# Transition Finance Guidance (Final version)

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**Introduction**

In order to protect the future of the Earth, financial institutions and financial markets are required to take into consideration the causes of climate change and environmental damage, and to carry out the appropriate and balanced allocation of resources to contribute to the achievement of a decarbonized society as well as to reduce environmental pollution, conserve biodiversity and promote the circular use of resources. In this context, the market for green bonds and other ESG-related bonds has already developed and the scope of such bonds has also expanded from green finance to sustainable finance in both financial and capital markets. However, the challenges we are facing cannot be solved sufficiently by the financing of green or sustainable activities alone. Economic and societal governance measures are urgently required to shift society away from an economic and energy system based upon fossil fuels and wasteful use of resources. A smooth, steady, just and cost-effective transition towards greater planetary sustainability is thus required.

For this purpose, additional investment and financing is necessary to help transform business activities (i.e. projects, assets, and activities) with carbon intensive or high environmental impacts (so-called "brown projects") to low or zero-carbon models while reducing other environmental impacts in a smooth and timely fashion. Similarly, this is also required for companies and sectors with carbon or environmentally intensive activities (i.e. "brown sectors"). To enable this smooth transition of both particular business activities and entire corporate entities, there is a need to develop and deploy investment and finance especially for this purpose. This will be hereinafter called "transition finance".

Also, in order to spread and expand such financing in the market, there is a need for common procedures and methods to evaluate the appropriateness of transitioning specific business activities and corporate entities. Compiled as a guidance for this purpose, this proposal was drafted by a team of researchers interested in this challenge and in contributing to the formulation of a common global standard for transition finance.

**Scope**

Green finance refers to providing finance to new projects with low or zero carbon emissions or reduced environmental impacts. Typical examples include climate change mitigation projects such as renewable energy. For this reason, evaluating the "greenness" of new business activities such as individual projects or specific businesses (either operating or under planning) is essential. In contrast, in the case of transition finance, the focus is on existing business activities or corporate entities which have carbon-intensive or

high environmental impacts but also have a strong intention to change to a more climate and environment friendly business model. Therefore, the process of transition finance should involve setting and evaluating the goals of the transition for both business activities and corporate entities and determining the validity of the specific "transition period" intended for this in addition to the extent to which these have been "greened" in accordance with initial objectives. By setting the goal of the transition, monitoring the process and verifying the outcome, verifying the "GPO" (i.e. Goal, Process and Outcome) of transition activities receiving financing can provide investors or lenders with confidence about the effectiveness of their investment and its contribution to sustainability. In addition, it can increase certainty about both economic and societal returns.

Currently, the evaluation criteria used in the market for ESG bonds targeted at business activities are based on four core elements set out by Green Bond Principles (GBP), managed by the International Capital Markets Association (ICMA). These are: 1) Use of proceeds, 2) Process for project evaluation and selecting a project, 3) Management of proceeds, and 4) Reporting. Meanwhile, when measuring ESG or the sustainability of specific corporate entities, evaluation criteria defined in the ICMA Sustainability Link Bond Principles (SLBP) published in 2020 are also valuable references. Consisting of five core elements that differ to the Green Bond Principals, these include: 1) Selection of Key Performance Indicators (KPIs), 2) Assessment of Sustainability Performance Targets (SPTs), 3) Bond features, 4) Reporting, and 5) Verification.

The main differences between these two sets of principles lies in how "greenness" and "sustainability" should be evaluated. That is, should this be evaluated from the perspective of the sustainability related project itself (i.e. Use of Proceeds (UoP))? Or should this be evaluated from the perspective of the entire corporate entity concerned (e.g. using KPI and sustainability performance targets)? In the case of transition finance, in addition to taking into account the core elements of the abovementioned principles, we recommend verification of the Goals, Processes, and Outcomes (GPO) of the transition as additional evaluation criteria for both business activities and corporate entities (described in the "Principles" part of this guidance). In related with that, we add External Assessment as $6^{th}$ principle due to its significance of verification of transition outcome.

The question of whether we should promote transition finance for both specific business activities or entire corporate entities requiring finance for shifting to a decarbonized or resource circulating business model should basically depend on the determination of credit issuers. However, if comparing the transition of the specific individual business activities with a corporate entity as a whole, since planning, implementation and evaluation of measures in the latter would be likely more complex, this would require therefore a larger scope and longer time period for the transition. On the other hand, it is expected that

the impact of transitioning entire corporate entities would be larger and more significant for the economy and society as a whole than individual business activities alone.

