

## ASSESSMENT

30 September 2025



Send Your Feedback

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## Mizuho Financial Group, Inc.

### Second Party Opinion – Green Bond Framework Assigned SQS2 Sustainability Quality Score

#### Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to Mizuho Financial Group, Inc.'s ('Mizuho' or 'issuer') green bond framework dated September 2020. Mizuho has established its use-of-proceeds framework to finance four eligible green categories. The framework is aligned with the four components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2025. The framework demonstrates a significant contribution to sustainability.

#### Sustainability quality score



#### Alignment with principles USE OF PROCEEDS

##### Overall alignment



##### FACTORS

##### ALIGNMENT

|                          |             |
|--------------------------|-------------|
| Use of proceeds          | <div></div> |
| Evaluation and selection | <div></div> |
| Management of proceeds   | <div></div> |
| Reporting                | <div></div> |

#### Contribution to sustainability

##### Final contribution to sustainability



##### Preliminary contribution to sustainability

Relevance and magnitude

Additional considerations **No adjustment**

POINT-IN-TIME ASSESSMENT

## Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Mizuho's green bond framework, including the framework's alignment with the ICMA's GBP 2025. Under its framework, Mizuho plans to finance projects in four green categories as outlined in Appendix 3 of this report.

Our assessment is based on the issuer's framework dated September 2020, and our opinion reflects our point-in-time assessment<sup>1</sup> of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

We produced this SPO based on our [Assessment Framework: Second Party Opinions on Sustainable Debt](#), published in March 2025.

## Issuer profile

Headquartered in Tokyo, Mizuho Financial Group Inc. (Mizuho) is one of the largest financial groups in Japan, with a number of enterprises operating under its umbrella: MHBK, a retail and wholesale bank; MHTB, a trust bank; Mizuho Securities Co., Ltd., a securities company; and a number of other entities, which together provide a comprehensive array of financial services. The group's consolidated total assets were ¥292.3 trillion as of the end of June 2024.

Mizuho faces environmental risks, particularly from carbon transition due to its exposure to carbon-intensive sectors. Mizuho has set environmental targets to achieve carbon neutrality for its scope 1 and 2 emissions by 2030, and for its scope 3 emissions by 2050. The group has established several investment and financing targets for carbon-intensive sectors, including electricity, oil and gas, coal for fuel use, automobiles, shipping, steel, and real estate. Additionally, Mizuho aims to divest from coal-fired power plant assets by 2040. As part of its sustainability strategy, the group also plans to invest 2 trillion yen in hydrogen, ammonia, and synthetic methane projects by 2030.

## Strengths

- » The majority of the proceeds from renewable energy category will be allocated to solar and wind projects, which are considered to be best available technologies
- » Short look-back period of less than 24 months, in line with best market practices
- » The proceeds of the bonds will be allocated to eligible projects shortly after the bond issuance, which is in line with the best market practice of short allocation period of less than 24 months

## Challenges

- » Lack of energy performance threshold and core impact indicators that measure the direct environmental benefits of green building projects
- » Lack of emissions related threshold and inclusion of woody biomass as eligible feedstock for bioenergy projects, although concerns around eligible feedstock are mitigated to an extent through certification requirements

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## Alignment with principles

Mizuho's green bond framework is aligned with the four core principles of ICMA's GBP 2025. For a summary alignment with principles scorecard, please see Appendix 1.

- |  |  |
|--|--|
| <input checked="" type="radio"/> Green Bond Principles (GBP)       | <input type="radio"/> Green Loan Principles (GLP)                  |
| <input type="radio"/> Social Bond Principles (SBP)                 | <input type="radio"/> Social Loan Principles (SLP)                 |
| <input type="radio"/> Sustainability-Linked Bond Principles (SLBP) | <input type="radio"/> Sustainability Linked Loan Principles (SLLP) |

## Use of proceeds



### Clarity of the eligible categories – BEST PRACTICES

The issuer has clearly communicated the nature of the expenditures, the eligibility and exclusion criteria for financed projects. While the eligibility criteria are broadly defined in the framework for some project categories, the issuer has provided confirmation to us through internal communication regarding detailed thresholds (see Appendix 3). The issuer has disclosed to us that the eligible projects can be located in different geographic regions, including the United States, Europe, and Asia Pacific (including Japan).

