framework is robust, transparent, and in alignment with the four core components of the Green Bond Principles 2021.

## Appendices

### Appendix 1: Framework Overview

For the purpose of issuing green bonds, Nochu has developed the following Framework which addresses the four key core components of the GBP: use of proceeds, project evaluation and selection process, management of proceeds, and reporting, in August 2021. The Framework belongs to Nochu.

#### 1. Use of proceeds

Nochu intends to use an amount equal to the net proceeds of the Green Bonds to finance or refinance, in whole or in part, existing or future projects, which include investments made by Nochu or by its subsidiaries that meet the following "Eligibility Criteria".

##### 1.1 Eligibility Criteria

Eligible Green Projects will meet ALL of the conditions below:

- (i) A project meets one or more of the eligible project categories below,
- (ii) A project has been financed by the Bank within 24 months as of the issue date of a relevant Green Bond, or will be newly financed on or after the issue date.

Nochu aims to support the achievement of the United Nations Sustainable Development Goals (SDGs) by issuing the Green Bonds, as illustrated below.

GBP Eligible Project Category	Eligibility Criteria and Example Projects	Environmental Objective	SDGs Alignment
Renewable Energy	Funds to finance or refinance renewable energy projects (including power generation / transmitting) with the threshold of 100g of CO2 per kwh or less: <ul style="list-style-type: none"> <li>a. Construction, maintenance and/or operation of solar, solar thermal, wind (onshore and offshore), geothermal power assets</li> <li>b. Construction, maintenance and/or operation of biomass power plant using virgin wood (chips and pellets) from the forestry with a suitable certification on resource conservation and management.</li> </ul>	Climate change mitigation  Pollution prevention and control	7. Affordable and Clean Energy
Clean transportation	Funds to finance or refinance exclusively use for clean transportation projects with emission threshold of 50g of CO2 per passenger-km or less: <ul style="list-style-type: none"> <li>a. Construction, maintenance and/or operation of light rail lines and/or high speed rail line projects</li> <li>b. Construction, maintenance and/or operation of tunnels for clean transports such as electric trains</li> <li>c. Manufacture of electric trains, including spares and related parts for sale or lease</li> </ul>	Climate change mitigation  Pollution prevention and control	11. Sustainable Cities and Communities
Green Buildings	Funds to finance or refinance real-estate properties (including those owned by Japanese Real Estate Investment Trust (J-REITs)) which have earned or is expected to earn one of the following: <ul style="list-style-type: none"> <li>a. Gold or Platinum rating under LEED</li> </ul>	Climate change mitigation  Pollution prevention and control	9. Industry, Innovation and Infrastructure

	b. Excellent or Outstanding rating under BREEAM c. A or S rating under CASBEE d. 4 or 5 stars under DBJ Green Building Certification		
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### 1.2 Exclusionary Criteria

Nochu has developed a list of exclusionary criteria to be applied to the allocation of the net proceeds from the issuance of the Green Bonds. In this regard, Nochu commits to not knowingly allocating such proceeds to projects and businesses of sector that meet one of the following exclusionary criteria.

- a. Cluster bombs/munitions
- b. Projects with an adverse impact on UNESCO World Heritage sites
- c. Projects with an adverse impact on wetlands designated as Wetlands of International Importance under Ramsar Convention
- d. Projects involving in child labor and forced labor
- e. Coal-fired power generation
- f. Coal mining
- g. Palm oil
- h. Deforestation
- i. Inhumane weapons
- j. Projects with an adverse impact on high conservation value areas (IUCN Category I-IV)
- k. Projects with an adverse impact on indigenous peoples' communities
- l. Projects involving land expropriation leading to involuntary resettlement

## 2. Process for project evaluation and selection

### 2.1 Application of Eligibility and Exclusionary Criteria in Project Selection

ESG risk assessment and management are governed by the policy and procedures based on the Environmental and Social Risk Management ("ESRM") framework. After being qualified through basic ESRM framework, the Eligible Green Projects are identified to align with the Eligibility Criteria described above via the following process:

Nochu's Project Finance Division and Real-estate Investment and Solution Division, both of which deal with project assets directly as Front Business Units, draft the list of projects that are suited to any of Project Categories mentioned above (i), and that meet condition (ii) above in Eligibility Criteria. Front Business Units submit their lists to the Bank's Treasury and Forex Division.