In particular, it is extremely important to ensure the validity of KPIs and SPTs selected for contributing to the transition of corporate entities. Given the diversity of sectors and corporate entities using these immature evaluation and verification methods and tools, they are still undergoing trialing in the market. In contrast, evaluation and verification methods and tools that target particular business activities have already started in both bond and loan markets. Rich experiences have thus accumulated around issuing and evaluating green bonds and green loans for individual projects and activities.

In this guidance, we will discuss common standards for transition finance targeted at both individual business activities and corporate entities. We acknowledge that there is room for debate on whether financial support for the transition to a decarbonized economy should focus on individual business activities or entire corporate entities. However, even in the case of the transition of an entire corporate entity, the improvement of KPIs and the achievement of SPTs are expected to be formed mainly by the accumulation of the transition results of individual business activities carried out by that corporate entity. On the other hand, the impact of reducing carbon emissions in individual business activities will be relatively smaller than if reducing all emissions associated with a corporate entity. This implies that these two aspects of corporate activities are strongly related and dependent on each other. Therefore, it is desirable to also evaluate the transition process and outcome of particular business activities when evaluating corporate entities as a whole. In parallel, when evaluating the transition of corporate entities, it is desirable to determine the major business activities making up that entity along with their intended contribution to improving KPIs and achieving SPTs. Additionally, issuers or borrowers should clearly indicate in advance whether their finance is aimed at the transition of particular business activities or at the corporate entity as a whole.

Regarding this, we consider that finance provided to newly established green projects (e.g. renewable energy power generation projects) after decommissioning old plants or business activities should be considered green finance rather than transition finance.

**Objective**

When providing transition finance, it is necessary to clearly indicate the point of departure and the destination in the "transition pathway" in terms of from where until where the transition is intended to take place. The “point of departure” refers to the baseline or the carbon intensive and environmental impacts of business activities or entire corporate entities as they currently stand while the "destination" refers to decarbonization (i.e. carbon neutrality). To give some examples, a destination for the case of

climate change mitigation might involve reducing emissions to the point of net-zero or beyond. Similarly, an environmentally focused transition might aim to reduce environmental degradation and pollution by eliminating pollutant emissions and carrying out environmental restoration and remediation in accordance with relevant environmental laws and standards. In the case of biodiversity, a transition might involve the regeneration of overexploited or degraded natural resources and so on.

**Definition**

Transition finance should be defined as that from which the proceeds will be exclusively applied to finance or re-finance (in part or in full) new or existing transitional business activities or relevant corporate entities that are aligned with the core components of the principles in this guidance. Transition finance consists of debt-based financial instruments including transition bonds and transition loans. It is also expected that some of the business activities and corporate entities undergoing a transition will also use finance for employment measures (which are a key social benefit that can arise from transitions). However, debt-based financial instruments that are not applied to any of the core elements of transition finance, both for individual business activities and entire corporate entities, should not be considered transition finance.

**Principle 1: Use of Proceeds**

1.1 Transition Finance for Business Activities (A-Type)

Proceeds raised in transition financing for corporate entities or particular business activities, assets and projects are used for the goal of smoothly transitioning carbon-intensive or high-environmental impact activities into low-carbon, decarbonized or low-environmental impact alternatives. This purpose should thus be appropriately documented in legal documents defining the debt-based financial instruments to be utilized. Since the transition of individual assets is expected to be a major focus of transition activities, we define further below a category for assets that we label "A-type" finance (i.e. A=asset).

The use of proceeds for transitioning brown projects to green ones will produce clear environmental benefits. The effect of these benefits should be evaluated by the issuer or borrower, and where possible, quantified. Also, if either part of or the entirety of proceeds raised are used for refinancing, the issuer or borrower should indicate the estimated ratio of the amount used for the initial investment and the amount used for refinancing and, if necessary, determine which business activities will be eligible for refinancing.

Business activities supported by transition finance should reach the targeted level of "greenness" within a specified period of time in accord with initial objectives. If setting a target or goal for climate change mitigation, it is desirable to set specific quantitative targets for zero emissions of greenhouse gases. Also, if transition finance targets other objectives such as the protection of natural resources, the conservation or restoration of biodiversity, the prevention and management of pollution or the attainment of circular

economy-based businesses and so on, certain quantitative targets or goals to be achieved should be established. With regard to identifying business activities with potential to contribute to the achievement of transition goals, as is the case already for green finance, it is desirable to define a taxonomy of brown or transition activities so as to make it easier to determine their eligibility for transition targets.