### Clarity of the environmental or social objectives – BEST PRACTICES

The issuer has clearly defined the environmental objectives associated with all four categories by providing confirmation to us through internal communication (see Appendix 3). All eligible categories are relevant to the respective environmental objectives to which they are aiming to contribute. The issuer has referenced UN Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories (see Appendix 2).

### Clarity of expected benefits – ALIGNED

The issuer has identified clear and relevant expected environmental benefits for nearly all the eligible categories. While no impact indicators are identified in the framework for the clean transportation and pollution prevention and control categories, the issuer has communicated the indicators to us through internal documentation (see Appendix 3). For green buildings category, the expected impact indicators lack core indicators that measure the direct environmental benefits (such as final or primary energy use, annual GHG emissions reduced). The benefits are measurable, and they will be quantified for all categories in the annual reporting. The issuer has communicated through internal documents about the expected share of refinancing, but will not report on the actual share of refinancing in the reporting. The issuer has stated a look back period of 24 months in its framework.

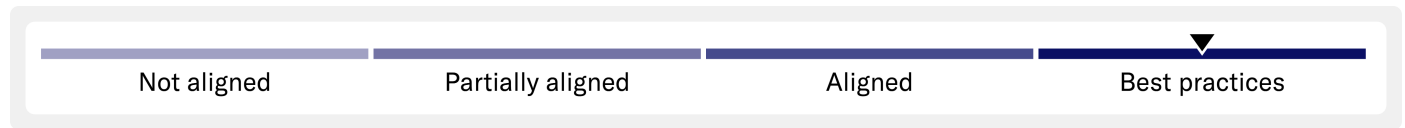
## Process for project evaluation and selection



### Transparency and clarity of the process for defining and monitoring eligible projects – BEST PRACTICES

The issuer's decision-making process for the selection and evaluation of projects is clearly structured, and is outlined in its publicly available framework. Eligible projects will be identified and selected through a process involving various functional areas within Mizuho Bank and Mizuho Financial Group. The issuer is committed to semiannually monitoring the compliance of selected projects with both eligibility and exclusion criteria until the maturity of the bond. In the event a project no longer fulfills the eligibility criteria, the net proceeds will be reallocated to other eligible projects. The framework also clearly delineates the Environmental & Social (E&S) risk management process, and the issuer will conduct reviews and due diligence in accordance with the Equator Principles, incorporating an internal E&S risk assessment to ensure that projects with inherent environmental and social externalities have appropriate mitigation measures in place.

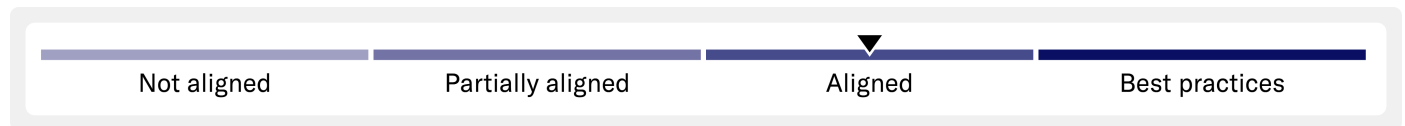
## Management of proceeds



### Allocation and tracking of proceeds – BEST PRACTICES

The issuer has defined a clear process for the management and allocation of proceeds in its publicly available framework. The issuer has confirmed to us that the bond proceeds will be deposited into a general treasury account and tracked using an internal information system. These proceeds will be adjusted annually to align with the amounts allocated to eligible green projects. Upon bond issuance, an amount equal to the net proceeds from the bond will be loaned from Mizuho FG to Mizuho Bank, and allocated by Mizuho Bank to the financing of existing and/or new Eligible Green Projects. Typically, the balance of eligible assets will exceed the intended bond issuance amount, ensuring that the funds are allocated immediately to eligible projects. However, in the event of a shortage of allocated assets due to unexpected early repayments of allocated assets, it is stipulated that the funds will be allocated to appropriate assets within a maximum allocation period of 36 months. Any temporarily unallocated proceeds will be invested in overnight or other short-term financial instruments.