The Treasury and Forex Division, which oversees the Green Bond implementation of the allocation and selection process, combines the candidate lists into one Eligible Green Projects List and, double-checks them against the framework criteria.

Finally, Nochu's Corporate Planning Division (Sustainability Management Department), which is responsible for the Bank's business planning including sustainability management, jointly authorizes the Eligible Green Projects List together with all divisions mentioned above.

All Green Projects, as with all other investment assets of Nochu, shall be under the periodical monitoring by the front business units during the entire life-cycle of the assets until they are redeemed on maturity or sold to the market. Upon the unlikely events where those projects are to be found no longer eligible, they will be immediately disqualified as a green project and deleted from the list of Eligible Green Projects.

### 2.2 Environmental Objectives

Nochu has established its "Sustainability Topics" (five focus areas and 14 topics) aiming for Nochu's business operations to be sustainable by providing solutions to environmental and social issues.

Promoting "Responsible Finance" is one of the five focus areas of "Sustainability Topics" of Nochu. Since FY2019, Nochu started "Sustainable Finance" initiative as a part of the focus, which has been enhanced from Nochu's traditional effort to promote sustainability of society and environment including agricultural, fishery and forestry ("AFF") industries through its financing activities. Under the "Sustainable Finance" initiative, Nochu established a framework of integrating environmental/social risk assessment and

traditional financial risk/return analysis into overall investment judgement which enables the Bank to coordinate its business activities into the requirements of ESGs, and to work on the wide range of financial products, such as sustainability-linked loan and ESG-themed lending and investment to get more new business opportunities.

The implementation of these loans and investments is in line with the Medium-Term Management Plan (FY2019-FY2023). The Bank established a Medium/Long-Term goal of reducing GHG emissions of its investees and financial customers by 50% by the end of FY2030 as compared to FY2013. The Bank also aims to execute JPY 10 trillion of new Sustainable Finance loans and investments by the end of FY2030.

#### Nochu's Sustainability Topics (Five Focus Areas and 14 Topics)

Five Focus Areas	14 Topics
(Focus Area 1) Creating positive impact on the agriculture, fishery and forestry industries, food and local communities	> (Topic 1-1) Contributing to sustainable agriculture, fishery and forestry industries
	> (Topic 1-2) Contributing to safe and secure food supply
	> (Topic 1-3) Contributing to sustainable local communities
	> (Topic 1-4) Conserving the natural environment as a foundation of the agriculture, fishery and forestry industries
	> (Topic 1-5) Creating business innovation
(Focus Area 2) Promoting responsible finance	> (Topic 2-1) Promoting sustainable finance
	> (Topic 2-2) Contributing to sustainable energy utilization
	> (Topic 2-3) Realizing financing for everybody
(Focus Area 3) Promoting sustainability management	> (Topic 3-1) Ensuring a transparent organizational governing structure
	> (Topic 3-2) Reinforcing the management of environmental and social risks
	> (Topic 3-3) Reinforcing stakeholder engagement
(Focus Area 4) Securing highly capable human resources	> (Topic 4-1) Improving diversity and equal opportunities
	> (Topic 4-2) Enhancing human resources development
(Focus Area 5) Maintaining customer trust as a financial institution	> (Topic 5-1) Further reinforcing the compliance framework

### 2.3 Process to Mitigate Environmental and Social Risks

Nochu has introduced the Environmental and Social Risk Management ("ESRM") framework as follows to enhance its procedures to assess and manage environmental and social risks prior to making investment and financial decisions.

- Sector Policies for Investment and Loan

Nochu has established the policy to restrict and/or prohibit transactions in sectors that have strong potential for significant negative impact on the environment and society.

- ESG Integration in risk management

ESG Integration is the framework for investment decisions based on a comprehensive evaluation integrating financial analysis and non-financial ESG assessment. The ESG related information obtained through the process is also utilized in engaging dialogue with customers. The risk management department evaluates environmental and social risks for investment and finance clients, and serves as a second line of support for ESG Integration conducted by the front-line departments.

