



Carbon Neutrality Initiative

December 16, 2021

JAPANESE BANKERS ASSOCIATION

Table of Contents

Overview of the Carbon Neutrality Initiative	3
I Key Policies	4
1. Financial intermediation	5
2. Cooperation with industrial sectors	6
3. Public advocacy	7
4. International discussions	8
II Key Priorities by 2030	9
1. Engagement	10
2. Assessment	11
3. Sustainable finance	12
4. Climate-related disclosure	13
5. Climate-related financial risks	14

Foreword

In October 2020, the Japanese government declared its pledge to achieve carbon neutrality by 2050 and in April 2021 set its interim target to reduce GHG emissions by 46% from the FY2013 levels by FY2030. In response to the commitments, a number of projects for carbon neutrality are currently being carried out in both public and private sectors in Japan.

At COP26 held in November 2021, global leaders reaffirmed their intent to pursue efforts to limit the temperature increase to 1.5°C in accordance with the Paris Agreement, and agreed to invite further actions over the next 10 years to 2030 (which is being called a “critical decade”), taking into account IPCC’s Sixth Assessment Report¹.

The JBA believes that it is also an urgent and critical issue for the Japanese banking industry to work on reducing its own GHG emissions and to provide financial support to the economy to achieve a “Just Transition”² to carbon neutrality / net zero emissions. There is also increasing international pressure on financial institutions to manage climate-related financial risks, including physical and transition risks that impact their portfolio. Supporting clients’ efforts toward carbon neutrality / net zero emissions is crucial for banks from the viewpoint of not only dealing with climate-related financial risks but also maintaining the international competitiveness of the Japanese economy.

Against this backdrop, the JBA set out the “Carbon Neutrality Initiative”, which identifies the JBA’s key policies and priorities up to 2030 to further strengthen the efforts of the Japanese banking industry toward achieving carbon neutrality. The JBA also established the Sustainability Promotion Office in July 2021 to foster those initiatives.

For this Initiative, the JBA carried out interviews with key stakeholders including its member banks, companies in hard-to-abate sectors, leading companies actively working toward carbon neutrality and regional companies. The findings and input from the interviewees are reflected in this Initiative.

Overview of the Carbon Neutrality Initiative

- Achieving carbon neutrality by 2050 is a global commitment by more than 130 countries including Japan, which may bring about a global transformation to the industrial structure and the entire economy as a whole. While such a transformation may provide significant growth opportunities, a disorderly transition to carbon neutrality could also bring about financial risks for banks.
- Against this backdrop, the Carbon Neutrality Initiative provides a foundation for the JBA's policies and actions for a society/economy-wide "Just Transition" to carbon neutrality. The JBA will continue to review its focus, as necessary.

Objective

Support and achieve a "Just Transition" to carbon neutrality by 2050

Key Policies

Key policies to support and accelerate JBA member banks' efforts for their clients' orderly transition to carbon neutrality

1

Financial
intermediation

2

Cooperation with
industrial sectors

3

Public advocacy

4

International
discussions

Key Priorities

Key priorities in the next three years to achieve the 2030 interim GHG reduction targets

1

Engagement

2

Assessment

3

Sustainable finance

4

Climate-related
disclosure

5

Climate-related
financial risks

Key Policies

- Achieving carbon neutrality requires significant efforts by both the public and private sectors globally and nationally. It is therefore essential to work collaboratively, not just within the banking industry alone but also with industrial sectors, the government and the international community.
- The JBA, as the premier Japanese banking association, is committed to playing a leading role in such cooperation with key stakeholders, working collaboratively to achieve carbon neutrality by 2050.

