Report of the Committee on Evaluation to Secure Quality Urban Green Spaces through Private Sector Investment

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**This translation is provisional translation for reference, formally refer to the original Japanese text.*

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I. Introduction

As the social situations around cities change, these urban areas, in which populations, assets and industries are concentrated, are also being called upon to take proactive action to address global scale issues, such as accelerated climate change and the threats to biodiversity security.

Demands to improve well-being are also rising year after year due to changes in people's lifestyles caused by the COVID-19 pandemic, creating an urgent need for efforts to realize human-centred urban development.

In response to these issues, it is vital that actions be taken to secure urban green spaces in terms of both quality and quantity, as these spaces are expected to play an instrumental role in resolving challenges as green infrastructure with diverse functions.

Mindful of these new social trends, there is a need to explore the social significance of urban green spaces and their ideal state in urban structures, as well as a course of action for measures to achieve this.

In the past, a comprehensive approach has been taken to secure urban green spaces in accordance with master plans for parks and green spaces formulated by local government. However, in light of recent shifts in the social situations, it has become essential for governments to present a clearer vision of ideal green spaces based on their roles and functions in urban structures, as required from an international and regional perspective, and to discuss measures to embody it.

In doing so, it has become important to incorporate private sector investment in the environmental field, such as ESG investment which has expanded globally in recent years, as well as to objectively evaluate and visualize the effectiveness of green areas from the perspective of promoting private investment. In this respect, consideration should be paid to the government's required level of involvement in light of a new course of action on the social significance of new green spaces.

In this respect, the Committee on Evaluation to Secure Quality Urban Green

Spaces through Private Sector Investment (hereafter referred to as “Committee ”) has discussed and examined methods for evaluating efforts to secure urban green spaces through private investment.

This report offers recommendations on a future course of action for evaluation to secure quality urban green spaces through private investment, based on the outcomes of past discussions by the Committee since February 2023.

[Relationship with the Subcommittee on City Planning Fundamental Issues]

The following recommendations were included as future courses of action for the green transformation (GX) of city in the “Interim Report by Subcommittee on City Planning Fundamental Issues” (released on April 14, 2023), which discussed current issues related to urban policies.

(1) The government presents a common objective, including layout (location) shared by the public and private sectors for urban green spaces;
(2) When promoting the conservation and creation of green spaces using private investment, it is important to discuss the introduction of frameworks that can be applied to objectively evaluate the voluntary actions of companies and the provision of incentives to encourage action; and
(3) The national government formulates policies for such actions and strengthens support for local government.

The purpose of this report is not only to elaborate on and delve deeper into discussions in (2), but also to add that it may be more effective to organically link this with initiatives in (1) and (3).

II. Background, Current Status, and Direction for Evaluation Methods to Secure Quality Urban Green Spaces through Private Sector Investment

1. Background and current status

(1) Changes in the social situationsof cities

(Global-scale trends)

Although people's lifestyles have become materially richer and more convenient as a result of economic and technological developments, the global environment, the very foundation that allows humanity to continue to survive and thrive, is reaching its limits. Environment-related risks, such as climate change and loss of biodiversity in particular, both examples in which planetary boundaries have been breached, pose grave risks to the global economy in the medium- to long-term.[1]

In addition, reports such as that from the IPBES-IPCC Co-Sponsored Workshop on Biodiversity and Climate Change, assert that climate change, biodiversity and people's quality of life are intertwined, and that there is a need to jointly consider climate change and biodiversity loss to improve quality of life.

(Movements to achieve carbon neutrality and net zero)

The Paris Agreement was adopted at COP21 (December 2015) as a new international framework for reducing greenhouse gas emissions after 2020. COP26 (November 2021) reaffirmed the significance of initiatives to limit temperature rise in this century to below 1.5°C. There has also been a rapid increase in the number of countries and regions around the world that have declared carbon neutrality targets, with a combined GDP accounting for 90% of the world's total.

Movements to decarbonize are also gaining momentum in Japan, including the nation's commitment to achieving carbon neutrality by 2050 (October 2020, Prime Minister Suga's policy speech at the 203rd session of the Diet) and an announcement on targets to reduce greenhouse gas emissions by 46% by 2030

[1] "Global Risks Report 2023" (World Economic Forum)

(April 2021, meeting of the Global Warming Prevention Headquarters). There is a need to promote urban and regional development that contributes to decarbonization since substantial amounts of carbon dioxide, in particular, are generated by socio-economic activities in cities where there is a considerable concentration of populations and buildings.

With the announcement of the European Green Deal, a package of climate and environmental policies set to transform the EU's socio-economic landscape to realize a sustainable future, the EU is developing a variety of strategies and regulations, including the enactment of the European Climate Law, which aims to achieve net zero greenhouse gas emissions by 2050. The European Green Deal also promotes strategies to preserve and restore ecosystems and biodiversity (Biodiversity Strategy for 2030) and includes proposals for a transition to a fair and inclusive society that leaves no one behind (Just Transition Mechanism).

(Movements to achieve nature positive)

International discussions are in progress to secure biodiversity, including the adoption of the Kunming-Montreal Global Biodiversity Framework, which contains new global goals by 2030, at COP15 (December 2022).

With the approval of the National Biodiversity Strategy 2023-2030 by the Cabinet on March 31, 2023, Japan is accelerating moves to secure biodiversity, with the aim of achieving nature positive by 2030.

Securing biodiversity is also an urgent issue in cities. The Kunming-Montreal Global Biodiversity Framework also sets a target of "green and blue spaces in urban and densely populated areas," with mention made to urban planning that includes considerations for biodiversity.