- Equator Principles

Nochu has established the policy and procedure to confirm compliance with the Equator Principles and monitor compliance with the covenants since adopting the Principles in May 2017. In the Credit Risk Management Division, the Bank has also deployed staff dedicated to verifying the eligibility of applying projects according to the Equator Principles.

- Responding to environmental and social incident

Nochu has established a framework to respond to environmental and social incidents to avoid reputational risk and credit risk, by regularly monitoring the environmental and social risk of investments and borrowers. The escalation process of decision making is set in place to ensure sound and responsible judgement.

### 3. Management of Proceeds

Nochu has established an internal tracking system to monitor and account for the proceeds. Until full allocation of an amount equal to the net proceeds, proceeds will be held temporarily in cash, cash equivalents, or in a bank account or invested in current funds. In the case of divestment or if a project no longer meets the Eligibility Criteria, the funds will be reallocated to other Eligible Green Projects. Payment of principal and interest will be made from Nochu's general account and not be linked to the performance of eligible projects.

### 4. Reporting

Nochu will publish a Green Bond Report on its website (<https://www.nochubank.or.jp/en/>) annually, on a timely basis in case of material developments, until full allocation of the net proceeds, or an amount equal thereto, from a Nochu Green Bond issuance. After the full allocation, the Bank shall report if and when there are any changes in the allocation.

#### 4.1 Allocation reporting

- (i) The amount of net proceeds allocated to the Eligible Projects
- (ii) The outstanding amount of net proceeds yet to be allocated to projects at the end of the reporting period

#### 4.2 Impact reporting

The list of Eligible Assets including the information listed in the box below with brief descriptions and expected impact metrics such as GHGs emissions avoided in tonnes of CO2 equivalent, where feasible

Type of Eligible Project Category	Additional information to be reported
Renewable Energy	<ul style="list-style-type: none"> <li>■ Distribution by sub-sector and location</li> <li>■ Power generation capacity of plant</li> <li>■ Subject to confidentiality and clients' prior consent, high-level description of select projects</li> <li>■ Where feasible, quantitative assessment of expected positive environmental impacts on an aggregate basis</li> <li>■ Example KPI: estimated CO2 emission avoidance and the proportion of the loans</li> </ul>
Clean Transportation	<ul style="list-style-type: none"> <li>■ Distribution by sub-sector and location</li> <li>■ Subject to confidentiality and clients' prior consent, high-level description of select projects</li> <li>■ Where feasible, quantitative assessment of expected positive environmental impacts on an aggregate basis</li> <li>■ Example KPI: estimated CO2 emission avoidance</li> </ul>
Green Buildings	<ul style="list-style-type: none"> <li>■ Certification vintage</li> <li>■ Subject to confidentiality and clients' prior consent, two or three case studies of underlying REITs and real estate properties funded with the relevant Green Bond</li> <li>■ Example KPI: CO2 emission reduction</li> </ul>

### 5. Annual Review

Until full allocation of the net proceeds of Green Bond issuance to Eligible Projects, Nochu will appoint Sustainalytics (or any other party appointed by Nochu as a successor for Sustainalytics) to conduct an

external review on an annual basis of the allocation of the proceeds of such Green Bond to Eligible Projects, to provide assurance that the proceeds have been allocated in compliance with all material respects of the criteria set forth in this Green Bond Framework.