## Reporting

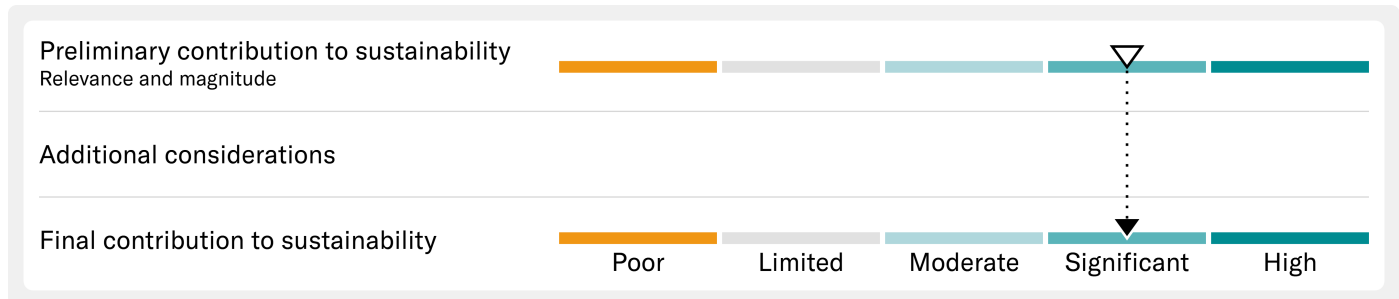


### Reporting transparency – ALIGNED

The issuer will report annually on the use of proceeds allocation and impact reporting. Reporting will be conducted until full allocation and on timely basis in the event of any material developments. The reports will be publicly accessible on the issuer's website. The reports will encompass descriptions of the projects, the amounts allocated to eligible projects, and the environmental impacts associated with these projects. Additionally, the methodology and assumptions used to assess the environmental impacts will be included in the reporting. The issuer commits to obtaining an annual external review on the allocation of the proceeds and the associated environmental impacts.

## Contribution to sustainability

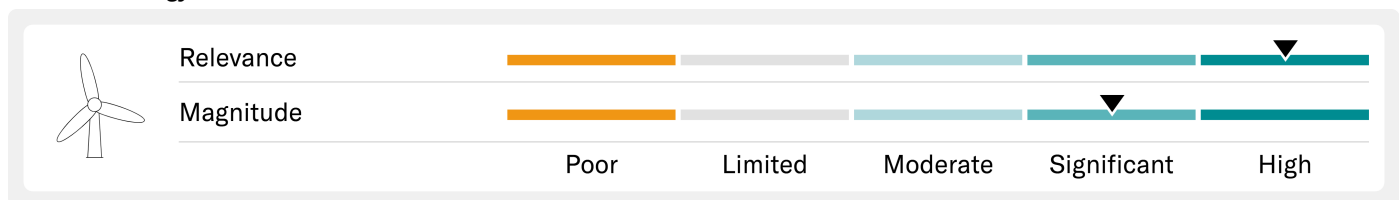
The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to sustainability score of significant, based on the relevance and magnitude of the eligible project categories, and we have not made an adjustment to the preliminary score based on additional contribution to sustainability considerations.



### Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the eligible project categories. Based on the information provided by the issuer, the vast majority of the proceeds are expected to be allocated to the green buildings and renewable energy categories, and therefore we have assigned a higher weight to these categories in our assessment. A detailed assessment by eligible category has been provided below.