(Demands to improvewell-being accelerated by COVID-19)

One of the Sustainable Development Goals (SDGs) is the aim to promote well-being for all at all ages. WHO published a discussion paper in 2021 which elaborated on the concept of well-being in relation to each of the 17 goals of the SDGs, stating that the promotion of social well-being would be instrumental in

building active, resilient and sustainable communities and help them respond to existing and emerging threats to human health, such as COVID-19.

Japan established the Inter-Ministerial Liaison Committee on Well-being in July 2021 in recognition of the importance of efforts to improve well-being. The committee meeting promotes information sharing, stronger cooperation, and scaling out good practices in order to promote actions to improve well-being.

(Stronger international competitiveness in major cities)

Populations, assets and industries in Japan are concentrated in major cities. In international comparisons of cities, Tokyo consistently ranks high overall, but low in terms of available green spaces and risks from natural disasters. Cities in Asia have also surpassed Tokyo in recent years.[2] Other cities in Japan have also been struggling in these overall rankings, indicating a need to continue to strengthen international competitiveness in cities by raising standards in sectors with room for improvement.

(Global reach of ESG investment[3])

ESG investments have expanded in recent years with the formulation of the Equator Principles in 2003, a set of standards to assess environmental and social impacts when financing projects, and the publication of the Principles for Responsible Investment (PRI) in 2006, which stipulates standards for ESG investment by institutional investors. The global ESG market has continued to expand against the background of the Paris Agreement, SDGs and other international agreements. At the start of 2020, global ESG investments reached USD 35.3 trillion, an increase of 55% between 2016 and 2020.[4] There has also been a rapid expansion in ESG investments in Japan, recording figures of approximately JPY 56 trillion in 2016 and surpassing JPY 493 trillion in 2022. Although Japan's share in ESG investment globally was only about 2% in 2016, it experienced the largest growth rate worldwide, accounting for about 8% of the

[2] "Global Power City Index 2022" (The Mori Memorial Foundation)
[3] The terms "ESG investment" and "impact investment" in this report include financing.
[4] "Global Sustainable Investment Review 2020." Note that loans are not included in "ESG investments" in this report.

total in 2020.[5] With momentum for ESG investment growing, the national government is calling for worldwide ESG funds as investment in GX.[6]

Overall, “impact investment” is defined as an ESG approach with positive environmental, social and economic impacts that also ensures a comparable level of risk versus return. Impact investment is expected to be even more productive as investors, financial institutions, businesses, local stakeholders, and other diverse actors gain an understanding of the existence and significance of projects that will resolve environmental and social issues and achieve growth.[7]

There is also a growing trend by companies to disclose climate- and nature-related financial information, such as the Taskforce on Climate-related Financial Disclosures (TCFD) and the Taskforce on Nature-related Financial Disclosures (TNFD). Companies listed on the Prime Market of the Tokyo Stock Exchange from April 2022 are required to disclose information based on TCFD recommendations. The TNFD plans to publish its final recommendations (ver1.0) in September 2023.

As competition intensifies between cities around the world, there have been delays in developing a favorable environment for ESG investment. If companies do not take a more proactive approach to consider social and environmental factors than what is currently in place, there is a possibility that they will miss private investment opportunities for developmental projects in Japan from domestic and foreign sources.

Similar perspectives are also being discussed in real estate, a sector with major potential to play an instrumental role in resolving environmental and social issues. Companies and other actors are expected to help create value for society, including in the area of global environmental protection, and increase the value of real estate and sustainable corporate growth through appropriate

[5] "White Paper on Sustainable Investment in Japan 2017" and "White Paper on Sustainable Investment in Japan 2022." The term "globally" refers to five markets: U.S., Canada, Europe, Japan, Australia/New Zealand.
[6] “Grand Design and Action Plan for a New Form of Capitalism” (Cabinet decision, June 7, 2022)
[7] "Draft Report by the Study Group on Impact Investing" (May 2023, Financial Services Agency)

management practices over the medium to long term. The Real Estate and Construction Economy Bureau of the Ministry of Land, Infrastructure, Transport and Tourism released Practical Guidance for “Social Impact Real Estate” in March 2023. This publication summarizes and categorizes social issues and initiatives related to real estate, and provides an overview of key points for practical implementation, including approaches and evaluation methods, to create a real estate market that is attractive to investors from both Japan and abroad, keeping pace with trends in ESG investment.

(2) Diverse functions of urban green spaces

Urban green spaces perform a diverse set of functions as green infrastructure, such as shaping beautiful landscapes and local history and culture, absorbing greenhouse gases and mitigating heat-island effects, securing evacuation routes and shelters in disasters and preventing the spread of fires, retaining / infiltrating rainwater, preventing noise, vibration and air pollution, securing habitats for wildlife, enhancingcommunities, opportunities for a variety of familiar and accessible recreational activities, opportunities to interact with nature and environmental education, and promoting healthy lifestyles and tourism.

In light of the social situations in cities in recent years, green spaces that possess the following functions are expected to be extensively used as green infrastructure and play an instrumental role in resolving different issues, mindful of the unique features of each region.

(Green spaces that facilitate climate change actions)

The greenery in parks, public utilities and private buildings uses photosynthesis to absorb and fix CO_2 emissions.

Covering rooftop pavements and the exterior walls of buildings with plants and greenery, which prevents surface temperatures from rising and heat from being stored, as well as securing large tracts of green space which serves as a source of cool air flowing out into the environs and greening urban spaces in

surrounding areas in conjunction with “wind paths” to maintain the cooling effect mitigate heat island effects and reduce CO_2 emissions. Planting trees to create shade is also effective as a measure to counter heat.