Key Policies		Our Approach	Initiatives
1	Financial intermediation	<ul style="list-style-type: none"> ● The banking industry, as the key financial intermediary in Japan, has a <u>social responsibility</u> to provide financial support to the economy to achieve a Just Transition. ● At the same time, banks are expected to effectively <u>manage climate-related financial risks</u> for their financial soundness and to meet <u>the stakeholders' expectations</u>. 	<ul style="list-style-type: none"> ● Host seminars inviting relevant ministries, agencies and experts. ● Launch an information platform where JBA member banks can refer to key policies and documents by theme [by the end of 2022]. ● Continue to respond to JBA member banks' needs and challenges. Develop the JBA's capabilities and expertise.
2	Cooperation with industrial sectors	<ul style="list-style-type: none"> ● The JBA will carry out <u>sector-to-sector engagement with relevant industrial organisations</u> to collaboratively achieve carbon neutrality. ● <u>The JBA will act as a hub</u> for sharing issues between the banking industry and industrial sectors. 	<ul style="list-style-type: none"> ● Deepen collaboration and cooperation with relevant industrial organisations, and consider cross-sectorial measures and initiatives. ● Publish brief materials on the situation surrounding the banking industry to foster mutual understanding with the industrial sectors [by the end of 2022].
3	Public advocacy	<ul style="list-style-type: none"> ● The JBA will actively engage in public advocacy, sharing <u>financial issues and challenges for carbon neutrality and a Just Transition</u>. ● In areas where concerted efforts are required for Japan's international competitiveness, <u>the JBA will work with relevant industrial organisations</u> as necessary. 	<ul style="list-style-type: none"> ● Participate in relevant government councils and share the banking industry's views. ● Advocate policy recommendations in relation to climate policy/rule-making. ● Share the banking industry's initiatives and challenges with relevant ministries and agencies.
4	International discussions	<ul style="list-style-type: none"> ● <u>The JBA will actively participate in and contribute to international policy/rule-making</u>. ● <u>It also promotes close cooperation with the International Banking Federation (IBFed) and other bankers associations</u> to address common challenges and share good practices. 	<ul style="list-style-type: none"> ● Enhance the international presence of Japanese banks in the field of sustainable finance. ● Actively participate in international discussions on policy/rulemaking in cooperation with Japanese authorities. ● Continuously collaborate and cooperate with the IBFed and foreign bankers associations in other jurisdictions.

[Key policy #1] Financial intermediation

- The banking industry, as the key financial intermediary in Japan, has a social responsibility to provide financial support to the economy to achieve a Just Transition.
- At the same time, banks are expected to effectively manage climate-related financial risks for their financial soundness and to meet the stakeholders' expectations.

Funds required for carbon neutrality and the role of banks

Required funds	Global	IEA ³	USD 4 trillion Annually by 2030	Getting the world on track for net zero emissions by 2050 requires nearly USD 4 trillion additional investment annually by 2030 from current levels (USD 1 trillion on average during 2016 to 2020).
	Japan	WWF Japan ⁴		JPY 61 trillion by 2030
			JPY 253 trillion by 2050	Capital investments required during 2020 to 2050 account for approx. JPY 253 trillion in total: 81 trillion for energy conservation, 163 trillion for renewable energy and 9 trillion for electricity-related equipment.

The banking industry, as the key financial intermediary, needs to play a new role to support clients' Just Transition in addition to the traditional roles.

Traditional role

Engage in lending and investment activities to meet funding needs for clients (e.g., working capital, capital investments).

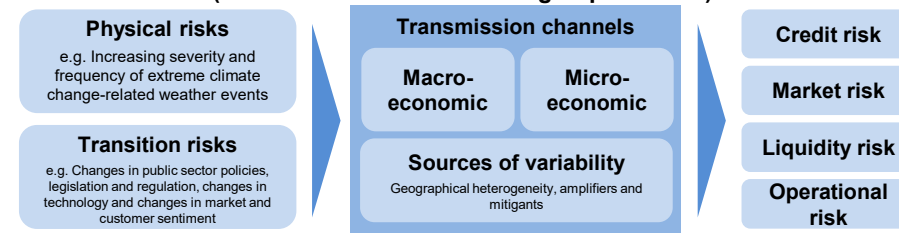
New role

Engage in supporting clients and providing funds for green initiatives, transition and innovation.

Potential impacts of climate-related risk on banks

Climate-related risk drivers can be classified into either physical or transition risks. These risk drivers affect banks' financial risks via micro- and macroeconomic transmission channels.

Financial risks from climate risk drivers (Basel Committee on Banking Supervision⁵)



The Basel Committee on Banking Supervision (BCBS) released a consultative document titled, "Principles for the effective management and supervision of climate-related financial risks".

The proposed principles require banks to incorporate climate-related risks into their risk management frameworks and assess the capital and liquidity adequacy for such risks⁶.

The JBA supports the efforts by its member banks to meet such significant funding needs and enhance their risk management of climate-related risks, both of which require cross-organisational efforts.

Approach

Host seminars inviting relevant ministries, agencies and experts.

Launch an information platform where JBA member banks can refer to key policies and documents by theme [by the end of 2022].