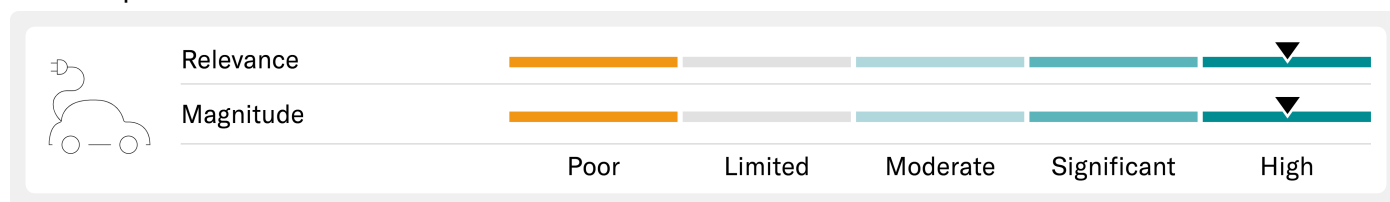
#### Renewable energy



Investments supporting the energy transition to low carbon and renewable sources are highly relevant to the country and to the banking sector in general. Reducing greenhouse gas emissions from the power sector and expanding renewable energy are vital for Japan, as highlighted in its Strategic Energy Plan. Japan aims to procure approximately 40% to 50% of its energy from renewable sources by 2040, up from the current 23%<sup>2</sup>. The banking sector plays a critical role in mobilizing capital to address climate change and to support the decarbonization of energy sources. Globally, the shift to renewables would have to increase to over 60% in 2030 and to nearly 90% in 2050 globally under IEA's net zero emissions scenario<sup>3</sup>.

The magnitude of this category is significant. The issuer has confirmed that the majority of proceeds will be allocated to wind and solar projects, which are among the cleanest energy options and considered to be the best-available technologies with minimal externalities. The eligibility criteria for other technologies, including geothermal, hydropower, and solar thermal energy, are also clearly defined and are broadly aligned with the Climate Bonds Initiative (CBI) criteria. However, eligible bioenergy projects, on stand-alone basis, would achieve a limited magnitude score due to the lack of emissions related technical thresholds and inclusion of woody biomass as eligible feedstock. Concerns around the eligible feedstock are mitigated to an extent as the issuer confirmed through internal documentation that eligible wood feedstock are limited to those provided by suppliers certified by the Forest Stewardship Council (FSC) or the Programme for the Endorsement of Forest Certification (PEFC). Projects using waste from palm oil operations are also limited to waste from palm oil suppliers that are certified by RSPO (Roundtable on Sustainable Palm Oil) or RSB (Roundtable on Sustainable Biomaterials).

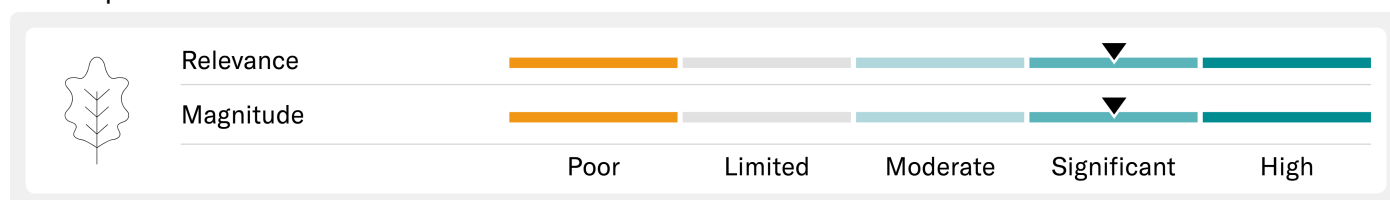
## Clean transportation



The relevance of the financed projects under this category to address climate change mitigation is high for the issuer, sector and on a global scale. Capital investments in supporting the electrification of transportation sector by increasing the uptake of zero emission vehicles are highly pertinent to support the decarbonization of the broader transportation sector. Transportation sector was responsible for 23% of global carbon emissions<sup>4</sup> and was responsible for around 19% of total emissions in Japan in 2024<sup>5</sup>.

The financed projects under this category are expected to have a high impact on reducing GHG emissions from the transportation sector. The issuer confirmed through internal documentation that projects such as electrified locomotives, trains, metro, interurban high-speed rail, mass rapid transit, and light rail transit (LRT) projects are limited to those with zero direct CO<sub>2</sub> emissions, which is considered best available technologies with no lock-in effects and minimal negative externalities. The issuer also confirmed through internal documentation that for freight rail, projects where fossil fuels account for more than 25% of the total freight volume (tkm) will be excluded from financing, in accordance with the CBI criteria.