It is also important to improve the resilience of cities amidst rising concerns about the intensity and increased frequency of natural disasters associated with climate change. River basin management that involves all stakeholders is particularly important in preventing water-related disasters, with the rainwater storage and infiltration functions of green spaces expected to be utilized further.

(Green spaces that help secure biodiversity)

The conservation of existing urban green spacesand the planned development of parks and other green areas contribute to the protection, regeneration and creation of habitats for living creatures both in and around urban areas and the formation of ecological networks.

Biodiversity conservation efforts in cities also serve as a catalyst for conservation actions by creating opportunities for urban residents to become involved with the natural environment and to interact with various ecosystem services.

(Green spaces that help improve people’s well-being)

Urban green spaces serve an important function to improve people’s well-being by reducing stress, promoting relaxation, physical activity and interaction between residents, and strengthening community ties.[8] Green spaces also perform the function of creating safe, secure and comfortable spaces, which also contributes to improving people’s well-being. The ability to secure these kinds of green spaces will lead to the creation of livable cities with excellent living environments for multiple generations of people, including families raising children and senior citizens.

(Green spaces that help improve the value of areas)

The value of areas and regions will be enhanced through climate change

[8] “Urban green spaces: a brief for action.” (World Health Organization Regional Office for Europe)

measures, securing biodiversity and improving people's well-being with the use of the functions found in green spaces. Actions that leverage these functions, such as forming communities, generating vitality, shaping beautiful landscapes and unique local histories and cultures, and creating a favorable environment for raising children, have an impact on the well-being of individuals and the local community at large. The networked nature of green spaces also enhances these functions, which in turn, increases the value of areas.

(Demonstrating the functions of green spaces through proper management and use)

Green spaces demonstrate their functions over time, such as the growth of plants and trees, meaning that proper maintenance and management play an essential role in maximizing these functions while adapting them to the unique environments of cities. It is important to continuously perform adaptive management in maintenance and management, monitoring and verifying the conditions of green spaces as needed.

When used, green spaces function as areas for rest and relaxation, the healthy development of children, and local community activities, so it is important to develop, operate, maintain and manage them in such a way to promote its use.

(3) Policies conductive to securing urban green spaces

Public entities have traditionally promoted the overall conservation and development of the quality and quantity of urban green spaces through various systems and programs, based on master plans for parks and green spaces formulated by local government.

In addition to requiring the installation of parks and other green spaces on privately owned land for development projects over a certain size to protect the environment, prevent disasters, and evacuate in an emergency, cities are promoting the preservation of privately owned green spaces and greening of private buildings through restrictions on development and mandatory greening, such as with green areas. In recent years, private developers have proposed

that urban green spaces be preserved as a way to contribute to environmental protection in urban development projects that involve relaxing floor-area ratios.

Local governments have also enacted ordinances to promote greening and conserve the natural environment. These ordinances set out standards and requirements for greening on public land, private businesses and residential land, with specific greening rates in some cases.

On the other hand, the mandatory greening of land has not always proved effective, as trees are forcibly planted in spaces where it is difficult to maintain greenery in order to achieve area standards, causing them to wither away and leading to a uniformity in spatial design and a lack of diversity. Expected effects are lost due to the lack of mechanisms to check on the status of maintenance and management after these urban spaces have been developed, requiring detailed evaluations and high-quality guidance systems for greening.[9,10]

2. Direction

(Developing evaluation and certification systems)

As the social situations of cities has shifted, there has been a strong need for urban development that can help put climate change measures in place, secure biodiversity, and improve well-being. For this reason, the quality and quantity of urban green spaces must be secured at an even higher rate through cooperation between the public and private sectors, as they play a key role in addressing these concerns.

Approaches used to secure the quality and quantity of green spaces can be broadly categorized into public works projects, regulations and guidance. The administration of green spaces in the past mainly involved the development of urban parks by governmental bodies and mandating greening in conjunction with

[9] Makoto Nishitani, Naoki Ueda, and Akinobu Murakami (2020). “Study on upkeep and effect of urban greenery designed under greening regulations,” *Journal of the City Planning Institute of Japan*, Vol.55, No.3.

[10] Naoki Ueda, Yumika Sejima, and Akinobu Murakami (2017). “Study on the features and problems of quantitative leading guidelines for urban greening of local government ordinances,” *Reports of the City Planning Institute of Japan*, No.16.

private sector development. These can be said to be a measure of internalizing events that fall outside of the market economy, especially as the economic benefits of urban green spaces are external in nature.

On the other hand, in a stable and mature society, not only public works projects and regulations, but also the perspective to induce private investments and loans and activities is required to promote market supply. In view of the difficult financial situation of the public sector, this point is critical in promoting autonomous initiatives by the private sector to improve assets and corporate values and bring about far-reaching effects.

With the rise in ESG investments in recent years, the market has demanded more in terms of efforts to secure biodiversity and improve well-being, in addition to climate change actions. Accordingly, it is important to encourage the flow of funds to such projects in order to prompt the private sector to voluntarily engage in initiatives, as companies benefit from their involvement in projects with high environmental and social impacts to improve their assets and corporate value.

The significance of projects must be evaluated objectively and recognized in order to encourage the flow of capital, i.e., a project's strong environmental and social impacts must be objectified. In other words, the environmental and social impacts of projects to secure quality green spaces must be highlighted and visualized to a diverse range of stakeholders, such as companies, financial institutions, tenants and local communities. The development of evaluation and certification systems is particularly important as a means of achieving this. These systems are also effective from the perspective of internalizing the external nature of green spaces in order to promote supply in the market.