Continue to respond to JBA member banks' needs and challenges. Develop the JBA's capabilities and expertise.

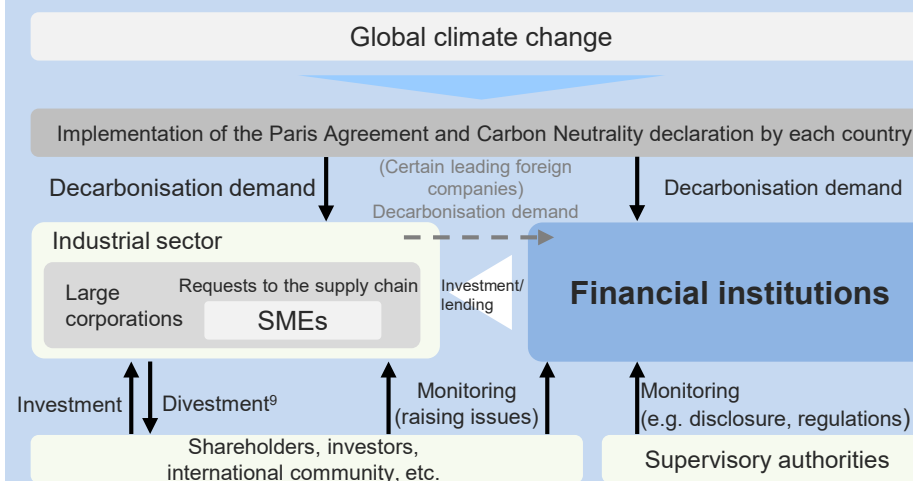
[Key policy #2] Cooperation with industrial sectors

- The JBA will carry out sector-to-sector engagement with relevant industrial organisations to collaboratively achieve carbon neutrality.
- The JBA will act as a hub for sharing issues between the banking industry and industrial sectors.

Challenges for industrial sectors⁷

Internal	<ul style="list-style-type: none"> Challenges for reaching a consensus within the company in setting company-wide targets.
External	<ul style="list-style-type: none"> Challenges for calculating Scope 3 emissions⁸ (this requires a number of estimates and data to improve accuracy). Reducing GHG emissions requires significant efforts throughout the supply chain, including SMEs.
Technological	<ul style="list-style-type: none"> In some industrial sectors, key decarbonisation technologies have not been established yet. Even if technologically feasible, it may be challenging to reflect the higher cost into their product pricing.
Cost	<ul style="list-style-type: none"> While decarbonisation may bring additional cost/investment burdens, it is uncertain whether those can be offset by additional revenue. Ensuring competitive fairness between companies promoting decarbonisation and those not dedicating efforts.

Environment surrounding Industrial sectors and Banking industry⁷



Achieving Carbon Neutrality by 2050 is a challenging task, and there are many industries that cannot achieve it immediately. In order for banks to understand clients' initiatives and challenges, it is necessary to work together and cooperate with industrial sectors not only at the corporate level but also at the sector-to-sector level.

Approach

Deepen collaboration and cooperation with relevant industrial organisations, and consider cross-sectorial measures and initiatives.

Publish brief materials on the situation surrounding the banking industry to foster mutual understanding with the industrial sectors [by the end of 2022].

[Key policy #3] Public advocacy

- The JBA will actively engage in public advocacy, sharing financial issues and challenges for carbon neutrality and a Just Transition.
- In areas where concerted efforts are required for Japan's international competitiveness, the JBA will work with relevant industrial organisations.

Policy measures for achieving Carbon Neutrality

Key policy measures under the government's Green Growth Strategy¹⁰

(Budget)

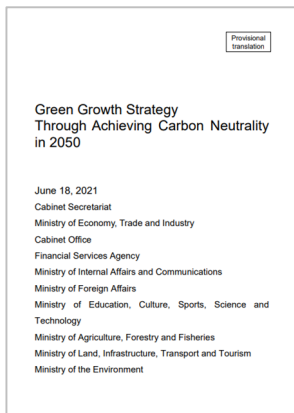
- Establish the Green Innovation Fund

(Tax system)

- Establish the Investment Promotion Tax System toward Carbon Neutrality
- Raise the upper limit of tax deduction for loss carried forward
- Expand R&D tax reduction

(Regulatory reform)

- Regulations to incentivise investments in new decarbonisation technologies (e.g., carbon recycling)
- Introducing market mechanisms, including carbon pricing (e.g., carbon credits, carbon tax), etc.