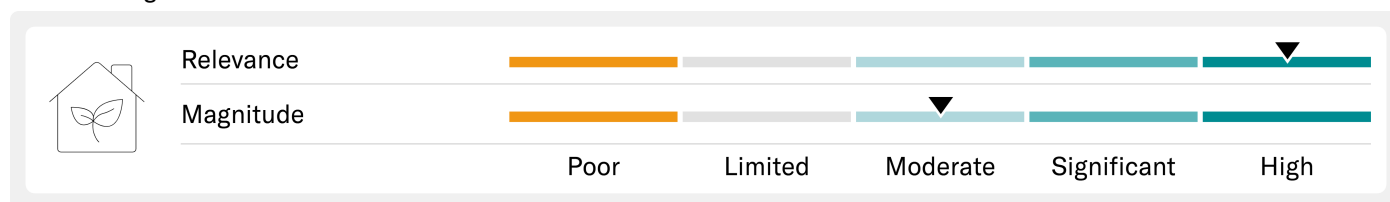
## Pollution prevention and control



The relevance of this category is significant because addressing pollution is a global issue. Managing and reducing pollution is crucial as municipal solid waste (MSW) generation is projected to escalate from 2.1 billion tonnes in 2023 to 3.8 billion tonnes by 2050, according to the UNEP<sup>6</sup>. However, the relevance of these projects is contingent upon their geographical context. For instance, MSW is rapidly increasing in fast-growing economies such as Central and South Asia, where waste management infrastructure is already saturated. The significant relevance score reflects the absence of specific project locations and lesser materiality for the issuer, who has communicated that no projects are currently under consideration for upcoming issuances.

The financed projects under this category are expected to have a significant contribution to pollution prevention. Financing projects related to facilities that process recyclable waste into secondary raw materials, as well as those that collect, sort, clean, refurbish, recondition, and repair products, are anticipated to help reduce pollution. However, the issuer has not provided information related to recycling methods used or other relevant thresholds, which limits our ability to fully assess the contribution to the stated objective. For waste-to-energy projects, although they carry inherent externalities, the issuer has confirmed through internal documentation that projects will follow the CBI waste management criteria (regarding plant efficiency, bottom ash recovery, average carbon intensity, plant capacity), and the eligible projects will adhere to the waste hierarchy. Additionally, the issuer has communicated that plastic, rubber, and tires are explicitly excluded from eligible waste to prevent resource loss. The issuer has communicated that the projects related to landfills will not be considered eligible under the framework.

## Green buildings



Investing in energy efficient residential and non-residential buildings is highly relevant for addressing climate change, which is important for the issuer, sector and on a global scale. According to IEA, operational energy use of buildings account for 30% of global energy consumption and 26% of global energy-related emissions<sup>7</sup>. The reduction of CO2 emissions from real estates is also recognized as a fundamental pillar of Japan's national sustainability strategy, as outlined in the Clean Energy Strategy<sup>8</sup> and the Plan on Global Warming Countermeasures<sup>9</sup>.

The financed projects under this category are expected to have a moderate magnitude due to the absence of clear energy performance thresholds for all financed buildings. The issuer has indicated that most proceeds will be allocated to projects certified by the Japan Building-Housing Energy-efficiency Labeling System (BELS) and the Comprehensive Assessment System for Built Environment Efficiency (CASBEE). The issuer confirmed through internal documentation that the eligibility criteria for the BELS scheme will adhere to the latest certification standard as the scheme evolves. Although CASBEE is one of Japan's most stringent green building certifications, and BELS-certified buildings provide some insight into energy efficiency levels, there remains a lack of clarity regarding the actual energy performance of the eligible buildings. The issuer has communicated that the majority of the proceeds will be allocated to the acquisition and new construction of the buildings. We note that newly constructed buildings carry negative externalities, such as greater absolute energy consumption, GHG emissions and E&S risks associated with the construction phase, leading to a less positive impact than that of refurbishment activities. Such externalities will be mitigated to a certain extent as an Environmental and Social Impact Assessment (ESIA) will be conducted for all large-scale projects. Additionally, the issuer will be closely working with the real estate developers to reduce the embodied carbon emissions of the buildings.

#### Additional contribution to sustainability considerations

We have not made an adjustment to the preliminary contribution to sustainability score based on additional considerations.

Mizuho has a robust due diligence process to identify and manage E&S risks associated with the financed projects. As a signatory of the Equator Principles, Mizuho is committed to reviewing and evaluating the environmental and social impacts of large-scale construction projects, ensuring that appropriate mitigation measures are implemented. The issuer has also established a responsible financing and investment policy, which delineates guidelines for financing activities with significant environmental and social impacts, as well as those with high transition risks. Following the policy, Mizuho will assess the mitigation measures in place and regularly monitor the borrower's progress on its carbon transition plan. The policy explicitly prohibits some financing activities such as the construction of new coal-fired power plants and the expansion of existing ones.