## Appendix 2: Overview and Comparison of Green Building Certification Schemes

	LEED <sup>42</sup>	BREEAM <sup>43</sup>	CASBEE Certification <sup>44</sup>	DBJ Green Building Certification <sup>45</sup>
Background	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Used for new, refurbished and extension of existing buildings.	The Comprehensive Assessment System for Built Environment Efficiency (CASBEE) Certification is a green building certification scheme in Japan, which a third party certifies the environmental performance of buildings. The certification scheme includes, based on types of buildings: CASBEE for Buildings, CASBEE for Real Estate, and CASBEE for Housing.	The Development Bank of Japan (DBJ) Green Building Certification Programme was launched by Development Bank of Japan in 2011 and is operated in conjunction with the Japan Real Estate Institute (JREI), a major appraisal firm in Japan. The certification scheme is recognized as one of Japan's major regional standards. The certification is available for office buildings, logistics, residential, and retail facilities.
Certification levels	Certified Silver Gold Platinum	Pass Good Very Good Excellent Outstanding	C (Poor) B- (Slightly Poor) B+ (Good) A (Very Good) S (Excellent)  * 4-grade evaluation for CASBEE for Real Estate excluding C rank	1 Star 2 Stars 3 Stars 4 Stars 5 Stars
Areas of Assessment: Environmental Project Management		Management (Man) addresses various aspects: project management, deployment, minimal environmental disturbance worksite and stakeholder engagement.	CASBEE assesses two main factors: inside and outside the building site, which translate into Q (Built Environment Quality) and, L (Built Environment Load), respectively.  * The above are not applied to CASBEE for Real Estate	Evaluation of DBJ Green Building Certification includes construction specifications, environmental features as well as social factors.
Areas of Assessment: Environmental Performance of the Building	<ul style="list-style-type: none"> <li>• Energy and atmosphere</li> <li>• Sustainable Sites</li> <li>• Location and Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Energy</li> <li>• Land Use and Ecology</li> <li>• Pollution</li> <li>• Transport</li> <li>• Materials</li> </ul>	<ul style="list-style-type: none"> <li>• Energy Efficiency</li> <li>• Resource efficiency</li> <li>• Local environment</li> <li>• Indoor environment</li> </ul>	•Energy & Resources (Energy conservation, resource conservation, etc.)

<sup>42</sup> More information on the LEED certification scheme at: <https://new.usgbc.org/leed>.

<sup>43</sup> BREEAM, "What is BREEAM?", at: <https://www.breeam.com/>.



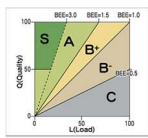

<sup>44</sup> Institute for Building Environment and Energy Conservation, "CASBEE certification scheme (Japanese only)", at: <http://www.ibec.or.jp/CASBEE/certification/certification.html>.

<sup>45</sup> Development Bank of Japan, Japan Real Estate Institute (JREI), "DBJ Green Building", at: <http://igb.jp/en/index.html>.

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	<ul style="list-style-type: none"> <li>• Materials and resources</li> <li>• Water efficiency</li> <li>• Indoor environmental quality</li> <li>• Innovation in Design</li> <li>• Regional Priority</li> </ul>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Waste</li> <li>• Health and Wellbeing</li> <li>• Innovation</li> </ul>	<ul style="list-style-type: none"> <li>* Areas for assessment of CASBEE for Real Estate are energy/GHG, water, resource, biodiversity, indoor environment</li> </ul>	<ul style="list-style-type: none"> <li>•Amenity (Convenience and comfort)</li> <li>•Resilience (Environmental risks, legal compliance, etc.)</li> <li>•Community &amp; Diversity (Consideration for the surrounding environment and biodiversity, etc.)</li> <li>•Partnership (information disclosure, etc.)</li> </ul>
Requirements	<p>Prerequisites (independent of level of certification) + Credits with associated points.</p> <p>These points are then added together to obtain the LEED level of certification</p> <p>There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools- /Retail- /Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>	<p>Prerequisites depending on the levels of certification + Credits with associated points</p> <p>This number of points is then weighted by item <sup>46</sup> and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score.</p> <p>BREEAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.</p>	<p>Score-based performance level.</p> <p>CASBEE uses the BEE (Built Environment Efficiency) as its assessment indicator, which is calculated from Q (Built Environment Quality) as the numerator and L (Built Environment Load) as the denominator. Q and L are obtained through the classification and rearrangement of the four areas of assessment.</p> <p>Buildings may receive ranks ranging from C (poor) to S (excellent), in order of increasing BEE value.</p> <p>For authorization, a building must receive a report from the CASBEE Certification system, which is afterwards assessed by the local government.</p> <p>* CASBEE for Real Estate does not use BEE, additional point system. Certification will not be given, if required item are not met.</p>	<p>Score-based performance level.</p> <p>The assessment has a full score of 300 points and consists of 85 questions, 73 of which are regular questions and 12 of which are questions on innovative initiatives.</p> <p>JREI will conduct on the ground review of building performance on the indicators above, and a committee set in JREI will decide the result of certification rank.</p>