Key government's councils (as of Dec 2021)

JFSA*	METI*	MOE*	Council
✓	Observer	Observer	Expert Panel on Sustainable Finance
Observer	Observer	Observer	Sustainable Finance Platform Development Working Group (JPX)
✓	Observer	-	Working Group on Corporate Disclosure of the Financial System Council
✓	✓	✓	Taskforce on Preparation of the Environment for Effective Transition Finance
-	✓	-	Taskforce for Formulating Roadmaps for Promoting Transition Finance in the area of Economy and Industry
Observer	Observer	✓	ESG Finance High Level Panel
Observer	Observer	✓	Green Finance Study Group

(Reference) Recent policies in other countries

U.S.	Announced investment of a total of USD 2 trillion in infrastructure and R&D over the next 8 years ¹¹ (March 2021) Modernising power transmission systems, introducing clean
EU	Green Deal Investment Plan providing EUR 1 trillion from public and private sources over the next 10 years ¹² (April 2020) Support for improvement in energy efficiency of buildings and introducing clean energy

Achieving the targets set out in the Paris Agreement requires concerted efforts by the international community. Japan needs to mobilise all available policy measures to achieve carbon neutrality and for a Just Transition. Those are also the keys for realising a “positive cycle of economic growth and the environmental protection”, thereby strengthening international competitiveness through business transformation.

Approach

Participate in relevant government councils and share the banking industry's views.

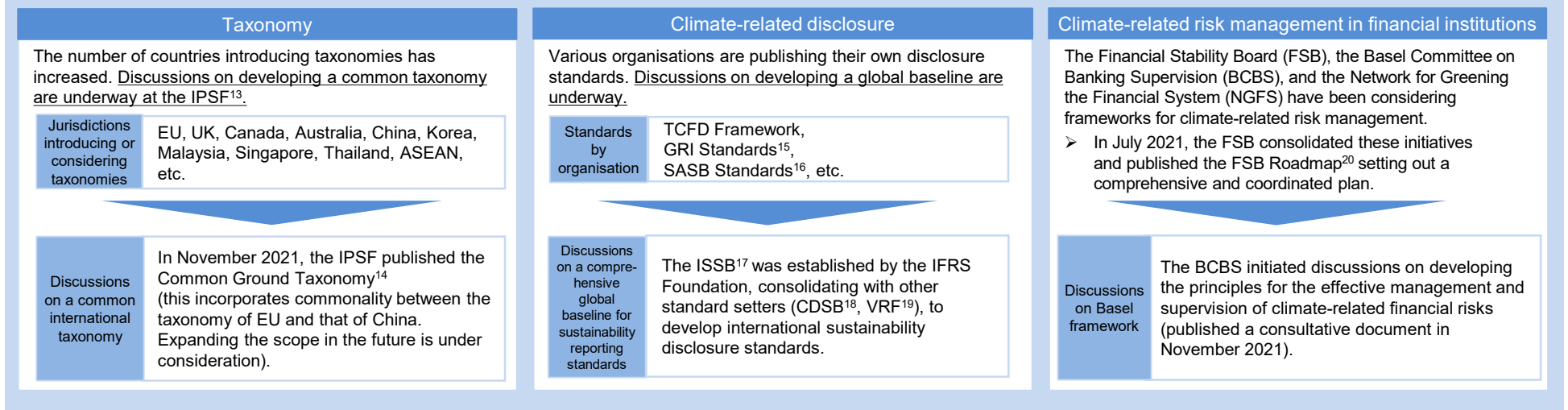
Advocate policy recommendations in relation to climate policy/rule-making.

Share the banking industry's initiatives and challenges with relevant ministries and agencies.

[Key policy #4] International discussions

- The JBA will actively participate in and contribute to international policy/rule-making.
- It also promotes close cooperation with the International Banking Federation (IBFed) and other bankers associations to address common challenges and share good practices.

International discussions on investment alignment with climate issue



There are growing trends of global alignment, integration and standardisation of rules, as well as extraterritorial application of certain jurisdictional rules. In order to ensure Japan's international competitiveness, it is important to actively participate in international discussions sharing Japan's view.