When setting step-by-step transition goals and processes, for the purposes of assisting technological and management decisions, the goals and processes for each phase should be clearly stated. At the same time, when aiming to achieve "greenness" through phased improvements, interim targets could also be set. Yet when setting such incremental goals or targets, it is still desirable to establish the final transition goal. This said, the formulation of transition process without phases or mid-term targets are obviously accepted and encouraged.

To set out the basic concept of a transition taxonomy for A-type finance, we list various business activities below. This non-exhaustive list for a "Brown Taxonomy for A-Type Transition" appears in no particular order and the phased process indicated are merely intended as examples.

1. Coal-fired power generation plants: In the case of setting a phased transition process, the first phase might concern fuel conversion to natural gas or biomass. The second phase might involve using CCS or CCU to reach net zero. (The transition from low-efficiency coal power technologies such as subcritical or supercritical to ultra-supercritical should be excluded due to the lock-in effect of lifetime emissions that would nullify emissions saved in the short-term).
2. Natural gas power generation: The first phase might involve Pipeline repairs to reduce methane leakages. The second phase might involve fuel conversion to biogas, biomethane gas or carbon-free hydrogen gas to reach net zero. (The use of biogas or biomass should not compete with human food and not increase the loss of biodiversity)
3. Automobiles: The first phase might involve conversion from gasoline vehicles to gas-fueled vehicles or hybrid vehicles. The second phase might involve switching to battery electric vehicles (BEVs) or Fuel Cell Electric Vehicles (FCEVs) to reach net-zero. (Care should be taken to source electricity and hydrogen from carbon free sources)
4. Ships: The first phase might involve conversion of fuel from heavy oil to gas. The second phase might involve switching to fuel cell propulsion with carbon-free hydrogen or Carbon Capture on the Ocean (CC-Ocean) to reach net zero.
5. Aircraft: The first phase might involve converting jet fuel to biofuels and improving operating systems and so on. The second phase might involve using airplanes propelled by batteries or carbon-free hydrogen fuel to reach net zero.
6. Buildings and houses: The first phase might involve retrofits for increasing energy efficiency and

integrating renewable energy. The second phase might involve deep retrofits to houses or buildings involving renewable energy, energy saving technologies and electricity storage to reach zero emissions, Life Cycle Carbon Minus (LCCM) or carbon positive.

7. Cement: The first phase might involve the reduction of the clinker ratio. The second phase might involve the introduction of carbon-free hydrogen combustion to reach net zero.
8. Metals and glass: Utilization of recycled resources, etc.
9. Iron and steel and chemistry: The first phase might involve biofuel mixed burning. The second phase might involve using hydrogen reduction methods or carbon-free hydrogen to reach net zero.
10. Palm oil: The first phase might involve strict sourcing of Roundtable on Sustainable Palm Oil (RSPO) certified oil or certification of biodiversity.
11. Food and beverage business: The first phase might involve the reuse or recycling of plastic containers or conversion to sustainable alternatives. The second phase might concern changing to a circular economy business model" to reach zero waste.
12. Agriculture: The first phase might involve non-chemical fertilizers, organic farming, low-carbon agriculture (e.g. production or utilization of biogas).
13. Clothing: Transition to recycled materials and circular economy-based business models.
14. Consumer goods: Conversion of plastic packages to biodegradable materials or introduction of recyclable or recycled resources.
15. Real estate and land use: Greening or rehabilitation of used or contaminated soil (i.e. brownfields)
16. Services: Business that use green products and services (e.g. introduction of battery electric vehicles (BEVs) or fuel cell electric vehicles (FCEVs) into shared transport fleets, rental of net zero or carbon positive housing etc.
17. Others

The above "Brown Transition Taxonomy for A-Type" is intended to serve as a preliminary and simple classification and taxonomy for A-Type transition finance. It is desirable to develop a more detailed version in the future.