Simply put, with the use of evaluation and certification systems to visualize projects to secure quality green spaces and their environmental and social impacts, businesses will be able to appeal to various actorsfor them to recognize the significance of their projects and corporate value. This is expected to simplify the process for investors, consumers and other stakeholders in selecting impactful projects and create a flow of money through the rental of buildings

integrated with quality green spaces and financing for projects. Evaluation and certification systems are also expected to improve corporate value or ensure that businesses will not be left behind from the future market when coupled with information disclosure requirements, such as TNFD.

It is the hope that these trends will also lead to projects to secure quality green spaces and create a positive cycle that will result in the formation of a sustainable and attractive society, and the continuous and stable growth of the market as a whole.

(Necessity of the national government involvement)

It is important that the national government takes a proactive stance in considering the development of evaluation and certification systems from the following perspectives.

<Presenting a pictureof urban green spaces and policy guidance for its realization>

The social significance of urban green spaces today can be seen in the fact that their diverse functions can be utilized as approaches to simultaneously resolve global, regional, and human challenges. This is also consistent with the concept of Nature-based Solutions (NbS), which looks to solve social issues by taking advantage of green infrastructure and the functions of healthy, natural ecosystems.

In doing so, both the public and private sectors must be proactive in engaging in efforts to resolve challenges by effectively demonstrating the functions of green spaces. Therefore, the national government must present consistent policies as goals to be achieved, while also incorporating a human-centerd approach, taking international and regional perspectives into account.

Thus, it is essential to evaluate appropriately the value of the area generated by the project that secures green networks and creates areal expanses outside sites from the perspective of enhancing green spaces so that they can function more effectively. As a country that is in a position to provide the basic policies that form the foundation of national measures and plans, it is appropriate to

establish evaluation and certification systems, while also taking into account trends happening in the international communities.

<Leading role to the global goals>

To achieve the global goals, such as carbon neutrality/net-zero emissions by 2050 and nature positive by 2030, it is required that the national government unambiguously takes on a leading role.

In light of the particularly limited timeframe available to achieve targets, the national government must work comprehensively and urgently to coordinate efforts with other systems from the perspective of securing cohesive green spaces that will elicit strong environmental, social and economic impacts, and networked green spaces that are effective in improving biodiversity, so that private companies, local authorities and all stakeholders will be empowered to take initiative and act.

The Ministry of the Environment of Japan is working on the establishment and certification of a scheme to Certify Conserved Areas to be Identified as OECMs in establishing and managing OECMs, a key measure of the 30by30 targets, while the Ministry of Land, Infrastructure, Transport and Tourism of Japan is introducing an evaluation and certification system for the urban sector. Extensive collaboration between these two ministries is expected to play an instrumental role in the effective and efficient management of both systems, and ultimately, to achieving the goals of Nature Positive by 2030, including the 30by30 targets.

<Presenting medium- and long-term policies to encourage investment>

The establishment of a framework for evaluation and certification systems that match the government’s medium- and long-term vision and policies for urban green spaces from both a international and national perspective will be recognized on the international stage, raising expectations on the predictability of achieving a sustained level of support from the public sector for businesses and investors engaged in securing green spaces. These policies will also promote stable, medium- to long-term investment and financing from both

domestic and international markets, irrespective of the status of cities as a large or regional urban areas.

The national government is also expected to collaborate closely with existing evaluation and certification systems for green spaces and buildings operated by the private sector and local governments. Synergy is expected to be generated in each system as the government sets a unified direction under national policy combined with strong initiatives to lead society.

III. Objective Evaluation and Certification Frameworks for Projects to Secure Quality Urban Green Spaces

1. Basic approaches used to examine evaluation and certification systems

(Items required for evaluation and certification systems that can be linked to private investment)

Systems for attracting private investment should be easy for investors and financial institutions to use and be socially recognized. Accordingly, the following points should be noted.

- Evaluation items and processes should be consistent with international standards and trends related to investments and financing in the environmental sector (TNFD, SBTs for nature, EU Taxonomy, PBAF, CDP, other), while appropriate to Japan’s climate and social conditions.
- Evaluation indicators should be easy to understand.
- Evaluation contents and frameworks should be disclosed.
- Updates should be flexible to avoid become obsolete.
- System credibility and awareness should be enhanced.
- Processes should be as scientific and quantitative as possible to avoid “greenwashing” (Note, however, that projects should be considered even if it may be difficult to quantitatively evaluate the impacts of green space), other.

It is also important to digitize procedures such as applications related to

evaluation and certification systems, as well as methods for measuring effects on species and population flow.

In addition, if a system can be developed so that it can be used as a corporate KPI, it may be used even more broadly. For example, setting an acquisition of certification as a corporate KPI means managerial decisions have been made. This means that from the perspective of the staff in charge, there is no need to explain or discuss the need for certification for each project with management. It is also possible that certifications may be positioned as evaluation items in financial products developed by financial institutions in the future, such as sustainability-linked loans.

(Considerations in keeping with the stage of efforts)

Consideration should be given to each stage of the process when examining systems to evaluate and certify projects to secure quality green spaces through private investment, since those using the systems and their objectives and motivations differ depending on the respective planning and management stages.

A major incentive for developers to obtain certification in the planning stages specifically lies in the advantage of acquiring funds from financial institutions, investors and others and in attracting tenants. In the management phase after construction is completed, real estate holding and management bodies (i.e., real estate funds) will have an incentive to promote the percentage of certified properties to investors investing in stocks and bonds through TNFD disclosures to increase corporate value, in addition to the stable rental income that can be expected with certification.