The framework is coherent with the sustainability strategy of the issuer. Mizuho's green bond framework and the associated eligible categories are coherently aligned with the group's sustainability strategy, contributing to the achievement of its sustainable commitments and goals. The group is committed to achieving net zero emissions and has established investment and financing targets for key carbon-intensive sectors, including power, road transportation, shipping, and real estate. Furthermore, Mizuho aims to bolster financing for climate transition-enabling technologies, particularly hydrogen, to facilitate Japan's shift to a low-carbon economy. Despite its current exposure to coal-fired power plants, the issuer has set a goal to reduce its credit balance by 50% by 2030 and to exit entirely by 2040.

## Appendix 1 - Alignment with principles scorecard for Mizuho FG's green bond framework

| Factor                                       | Sub-factor  | Component  | Component score | Sub-factor score | Factor score   |
|--|---|--|-----------------|------------------|----------------|
| Use of proceeds                              | Clarity of the eligible categories  | Nature of expenditure  | A               | Best practices   | Aligned        |
|  |   | Definition of content, eligibility and exclusion criteria for nearly all categories  | A               |                  |                |
|  |   | Location   | A               |                  |                |
|  |   | BP: Definition of content, eligibility and exclusion criteria for all categories   | Yes             |                  |                |
|  | Clarity of the objectives   | Relevance of objectives to project categories for nearly all categories  | A               | Best practices   |                |
|  |   | Coherence of project category objectives with standards for nearly all categories  | A               |                  |                |
|  |   | BP: Objectives are defined, relevant and coherent for all categories   | Yes             |                  |                |
|  | Clarity of expected benefits  | Identification and relevance of expected benefits for nearly all categories  | A               | Aligned          |                |
|  |   | Measurability of expected benefits for nearly all categories   | A               |                  |                |
|  |   | BP: Relevant benefits are identified for all categories  | No              |                  |                |
|  |   | BP: Benefits are measurable for all categories   | Yes             |                  |                |
|  |   | BP: Disclosure of refinancing prior to issuance and in post-allocation reporting   | No              |                  |                |
|  |   | BP: Commitment to communicate refinancing look-back period prior to issuance   | Yes             |                  |                |
| Process for project evaluation and selection | Transparency and clarity of the process for defining and monitoring eligible projects | Clarity of the process   | A               | Best practices   | Best practices |
|  |   | Disclosure of the process  | A               |                  |                |
|  |   | Transparency of the environmental and social risk mitigation process   | A               |                  |                |
|  |   | BP: Monitoring of continued project compliance   | Yes             |                  |                |
| Management of proceeds                       | Allocation and tracking of proceeds   | Tracking of proceeds   | A               | Best practices   | Best practices |
|  |   | Periodic adjustment of proceeds to match allocations   | A               |                  |                |
|  |   | Disclosure of the intended types of temporary placements of unallocated proceeds   | A               |                  |                |
|  |   | BP: Disclosure of the proceeds management process  | Yes             |                  |                |
|  |   | BP: Allocation period is 24 months or less   | Yes             |                  |                |
| Reporting                                    | Reporting transparency  | Reporting frequency  | A               | Aligned          | Aligned        |
|  |   | Reporting duration   | A               |                  |                |
|  |   | Report disclosure  | A               |                  |                |
|  |   | Reporting exhaustivity   | A               |                  |                |
|  |   | BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback | No              |                  |                |
|  |   | BP: Clarity and relevance of the indicators on the sustainability benefits   | No              |                  |                |
|  |   | BP: Disclosure of reporting methodology and calculation assumptions  | Yes             |                  |                |
|  |   | BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds                             | Yes             |                  |                |
|  |   | BP: Independent impact assessment on environmental and social benefits   | Yes             |                  |                |
| Overall alignment with principles score:     |   |  |                 |                  | Aligned        |

Legend: BP - Best practice, A - Aligned, PA - Partially aligned, NA - Not aligned



## Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The four eligible categories included in Mizuho FG's framework are likely to contribute to three of the United Nations' Sustainable Development Goals (SDGs), namely:

| UN SDG 17 Goals                                 | Eligible Category                | SDG Targets  |
|---|----------------------------------|--|
| GOAL 7: Affordable and Clean Energy             | Renewable energy                 | 7.2: Increase substantially the share of renewable energy in the global energy mix   |
| GOAL 9: Industry, Innovation and Infrastructure | Green buildings                  | 9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with all countries taking action                 |
| GOAL 11: Sustainable Cities and Communities     | Clean transportation             | 11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all                                 |
|   | Pollution prevention and control | 11.6: Reduce the adverse per capita environmental impact of cities, with special attention to air quality and waste management |

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

## Appendix 3 - Summary of eligible categories in Mizuho FG's framework

| Eligible Categories              | Description   | Sustainability Objectives        | Impact Reporting Metrics  |
|----------------------------------|---|----------------------------------|---|
| Renewable Energy                 | » The development, construction and operation of renewable energy facilities which generate wind, solar, solar thermal, biomass energy (restricted to sustainable feedstock and/or waste sources), geothermal energy (restricted to the projects that have direct emissions of less than 100gCO <sub>2</sub> /kWh), and small hydro facilities with generation capacity of 25 megawatts or less or run of river hydropower assets without pondage.  | Climate change mitigation        | » Tonnes of CO <sub>2</sub> emission equiv. avoided p.a.  |
| Clean Transportation             | » Projects to develop, operate and upgrade public transportation facilities (non-fossil fuel based), infrastructure and technologies including expansion and improvements of rail transport, non-motorized transport (such as bicycles), multi-modal transport, and manufacturing of electric vehicles.   | Climate change mitigation        | » Tonnes of CO <sub>2</sub> equiv. reduced/avoided p.a.<br>» Amount of air pollutants reduced<br>» Total distance of infrastructure   |
| Pollution Prevention and Control | » The development, construction and operation of pollution prevention and control facilities, such as waste recycling and waste-to-energy power plants. The sources of energy will be household waste, commercial waste, or market waste which will not include plastics/rubber/tire-derived fuel (TDFs) to energy/fuel conversion, gas capture from operational landfills, and landfill gas capture for flaring.   | Pollution prevention and control | » Amount of waste recovered, reduced, or recycled<br>» Reuse and recycling rates<br>» Percentage of change in the amount of waste generated<br>» Water pollution abatement in m3 and %<br>» Air pollution abatement in m3 and % |
| Green Buildings                  | » Buildings which have received or will receive during the life of the Green Bond at least one of the following classifications. Net proceeds of the Green Bond may be allocated towards new and existing loans from Mizuho BK to eligible green buildings with certifications as defined below, including the ones owned by J-REITs (Japanese Real Estate Investment Trusts). The allocation amounts to eligible green buildings owned by J-REITs may be calculated based on pro-rata share of eligible green buildings' acquisition cost.<br>- LEED (Leadership in Energy and Environmental Design): LEED Platinum or Gold<br>- BREEAM (Building Research Establishment Environmental Assessment Method): BREEAM Outstanding or Excellent<br>- CASBEE (Comprehensive Assessment System for Built Environment Efficiency): CASBEE S Rank or A Rank<br>- DBJ Green Building Certification: DBJ Green Building 5 Star or 4 Star<br>- BELS (Building-Housing Energy-efficiency Labelling System): BELS 5 Star or 4 Star | Climate change mitigation        | » Number and certification level of green buildings   |

## Endnotes

- <sup>1</sup> Point-in-time assessment is applicable only on date of assignment or update.
- <sup>2</sup> Ministry of Economy, Trade and Industry, [7th Strategic Energy Plan](#), February 2025
- <sup>3</sup> International Energy Agency, [Net Zero by 2050](#), accessed August 2025
- <sup>4</sup> International Energy Agency, [Greenhouse Gas Emissions from Energy Data](#), accessed August 2025
- <sup>5</sup> Ministry of Land, Infrastructure, Transport and Tourism, [CO<sub>2</sub> emissions from transportation sector](#), April 2024
- <sup>6</sup> UN Environment Programme, [Global Waste Management Outlook 2024](#), February 2024
- <sup>7</sup> International Energy Agency, [Buildings](#), accessed August 2025
- <sup>8</sup> Ministry of Economy, Trade, and Industry, May 2022
- <sup>9</sup> Ministry of Environment Plan for Global Warming Countermeasures, October 2021

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