## 1.2 Transition Finance for Companies (C-Type)

Proceeds raised in transition financing for corporate entities or particular business activities, assets and projects are used for the goal of smoothly transitioning carbon-intensive or high-environmental impact activities into low-carbon, decarbonized or low-environmental impact modes. This purpose should thus be appropriately documented in legal documents defining the debt-based financial instruments to be utilized. Since the activities targeted here concern the core businesses of the corporate entity concerned, we distinguish these cases as "C-type" (i.e. C= corporate entities or companies) in contrast to the above mentioned "A-type" (see Section 1.1).

In this transition case, with the core characteristics of the corporate entity in question belonging to some kind of "brown industry sector", there is a need to define the goal or target of the transition as "greening" the corporate entity in its entirety and supporting this process with finance.

In case of C-type transition finance, not all corporate entities in all industries or sectors should be eligible to obtain finance. Rather, eligibility should be limited to corporate entities belonging to carbon-intensive or high environmental impact sectors. The reason for these limitations is simple. Any corporate entity wishing to reduce or change the climate or environmental impacts of individual business activities can use A-type transition finance. Also, for corporate entities that cannot be considered overall as carbon-intensive or possessing high environmental impacts but have certain carbon-intensive projects or activities in their assets, regular finance or A-type transition finance could be used to reduce carbon emissions and enhance environmental sustainability.

On the other hand, under the increasing urgency of the climate crisis and increasing environmental threats, there is a concern that companies with carbon-intensive or high environmental impacts will not be able to sufficiently secure finance for their transition through traditional means. Investors or financial institutions also need to know which corporate entities should change their current business model to align with the pursuit of a low-carbon or decarbonized economy in order to better select and decide their own ESG investment policy. Also, if companies of a non-carbon intensive nature were able to apply for C-type transition finance, the use of proceeds might be used not only for transitioning but also for the general funding of the corporations themselves. If this was the case, there is a danger that this would erode the significance and purpose of "transition finance". Therefore, investors and financial institutions providing transition finance should clarify which corporate entities are eligible to apply for transition finance.

For these reasons, since it is desirable for the financing party to determine the eligibility of that corporate entity applying for funds, we have categorized a non-exhaustive list below of several industries and sectors that might be considered for C-type transition finance. This following "Brown Taxonomy for C-Type Transition" appears in no particular order.

1. Electric power companies
2. Energy developers for fossil fuels such as oil and gas
3. Iron and steel manufacturing
4. Chemicals
5. Metals and processing.

6. Cement
7. Ceramics and glass
8. Pulp or paper
9. Infrastructure related (e.g., railways, airplane-related etc.)

In addition, corporate entities eligible for C-type transition finance should take care to avoid double counting the outcomes of activities undertaken with existing financing such as A-type or regular green finance. For example, take the case of a company that had had succeeded in reducing company-wide carbon emissions. This company might have used A-type finance to reduce carbon emissions of particular assets by issuing bonds to finance a renewable energy project or switch from coal to gas-fired technology in a power plant. If these KPI improvements were not excluded from the outcomes of the newly acquired C-type transition finance, there is a danger that double counting would occur. An external verifier should thus be used to assess whether the transition finance scheme includes such dangers in the pre-assessment procedure.

**Principle 2: Process of Evaluation and Selection for Project and Companies**

The issuers and borrowers of transition finance either in the form of bonds or loans should clarify whether the target of financing is a particular set of business activities or an entire corporate entity. Then, in both cases, the following points should be clearly communicated to investors and financial providers.

- The extent of expected improvements and outcomes for mitigating climate change or enhancing environmental sustainability as a result of a smooth and reliable transition.
- The suitability of the targeted business activities or corporate entities following eligibility identified in the transition taxonomies.
- The kinds of criteria used for evaluating the eligibility of the transition.

In addition to communicating this information to financial providers during the process of screening and evaluating the targeted transition projects or corporate entity, issuers and borrowers are expected to incorporate this information into their own overall objectives, strategies and policies related to sustainability. It is also expected to disclose the use of environmental standards or certifications which are referred to during the screening, as well as any external verification of the process.

When financing corporate entities (i.e. C-type), it is necessary to select the KPIs to be used in the evaluation, the scope of their application, and the transition goals (based on SPTs). In principle, the scope of assessment in climate related transitions should include Scope 3 greenhouse gas emissions. As described above in the taxonomy for A-type transition finance, the applicable KPIs should be based on

the core business activities subject to transition and the prospects for successfully transitioning to these major A-Type business activities should be clearly explained. It is also desirable to select indicators for which evaluations can be measured as quantitatively as possible. For example, this might include per-unit carbon intensity and improvement targets for business revenue, sales and investments. For climate related transitions, the scope of GHGs should cover the entire value chain. This should thus include Scope 3 emissions as well as consider other environmental impacts along the company's entire supply chain.