Approach

Enhance the international presence of Japanese banks in the field of sustainable finance. (e.g., internationally share the Japanese government's and banks' efforts)

Actively participate in international discussions on policy/rulemaking in cooperation with Japanese authorities. (e.g., share views at international conferences, provide comments to public consultations)

Continuously collaborate and cooperate with the IBFed and foreign bankers associations in other jurisdictions.

Key Priorities by 2030

- The first step for clients to respond to climate change is to identify potential climate-related risks and opportunities and, based on their materiality, develop a credible transition plan for decarbonisation, including specific actions during the “critical decade” up to 2030.
- The starting point for banks to support such a transition is to engage with clients to build a common understanding on their challenges and issues. The JBA will actively play a key role to facilitate such engagement by its member banks and address industry-wide challenges.

Key Priorities		Challenges	Action Plan (for the next three years)
1	Engagement	<ul style="list-style-type: none"> Currently, <u>the advancement of client self-assessment on climate-related risks and opportunities varies by sector and company.</u> <u>The banking industry needs to build expertise on climate-related policies and sector-specific challenges</u> for engagement with clients and effective management of climate-related risks. 	<ul style="list-style-type: none"> In order to facilitate clients’ understanding on the banks’ intentions of engagement, the JBA plans to publish brief materials regarding the banking industry’s efforts and their background [by the end of 2022]. Host study sessions inviting stakeholders such as relevant industrial organisations and ministries to better-understand sector-specific action plans and economic/technological challenges [initiate in FY2021].
2	Assessment	<ul style="list-style-type: none"> <u>A globally consistent assessment framework/criteria on whether a client’s activities and transition plan are credibly aligned with the Paris Agreement and/or NDCs does not necessarily exist.</u> There, however, is <u>internationally growing pressure</u> on banks to demonstrate to stakeholders how banks reduce their financed emissions. 	<ul style="list-style-type: none"> Sort our global, regional and domestic assessment guidance/criteria [by the end of FY2021]. Share examples of leading initiatives [start from 2022]. Participate in relevant government councils and share views [on-going].
3	Sustainable finance	<ul style="list-style-type: none"> <u>Sustainable finance in Japan is a growing but still nascent market.</u> The JBA will contribute to the market development, showcasing the key features and its mechanisms. <u>For SMEs,</u> transforming their business entails numerous challenges. The public sector needs to play a complementary role in supporting and financing the transition. 	<ul style="list-style-type: none"> Publish brief materials on general sustainable finance categories, mechanisms and necessary actions [by the end of 2022]. Cooperate with SME organisations and engage in public advocacy for support programs to complement the private sector’s efforts [on-going].
4	Climate-related disclosure	<ul style="list-style-type: none"> Climate-related disclosures have been increasingly becoming important. <u>They are the key foundation for banks to engage with clients and provide sustainable finance.</u> A client’s climate-related disclosures are interlinked with the bank’s climate-related disclosures <u>in calculating financed emissions.</u> 	<ul style="list-style-type: none"> Share views through relevant government councils and the TCFD Consortium [already initiated]. Monitor the progress of TCFD disclosure by our member banks, and host study sessions [already initiated]. Cooperate with international fora such as PCAF on Scope 3 emissions calculations.
5	Climate-related financial risks	<ul style="list-style-type: none"> Banks need to <u>start building capabilities to effectively manage climate-related financial risks, such as scenario analysis,</u> given the iterative nature. In some jurisdictions, there are increasing signs of trying to incorporate climate-related financial risks into <u>stress testing and/or capital requirements.</u> The JBA needs to actively participate in international discussions. 	<ul style="list-style-type: none"> Participate in international discussions on climate-related financial risks [on-going]. (e.g., share views at international conferences, provide comments to public consultations) Provide comments on JFSA’s draft supervisory guidance on climate transition support and risk management [by the end of FY2021].

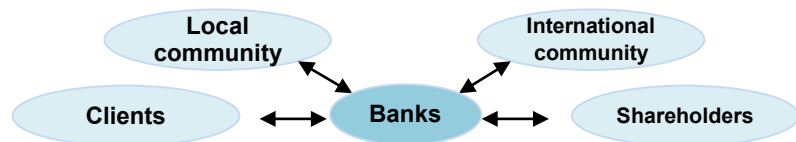
[Key priority #1] Engagement

- Currently, the advancement of client self-assessment on climate-related risks and opportunities varies by sector and company.
- The banking industry needs to build expertise on climate-related policies and sector-specific challenges for engagement with clients and effective management of climate-related risks.