<sup>46</sup> BREEAM weighting: Management 12%, Health and wellbeing 15%, Energy 19%, Transport 8%, Water 6%, Materials 12.5%, Waste 7.5%, Land Use and ecology 10%, Pollution 10% and Innovation 10%. One point scored in the Energy item is therefore worth twice as much in the overall score as one point scored in the Pollution item

Performance display	 <b>Platinum</b> 80+ points earned <sup>47</sup>	 48	 49	 50
Qualitative considerations	Worldwide recognition and application	Worldwide recognition and application	<p>CASBEE is continuously developed based on industry-government-academia collaboration under the support of Ministry of Land, Infrastructure, Transport and Tourism. In Japan, many local governments have made CASBEE assessment results mandatory for building permits.</p>	<p>In addition to LEED and CASBEE, DBJ Green Buildings Certification Programme is considered as one of the green building standards in Japan. According to its website, as of March 2021, 1073 properties in Japan are certified by the programme.<sup>51</sup></p>

<sup>47</sup> U.S. Green Building Council, "Green building leadership is LEED", at: <https://new.usgbc.org/leed>

<sup>48</sup> BREEAM, "What is BREEAM?", at: <https://www.breeam.com/>

<sup>49</sup> Institute for Building Environment and Energy Conservation, "Method of Evaluation and Built Environment Efficiency (BEE)", at: [http://www.ibec.or.jp/CASBEE/CASBEE\\_outline/method.html](http://www.ibec.or.jp/CASBEE/CASBEE_outline/method.html).

<sup>50</sup> Development Bank of Japan, "DBJ Green Building", at: [http://www.dbj.jp/en/pdf/service/finance/g\\_building/gb\\_presentation.pdf](http://www.dbj.jp/en/pdf/service/finance/g_building/gb_presentation.pdf).

<sup>51</sup> Development Bank of Japan, Japan Real Estate Institute (JREI), "DBJ Green Building", at: <http://igb.jp/en/index.html>

## Appendix 3: Green Bond / Green Bond Programme - External Review Form

### Section 1. Basic Information

Issuer name:	The Norinchukin Bank
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	The Norinchukin Bank Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	August 19, 2021
Publication date of review publication:	

### 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 <sup>nd</sup> 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, Clean Transportation, Green Buildings 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 7, 9 and 11.

#### Use of proceeds categories as per GBP:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Renewable energy  | <input type="checkbox"/> Energy efficiency   |
| <input type="checkbox"/> Pollution prevention and control   | <input 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 checked="" 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 ( <i>please specify</i> ):  |

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

## 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The Norinchukin Bank's internal process in evaluating and selecting projects is managed by the Treasury and Forex Division. The front business units, which consists of Project Finance Division and Real-estate Investment and Solution Division, selects the eligible projects. The Treasury and Forex Division double-checks the lists against the framework criteria and oversees the implementation of the allocation and selection process. The Corporate Planning Division (Sustainability Management Department), together with the front business units and treasury and Forex Divisions, jointly provides the final authorization over the selected projects. Sustainalytics considers the project selection process 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 |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available       | <input type="checkbox"/> Other ( <i>please specify</i> ):   |

**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 Norinchukin Bank's processes for management of proceeds is overseen by Treasury and Forex Division. The Norinchukin Bank intends to track and monitor the allocation of proceeds to eligible projects via an internal tracking system. Pending allocation, unallocated proceeds will be held temporarily in cash, cash equivalents or held in a bank account or invested in current funds. This process 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):

The Norinchukin Bank intends to report on allocation and impact of proceeds on its website on an annual basis until full allocation of the net proceeds, or an amount equal to the net proceeds. Post full allocation, the Norinchukin Bank will report if and when there are any changes in the allocation. In addition, The Norinchukin Bank is committed to reporting on relevant impact metrics. Sustainalytics views The Norinchukin Bank's allocation and impact reporting as aligned 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*): The outstanding amount of net proceeds yet to be allocated to projects at the end of the reporting period

**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): Distribution by sub-sector and location, high-level description of select projects, power generation capacity of plant, and achieved green building certifications

**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): Nochu'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 <sup>nd</sup> 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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