**Principle 3: Identification of the Transition Process and Outcomes**

In transition finance, the most critical issue for issuers and borrowers is how to smoothly and reliably transition existing business activities and corporate entities into low-carbon, decarbonized, or low-environmental impact types in accord with the expectations of investors and financial institutions providing transition finance. Before executing transition financing, the issuer and borrower should state clearly to financial providers and market actors the duration of the intended transition process as well as targets pertaining to the degree by which business activities or entire corporate entities shall be decarbonized or transformed into environmentally sustainable business models. After that, during their transition period, it is necessary to monitor whether any deviations occur from the planned process. This is because not reaching the targeted levels within the planned term could prove disadvantageous for investors and financial institutes in terms of both return on investment and contributions to ESG. Therefore, the process of reviewing transition goals, processes, and outcomes (GPO) is critical to transition finance.

In light of this, the following countermeasures are suggested:

- In the case of transition bonds, it is generally desirable to set the transition term for achieving the intended levels of transformation, for both specific projects or entire corporate entities, to be equal to or shorter than the bond redemption period in line with the expectations of investors. This is necessary for the purpose of being able to confirm the outcomes of the transition during the investment period. In case of transition loans, it is also desirable to confirm outcomes and the extent to which the transition loan has led to the transformation of the targeted business activities or the corporate entity's business model during the loan period.
- To confirm the status of outcomes during the transition period, it is desirable for issuers or borrowers to periodically disclose their progress towards transition objectives and verify their appropriateness with an independent third-party. While the transition of the targeted economic activities or corporate entity will lead to climate and environmental improvements as well as increases in the asset value for issuers and borrowers, where possible, it is also desirable to evaluate these outcomes from a financial perspective.

- If the transition finance does not meet the expected transition targets or goals of the issuers and borrowers, investors and lenders will not be able to meet the original expectations regarding the contribution of transition activities and will thus risk depreciating the market value of their invested financial products (transition bonds or loans). To prevent such a situation, transition finance products such as transition bonds and loans should be designed to include some sort of collateral clauses in their product documents. For example, transition bonds should include a "variable coupon system". That is, if the issuer is unable to achieve the promised transition outcomes in alignment with initial targets and time periods, the issuer should pay investors additional interest at a rate fixed before issuing bonds. In the case of transition loans, lenders and borrowers should agree to a set of "covenant clauses" which can guarantee that the borrower should pay additional interest to the lender if the borrower is unable to attain the promised outcomes within the stated transition period. In addition, it is also possible to make it mandatory for the issuers or borrowers to disclose information to that effect. These clauses can be regarded as a "penalty". Although issuers and borrowers would want to avoid such penalties, the purpose of transition finance is to ensure that the transition from the current situation to the intended goals actually occurs. Therefore, such penalty measures should be considered necessary to ensure the outcome of the transition.

**Principle 4: Management of Proceeds**

In principle, all funds raised through transition financing should be credited to a sub-account or sub-portfolio held by the issuers or borrowers that are managed separately from their other general funds. Otherwise, transition funds should be managed appropriately by other traceable methods. In the case of bonds, so long as the transition bonds are outstanding, the balance of the tracked net proceeds should be periodically adjusted to match allocations to eligible transition projects made during the transition period. If there are unallocated funds, the expected temporary management method(s) should be disclosed to investors and lenders. The management of funds raised by issuers and borrowers should be complemented by an auditor or external evaluation body.

**Principle 5: Reporting**

Both issuers and borrowers are required to disclose the methods described in "3. Identification of the transition process and outcomes" and "4. Confirmation of migration process and outcomes" of this guidance in the form of pre-issuance reporting. When conducting post-issuance reporting, these should be disclosed together with information related to monitoring the progress of the transition and the prospect of achieving the transition goals.