Current status and challenges

Engagement by banks

Need to build relationships and engage with various stakeholders

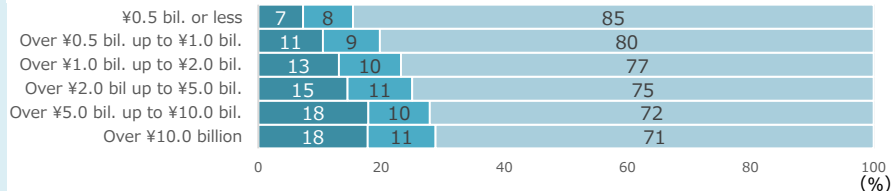


Challenges

The progress of efforts toward decarbonisation varies by sector and company. It is important for banks to deepen their understanding of clients' opportunities and risks/challenges, including efforts in the critical decade.

Status of considering actions to address the impact of carbon neutrality (by size of business in sales)

■ Action in progress ■ Under consideration ■ Not considered

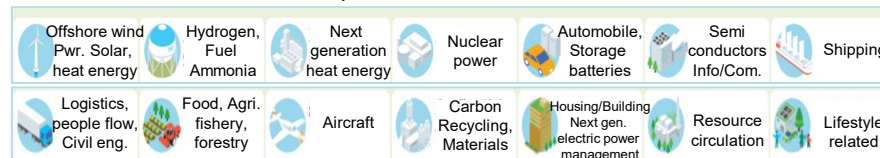


Source: Shoko Chukin Bank, "Survey on Carbon Neutrality awareness among SMEs" (July 2021)

Necessity to understand transition plans of the industrial sector

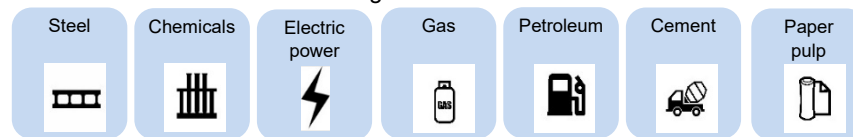
Sector/field-specific initiatives

The government's Green Growth Strategy selected 14 sectors with high growth potential toward 2050.



Source: METI's news release on "Green Growth Strategy Through Achieving Carbon Neutrality in 2050"

... while some hard-to-abate sectors are facing economic/technological challenges for decarbonisation.



Need to understand sector-level efforts & challenges and transition plans, as well as efforts across the supply chain for achieving carbon neutrality.

Action Plan

In order to facilitate clients' understanding on the banks' intentions of engagement, the JBA plans to publish brief materials regarding the banking industry's efforts and their background [by the end of 2022]

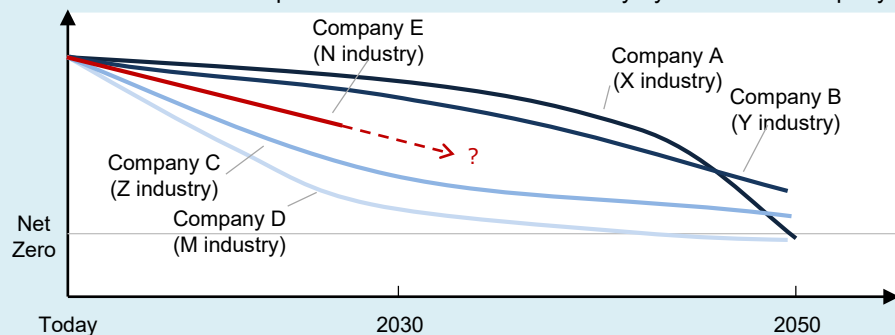
Host study sessions inviting stakeholders such as relevant industrial organisations and ministries to better-understand sector-specific action plans and economic/technological challenges [initiate in FY2021].

[Key priority #2] Assessment

- A globally consistent assessment framework/criteria on whether a client's activities and transition plan are credibly aligned with the Paris Agreement and/or NDCs does not necessarily exist.
- There, however, is internationally growing pressure on banks to demonstrate to stakeholders how banks reduce their financed emissions.

Challenges in assessing the client's transition plan

GHG emissions Transition plans of investees/borrowers vary by sector and company.



Challenges

- While transition plans vary by sector and company, **criteria for assessing feasibility and reliability are yet to be established in some sectors.**
- Due to uncertainties of the business environment and resource constraints, developing **a long-term transition plan may be difficult** (in particular, for SMEs).