2. Evaluation and certification frameworks

There are several potential patterns for frameworks to evaluate and certify projects to secure urban green spaces that involve the national government, including having the government directly evaluate and certify each individual green space or providing guidelines on its approaches to evaluation and certification.

It is effective to establish a framework where the national government first authorizes evaluating organizations (and their systems), including those operating existing greening certification systems, and then these organizations evaluate and certify the projects of individual businesses. This is effective approach in allowing the system to be built and rolled out as soon as possible while preventing a flood of similar systems that could undermine the credibility of the evaluation and certification system. This framework would ensure stability and uniformity, and incorporate the knowledge and ingenuity of non-governmental actors.

Local governments also play a considerable role in laying out these policies and plans from the perspective that it is important to be in compliance with the policies and plans presented by the government when evaluating projects to secure green spaces. Local governments are also expected to be actively involved and take on leadership roles in promoting their policies and plans, including coordination and support as necessary for projects on securing green spaces for businesses and other groups.

3. Evaluation targets

(Evaluation targets)

It is feasible that “projects to create new green spaces” and “projects to contribute to improving and securing the quality of existing green spaces” may be subject to evaluation from the perspective of ensuring the quality and quantity of these spaces in urban settings.

"Projects to create new green spaces" aim to develop quality green spaces in conjunction with redevelopment projects and are expected to be located mainly in urban centers. These projects are in compliance with Target 2 of the Kunming-Montreal Global Biodiversity Framework (30% of degraded areas of ecosystems under effective restoration) and can be utilized by companies in response to TNFD disclosures, since degraded spaces that should be restored are identified as high priorities in the TNFD.

Next, "projects to contribute to securing and improving the quality of existing green spaces" are expected to be implemented on the existing green spaces throughout entire city areas, from urban centers to suburban areas, and include those to (1) improve the functions of existing green spaces (for example, thinning dense forested areas to create green spaces that allow sunlight in) and (2) sustainably manage quality green spaces. These also include large-scale redevelopment projects of existing green spaces. In terms of (2) above, projects to incorporate sustainable quality management in existing high-quality green spaces are envisioned as mitigating negative impacts to prevent deterioration in the future, even with no changes in physical management. For example, projects could be implemented by BIDs or other groups using their own financial resources with balanced benefits.

While the project is covered by the evaluation and certification itself, it is also important that the system be evaluated as the achievement and contribution of the entity implementing the certified project.

(Timing of evaluation and necessity for continuous evaluation)

From the perspective of financing projects, it is advisable to evaluate and certify projects to secure green spaces from the planning stages. When considering the feature of green spaces demonstrating their functions over time, ensuring continuity and consistency from project planning and implementing entities to operating entities, and the perspective of continuous financing (refinancing, other), it is advisable to continue to monitor, improve and disclose the conditions of green spaces and impacts even after a project has ended. If this type of mechanism to disclose evaluation results functions properly, it is expected to generate a positive cycle for attracting investment to companies that give proper consideration to the environment and society.

Impact Measurement and Management (IMM) is a mechanism used for continuous monitoring, post-evaluation, improvement and disclosure of the management status and performance of impact investing, in addition to pre-assessments. Some existing certification systems also function similar to a

process for recertification by capturing and monitoring actual data on post-certification operational results and performance on a continuous basis.

(Units of evaluation)

It is preferable to evaluate target green spaces on a block by block basis, from the perspective of ensuring that green spaces are cohesive and generate high environmental, social and economic impacts. However, in cases where green spaces can be secured at a set scale, single sites located in one city block can also be considered.

(Areas and entities subject to evaluation)

It is advisable for systems to target green spaces in city planning areas (green spaces under the Urban Green Spaces Act, including green spaces on artificial ground, rooftop and wall greening, farmland and others, in addition to woodlands and grasslands), with the aim of creating an advantageous urban environment. In this regard, it is desirable to envision both the urban centers of large cities, as well as suburban areas and regional cities as subjects for evaluation.

It is helpful to target local governments, such as public facility managers, as subjects for evaluation, in addition to private companies. Local governments, especially in the case of regional cities, play a key role as the primary project lead. It is possible that a mechanism could be looked at in perspective that would evaluate and certify overall urban development in relation to green spaces, such as plans and measures developed by local governments, and create an environment where cities themselves are rated in the market, facilitating the flow of money in.

4. Evaluation perspectives and items

(Evaluation perspectives)

<Climate change, Biodiversity, Well-being>

Urban green spaces may be evaluated in terms of climate change measures, securing biodiversity and improving well-being from the perspective of

assessing their contributions and impacts on resolving issues for the earth, communities and people.

The points from each evaluation perspective may include the following examples:

- Climate change measures: Planting and growth of tall trees, greening buildings and other infrastructure, heat-island measures, heat countermeasures, rainwater storage and infiltration, resource recycling, other
- Securing biodiversity: Conservating and creating green and blue spaces, improving native biodiversity and ecological health, creating hierarchical structures, protecting rare species, using native species and preventing the invasion of non-native species, preserving topsoil, securing soil density, restricting the use of pesticides and chemicals, water cycles, other
- Improving well-being: Improving health, increasing productivity, universal design, creating safe and secure spaces, offering environmental education, securing openness, ensuring accessibility to green spaces, use of green spaces as evacuation sites, securing farmland (excludes farmland converted through deforestation or other land use), other

In this case, it is important to be in alignment with Target 12 of the Kunming-Montreal Global Biodiversity Framework (significant increase in area and quality, connectivity of, access to, and benefits from green and blue spaces in urban areas, enhancing native biodiversity, ecological connectivity and integrity, improving human health and well-being and connections to nature, other).