Information for this post-issuance reporting should be disclosed annually throughout the transition period and at least once a year. In the event that any special circumstances occur during the transition period, it

would be necessary to disclose this in a timely fashion. In addition, when climate and environment outcomes or improvements in the economic asset value of issuers and borrowers are anticipated due to the transition progressing smoothly and as planned, if possible these positive financial outcomes should be evaluated and disclosed in an appropriate way. It is important that these disclosures indicate the degree of improvement for KPIs set in advance and the extent of improvements for major businesses or the corporate entity itself for which the funds raised by transition finance have been allocated. If the number of businesses receiving transition finance are numerous, disclosure of each targeted business area or portfolio unit should also be acceptable. In order to ensure transparency and reliability of the information disclosed, it is desirable to utilize quantitative indicators as much as possible.

**Principle 6: External Assessment**

To assess the appropriateness of transition finance, issuers and borrowers are required to obtain an external assessment to ensure whether their planned transition scheme has aligned with the above five principals prior to the execution of the transition bonds or loan. At the same time, it is also required to carry out post-issuance reporting by obtaining an external verification to assess whether the transition process has been progressing as expected and whether the transition target can be reached in line with initial expectations.

In the case of green bonds, these pre- and post-assessment reviews may be carried out by the same external verifiers or rating agencies. However, in the case of transition finance, the burden faced by external verifiers responsible for implementing the assessment is expected to vary across the pre- and post-assessment stages. That is, the former stage will involve the pre-assessment of the validity of financial product design. This should be utilized during the stage of product design before executing the transition finance. On the other hand, the latter stage would involve a post-assessment to confirm the degree to which the use of funds and outcomes align with the planned transition process. Therefore, in this latter case, if the transition is not observed to be progressing as expected, the external verifiers would be expected to ask the issuers or borrowers to correct their transitional strategies and also play a key role in triggering an increase of the coupon rate in the variable coupon scheme for bonds and the covenant clauses for loans.

Given that there are distinct differences in the role of the external verifiers between the pre- and post-assessment, we recommend that separate external verification agencies take charge of each of these processes. In addition, for the latter, it is expected there would be cases where a financial evaluation would be carried out and that results indicate improvements to the value of particular assets or the entire corporate entity from both a financial and sustainability perspective. Therefore, it is desirable that an independent financial auditor or external evaluation body with appropriate qualifications take charge of

the evaluation procedure.

However, in the case of regular loans, banks and other lenders will typically carry out monitoring themselves of the management of money flows and the results of lending based on the perspective of their debt management business. That is their core function of lending business. With that in mind, it is considered acceptable that the lender of the transition loan can also conduct by themselves the post-assessment of their lending as part of the normal lending process. But in such cases, it is necessary for banks and other lenders to disclose information related to their role in the transition finance to their depositors and stakeholders.

If issuers or borrowers introduce different external assessment verification procedures for both pre-assessment and post-assessment, it is anticipated that additional costs would arise compared to green finance. On the other hand, transition finance can allow issuers or borrowers to reduce transition risks due to stranded assets or obsolescent and outdated business models while also revitalizing or rebranding core businesses and so on. Additionally, transition financing can allow them to accomplish a clear transformation pathway which can contribute to increasing their brand value and reducing market risks.

Therefore, with regard to the additional costs involved in the transition, in the case of bonds this should be incorporated into the issuer's expenditure. In case of loans, these additional costs should be included in the amount borrowed from the lender. While it is hard to move down the transition pathway without these additional costs, both cases issuers and borrowers will be able to enjoy benefits from accomplishing the transition that outweigh the additional cost. It is also expected that the market will positively evaluate business activities and corporate entities undergoing or having successfully completed such transitions.

**Members of Transition Finance Study Group (TFSG） Consisting of Academic Researchers Based in Japan :**

- Asuka Asahikawa: Professor, Center for Northeast Asian Studies, Tohoku University
- Eiichiro Adachi: Advisor to the National Institute for Environmental and Financial Research (Observer)
- Nobuhito Ochi: Professor, Faculty of Policy Studies, Naomi Gakuen University
- Hugues Chenet : Honorary Senior Research Fellow at UCL（Institute for Sustainable Resources）
- Masaatsu Takehara: Associate Professor, Faculty of Human Environment, Hosei University
- Gregory Trencher: Associate Professor, Tohoku University
- *Yoshihiro Fujii: Former Professor, Graduate School of Global Environmental Studies, Sophia University (Representative Director, Research Institute for Environmental Finance)
- Hideki Murai: Professor, Faculty of Commerce, Nippon University

- Toshiaki Yamamoto: Former Professor, Faculty of Finance and Economics, Osaka University of Telecommunications

(* Lead author)