<Management and governance, Understanding and reflecting land and regional characteristics>

In order to demonstrate the functions of green spaces in a continuous and stable manner as extensively as possible, it is also important to evaluate management including proper maintenance of the land, governance of the organization, including planning, structure, and funds to support the

management and understanding and reflecting natural and historical features, legal status, and other characteristics of the land and surrounding areas where projects will be implemented.

Governance, strategies, risk and impact management, as well as indicators and targets are also defined in TNFD as pillars of information disclosure, with emphasis on management and governance, as well as impact assessments.

The following examples may be considered for inclusion as items in each evaluation.

- ○ Management and governance: Establishment and succession of maintenance and management plans, establishment and use of results of monitoring plans, securing implementation systems (persons responsible, experts, landscape architects, financing, etc.), other
- ○ Understanding and reflecting land and regional characteristics: Understanding and reflecting the characteristics and origins of the land and surrounding areas (i.e., protecting original topography, etc.), understanding and complying with governmental plans (i.e., master plans for parks and green spaces, local biodiversity strategies, etc.), legal status, other

In “management and governance”, it is also important to determine if private businesses have positioned certification systems in TNFD disclosures and SBTs for nature; in other words, it is necessary to determine if acquiring certification has been set as a corporate KPI, and examine the existence and content of the company’s strategies for green spaces and biodiversity. Due attention should also be paid to emphasis on social equity considerations, such as diversity, inclusion, and human rights, in all aspects of investment and financing.

<Increasing a value of areas>

A common goal shared bythree major evaluation perspectives (climate change, Biodiversity and Well-being) is to “increase the value of areas”.

In this case, “value” can be viewed in terms of the following two points.

(1) Value generated by green space initiatives to create vitality and solidarity in communities in surrounding areas: Enhanceslocal communities, creates regional economic promotion, passes on unique local history and culture, creates favorable environments for raising children, improves the resilience of areas in a disaster, other

(2) Value generated by the continuity of green spaces and the creation of networked or areal expanses within a wider area: Forms ecological networks, creates wind paths, forms beautiful landscapes, imploving regional resilience(disaster prevention), other

As seen here, it is important to conduct a proper evaluation of the value generated by projects to secure green networks and create areal expanses both inside and outside sites from the perspective of enhancing green spaces so that they can function more effectively. The value of areas will increase through (1) and (2), for example, with the following initiatives.

- Formation of ecological networks extending beyond the city block that are connected to the green spaces of private businesses and public entities
- Projects to create walkable networks connecting green spaces with green pathways and to introduce bicycles and new modes of mobility
- Integrated management of green spaces of adjacent public facilities, such as roadside trees, with green spaces located on site, other

In terms of the question of whether to evaluate those who were among the first to work on the continuity of green spaces (pioneers) or those who followed in their footsteps, both perspectives are valid as long as the standard of those who came after matches that of the pioneers, since the ones who first became involved will be even more highly regarded as the series of efforts in one area extends out to surrounding areas.

(Evaluation methods)

It is advisable to divide evaluation items into basic mandatory segments, selection criteria, and additional parts to evaluate innovativeness.

A different set of evaluation items must be used or adjustments made to weightings of the same evaluation items, such as management aspects, since it is difficult to use the same evaluation methods to assess “projects to create new green spaces” and “projects to contribute to securing and improving the quality of existing green spaces.”

It is better to use a range of scores when evaluating each item rather than a yes/no assessment to indicate if each single item has been completed, as this will result in a more impact-oriented approach.

5. Incentives for obtaining certification

(Linkages with other related systems)

Linking the acquisition of this certification to an advantage for utilizing other related systems (scoring elements, shortened procedures, other) would provide an incentive for those who use this certification

For example, linking this certification system to Global Real Estate Sustainability Benchmark (GRESB), an annual benchmark assessment that measures ESG considerations in the real estate sector, would result in an increase in corporate value of the real estate companies that acquired this certification.

It is also important that this system be linked with the Japanese Ministry of the Environment's "A Scheme to Certify Conserved Areas to be Identified as OECMs " certification, which will simplify procedures for acquiring this certification.

It may also be effective to create synergy with environmental certifications for buildings, as it has been statistically proven that environmental certifications have a positive effect on rents and cap rates. It may be feasible to collaborate with buildings around target green spaces that have already acquired certification, in order to make it easier to obtain environmental certification for buildings.

In addition, as an incentive, it would be effective to use this certification system

as a requirement for national and local government projects, as well as for evaluations and requirements for public real estate initiatives (PPP/PFI, Park-PFI, other), with an eye to expanding nationally.

(Direct incentives, such as financial assistance)

Cost benefits should be available as a financial incentive, since the creation and management of quality green spaces can be costly.

An additional potential incentive may be support, such as technical advice and dispatch of experts for the development, maintenance and management of green spaces after certification is acquired.

(Responses to TNFD and other frameworks)

A major incentive for the use of this certification system would be its potential application as an explanatory tool, especially in the real estate sector, in the event that companies are required to fully disclose nature-related financial information in response to the TNFD, SBTs for nature and other international frameworks.

For this purpose, it is important to create dialogue with TNFD and other frameworks starting from the rule-development stage of this certification system.

IV. Future Challenges

In order to establish an evaluation and certification system to secure quality green spaces through private investment, it is necessary to generate a positive cycle around the use of evaluations and certifications, improved assets and corporate values, promotion of investment and financing, market expansion, and back to the use of evaluations and certifications, and it is important to work to create this type of environment for the future.

Studies on evaluation items, effective measurement methods, review techniques, and ensuring the qualifications of reviewers must be enhanced in order to establish an actual evaluation and certification system. Evaluation items must consider regional characteristics and weighting, in particular. It may also be possible to evaluate the publication of data on species surveys and people flow

acquired through monitoring activities, from the perspective of promoting the expansion of efforts. The international discussions on stakeholder engagement held in recent years with local residents, communities and others during project planning and implementation stages is a trend worth noting.

Care should also be taken to ensure that the disadvantages and costs associated with efforts do not lean unfairly towards the most vulnerable in society.

Green spaces that serve as the backbones and hubs of cities are vitally important from the perspective of networking. In order to ensure the effectiveness of the certification system, it is necessary to use and enhance different systems to ensure that green spaces are secured in a sustainable way.

When examining the potential for introducing actual certification systems in the future, it is important to provide opportunities for expansive discussions with related businesses and other stakeholders from the project examination stage, make adjustments to systems while implementing model projects, and disseminate activities to the international community at various opportunities, such as international meetings.

Committee List

（in alphabetical order according to the Japanese syllabary、◎：Chairperson）

Name	Affiliation
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Makoto Haraguchi	TNFD dedicated SVP, Sustainability Dept., MS&AD Insurance Group Holdings,Inc./ Fellow, Research Sec., Research Dept., MS&AD InterRisk Research & Consulting,Inc.
Hiroki Hiramatsu	Woonerf Inc. Founder & CEO
Ryuichi Horie	CSR Design Green Investment Advisory, Co.,Ltd. Co-Founder & CEO
Shigeto Yanai(◎)	Chiba University Graduate School of Horticulture

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Glossary of Terms (in alphabetical order)

Based Targets for Nature (SBTs for nature Science) Measurable, actionable, and time-bound targets based on the best science available to enable companies and

other entities to act within the limits of the Earth and in line with the sustainability goals of society with respect to the interconnected systems of water, biodiversity, land, and sea along the value chain. The Science Based Targets Network (SBTN) is comprised of more than 45 organizations and has taken the lead in developing methodology to set up SBTs for Nature.
BID (Business Improvement District) System employed in the US, UK and other countries where businesses and other groups in a district (usually commercial) set up organizational and financing structures to implement projects required for the development of the district. The Local Revitalization Area Management Financial Support System in Japan was created based on BIDs overseas.
Cap rate Acronym for “capitalization rate”; rate of return, capitalization rate, expected yield. The rate used to determine the value of target real estate properties directly from net income for a period of time. The higher the risk (uncertainty) for a real estate investment, the higher the rate.
Carbon Disclosure Project (CDP) NGO with headquarters in London, UK that represents pension funds and other institutional investors. Sends out CDP surveys on climate change, water, forests, supply chains and other areas to companies, and rates and discloses responses.
Ecological networks Network of ecosystems organically connected to important areas, such as pristine natural areas, at the core, that takes ecological cohesion into account in order to ensure a state of symbiosis between people and nature. The development of these types of networks is expected to achieve multiple functions, such as securing habitats for wildlife, providing space for people to interact with nature, and preventing global warming.
Equator Principles Developed in 2003 by 10 major banks in Europe and North America in cooperation with the International Finance Corporation of the World Bank Group. The principles stipulate for businesses to monitor environmental and social impacts using set criteria and to be encouraged to implement appropriate measures, and to monitor whether projects are proceeding as planned after being financed.
ESG investment Investments and loans that take environmental, society and governance factors into account, in addition to traditional financial information. There are seven different types of investment methods: negative screening, norms-based screening, positive screening, ESG interaction, impact investing, sustainable themed investment, engagement and voting.
EU Taxonomy Criteria to determine if economic activities take social considerations into account, as announced by the Platform on Sustainable Finance, a consultative body under the EU’s European Commission. The literal translation of “taxonomy” is a “classification system”.
Fund Financial product in which funds collected from investors are invested and managed in a portfolio of stocks and bonds by an investment management company. Investment returns are distributed in proportion to the amount invested by investors.
Global Real Estate Sustainability Benchmark (GRESB) Tool to measure environmental, social and governance (ESG) considerations at the corporate and fund level in the real estate sector for use in selecting investments and in dialogue with investment locations. Established in

2009 primarily using pension funds in Europe.
Governance Mechanism used by organizational owners to control behavior throughout the organization. Refers to all governance actions taken to encourage the organization to act appropriately so that it can achieve objectives, as well as to enable long-term maintenance, survival and development.
Green infrastructure Efforts to promote the creation of sustainable and attractive national land, cities, and communities by using the diverse functions of the natural environment in terms both hard and soft infrastructure, such the development of social infrastructure and land use.
Green spaces As per the Urban Green Space Conservation Act of Japan, “green space” is defined as woodlands, grasslands, riparian areas, rocky areas, or land with similar conditions (including farmland), either alone or in combination, or in combination with adjacent land, which forms a favorable natural environment.
Greenwashing Claiming to have improved effects on the environment although there are, in fact, none, or although funding is not properly allocated to environmental projects.
Impact Ultimate change or impact generated as the outcomes of efforts.
Intergovernmental Panel on Climate Change (IPCC) Intergovernmental organization established in 1988 under the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP). The IPCC produces reports that contain summaries of the latest scientific findings on climate change (published literature) and provide a scientific basis for the global warming prevention policies of national governments.
Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Intergovernmental organization established in April 2012 as an intergovernmental platform to scientifically evaluate trends related to biodiversity and ecosystem services and strengthen the links between science and policy. IPBES works in four areas: scientific assessments, building capacity, generating knowledge and providing policy support. The outcomes from these areas are used in international initiatives based on the Convention on Biological Diversity and in national policies. IPBES is sometimes referred to as the biodiversity version of the IPCC, which is promoting similar activities in the area of climate change.
KPI (Key Performance Indicator(s)) Refers to indicators used in monitoring to achieve particular targets.
Master Plan for Parks and Green Spaces Basic plan based on Article 4 of the Urban Green Space Conservation Act, in which municipalities set out their future visions, goals and measures for conserving green spaces and promoting greening. This plan implements comprehensively and systematically the conservation of green spaces and promotion of greening.
The National Biodiversity Strategy of Japan 2023-2030 Basic national plan on the protection and sustainable use of biodiversity, based on the Convention on Biological Diversity and the Basic Act on Biodiversity. Based on the Kunming-Montreal Global Biodiversity Framework, global targets adopted at the 15th Conference of the Parties (COP15) to the Convention on Biological Diversity in December 2022, this plan was reviewed and approved by Cabinet decision in March 2023.
Nature-based Solutions (NbS)

Solutions for the protection, sustainable management and restoration of natural and human-built ecosystems that effectively and adaptively address social issues and simultaneously benefit the well-being of people and biodiversity.
Nature positive Concept of "halting and reversing biodiversity loss by 2030 to put nature on a path to recovery" mentioned in the annex to the communiqué at the G7 Summit in May 2021. In the National Biodiversity Strategy 2023-2030, "nature positive" is defined as "halting and reversing the loss of biodiversity". The financial community believes that similar to climate change, biodiversity loss generates cascading risks that affect financial stability.
Other Effective area-based Conservation Measures (OECM) Areas other than protected ones that contribute to the conservation of biodiversity. OECM is one of the core measures being used to achieve the 30by30 targets.
Park-PFI (Private Finance Initiative) Newly established by a revision to the Urban Parks Act in 2017. Entities are selected through a public bidding process to install park facilities open to the public that will improve convenience for park users, such as restaurants and stores, and to improve and renovate specific park facilities that can be used by general park users, such as parkways and squares in the surrounding area using revenue generated from such facilities. Referred to as "Park-PFI", this is a new type of maintenance and management approach to utilizing private financing in urban parks.
PBAF (Partnership for Biodiversity Accounting Financials) Initiative launched by six Dutch financial institutions, including ASN Bank, at the end of 2019. Financial institutions are considering opportunities and challenges in terms of evaluating and disclosing the impacts on biodiversity from their investments and loans. They aim to develop principles that will serve as the basis for biodiversity impact assessments and will contribute to the development of common methodologies for calculating biodiversity impacts in the financial sector through the sharing of experiences, case studies and discussions.
Planetary boundary Example of objective method to assess the impact of human activities on the Earth's systems. People cause nine types of changes in the functions of the Earth's systems (1. biosphere integrity (destruction of ecosystems and biodiversity), 2. climate change, 3. ocean acidification, 4. land-system change, 5. unsustainable freshwater use, 6. disturbances in biochemical flows (influx of nitrogen and phosphorus into the biosphere), 7. atmospheric aerosol loading, 8. pollution from new chemical substances, 9. stratospheric ozone depletion). The study found that the expansion of human activities beyond the range in which the stability of Earth's systems can be maintained (planetary boundary) will result in irreversible damage.
Principles for Responsible Investment (PRI) Concept proposed by former UN Secretary-General Kofi Annan in 2006 on incorporating environmental-, social- and governance-related issues into asset management.
A scheme to Certify Conserved Areas to be Identified as OECMs Certified by the government as areas where biodiversity is being protected through the efforts of the private sector. Certified areas are registered in an international database as OECMs, except where they overlap with protected areas.
Stakeholders Parties with an interest in a company's management actions. Stakeholders include shareholders, consumers, employees, suppliers, local communities and others.
Stakeholder engagement

Systematic endeavors by businesses to gain a better understanding of stakeholders and incorporate them and their interests into their business activities and decision-making processes.
Sustainable Development Goals (SDGs) International goals to create a sustainable and better world by 2030, as indicated in the 2030 Agenda for Sustainable Development, the successor of the Millennium Development Goals (MDGs) formulated in 2001. The SDGs were adopted in a unanimous vote by member states at the UN Summit in September 2015 and contain 17 goals and 169 targets to ensure that no one is left behind on Earth.
Sustainability Linked Loans Loans to encourage borrowers to achieve ambitious Sustainability Performance Targets (SPTs). Specifically, this refers to loans in which (1) there is a clear correlation between sustainability goals set out in the comprehensive social responsibility strategy of the borrower and the SPTs, (2) the degree of improvement in sustainability is assessed and measured with appropriate SPTs by pre-determined Key Performance Indicators (KPIs), and (3) transparency is ensured through post-financing reporting on the above.
TCFD (Task Force on Climate-related Financial Disclosures) Established by the Financial Stability Board (FSB) at the request of the G20 and chaired by Michael Bloomberg, the task force examines how to address climate-related disclosures and financial institutions. The final report was released in June 2017, with recommendations that companies and institutions disclose four items related to climate change risks and opportunities: (1) governance, (2) strategies, (3) risk management, and (4) indicators and targets.
30by30 targets Targets that aim to effectively protect at least 30% of the land and sea as healthy ecosystems towards the goal of halting loss and restoring biodiversity by 2030 (nature positive).
TNFD (Taskforce on Nature-related Financial Disclosures) International organization established to create a nature-related framework for corporate risk management and disclosure with the participation of major companies, financial institutions, and other companies, institutions and organizations from various countries. Discussions are ongoing on the establishment of a disclosure framework, with the final version expected to be released in September 2023.
Well-being In a state of being physically, mentally, and socially fulfilled.