Examples of available assessment guidance/criteria

There are various domestic and regional assessment guidance/criteria that can be used as a reference. However, the features of such guidance/criteria vary.



Taxonomy

- EU Taxonomy²¹
- Green Bond Endorsed Project Catalogue²²
- IPSF CGT
- ASEAN Taxonomy²³



Guideline

- Principles established by the International Capital Markets Association (ICMA)
- Guidelines established by the MOE
- Basic Guidelines on Climate Transition Finance established by the METI²⁴, etc.



Scenarios/Roadmap

- Paris Agreement Compatible Scenarios
- NGFS Scenarios²⁵
- IEA Scenarios²⁶
- METI Roadmaps for Climate Transition Finance



ESG ratings providers, etc.

- ESG ratings providers use their own methodologies and provide various ratings.
- The IOSCO published final recommendations on ESG Ratings and Data Products Providers²⁷.

It could be ideal to have a globally consistent assessment guidance/criteria from a perspective of ensuring objectivity, transparency and accountability. However, currently, various assessment guidance/criteria exist, and both the banking industry and the industrial sector are facing a challenge to choose the most suitable guidance/criteria.

Action Plan

Sort our global, regional and domestic assessment guidance/criteria [by the end of FY2021].

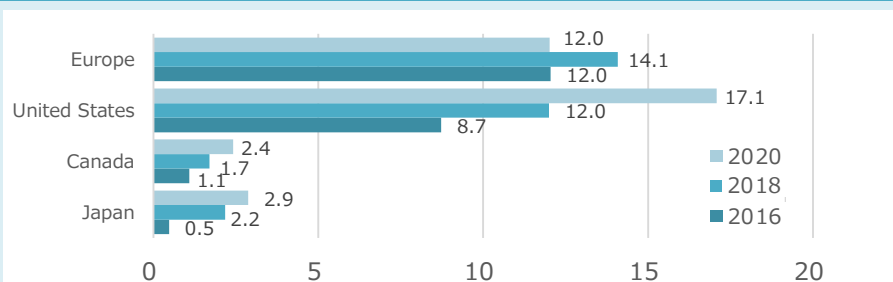
Share examples of leading initiatives [start from 2022].

Participate in relevant government councils and share views [on-going].

[Key priority #3] Sustainable finance

- Sustainable finance in Japan is a growing but still nascent market. The JBA will contribute to the market development, showcasing the key features and its mechanisms.
- For SMEs, transforming their business entails numerous challenges. The public sector needs to play a complementary role in supporting and financing the transition.

Global sustainable investing assets (2016-2020)



Source: GLOBAL SUSTAINABLE INVESTMENT REVIEW 2020 (in trillions USD)
The decrease in investment in Europe in 2020 is due to a change in the definitions.

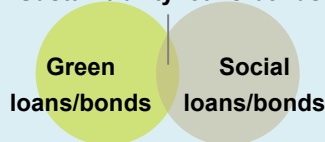
Key challenges of sustainable finance

- **The use of ESG ratings in financing requires cost and resource burdens for both borrowers and banks**, and it is sometimes difficult to apply to small-sized loans for SMEs.
- **There is a burden on monitoring metrics**, especially in SME finance.
- International discussion on transition finance is underway. **The key challenge is how to ensure its reliability and transparency.**
- Supporting the transition of hard-to-abate sectors **may temporarily increase the banks' Scope 3 emissions (financed emissions)** (specifically, when KPIs include the absolute amount).
- **There is a risk that loan assets become stranded assets²⁸** because of policy changes or new regulations.

Types of sustainable finance products

Use of Proceeds instruments

Sustainability loans/bonds



General Corporate Purpose instruments

Sustainability linked loans/bonds

Transition loans/bonds

Key challenges in regional and SME finance

Expected roles for regional financial institutions²⁹

- Find out the corporate value of local companies that utilise local resources and address local issues.
- Assess business feasibility by taking into account the company's issues/values and local needs, and provide financing or other support to local companies.

SMEs' challenges

Due to business and financial-related resource constraints, actions involving a significant business transformation is a huge challenge for SMEs.

Cooperation with the SME Agency, local governments and SME organisations is critical.

Action Plan

Publish brief materials on general sustainable finance categories, mechanisms and necessary actions [by the end of 2022].

Cooperate with SME organisations and engage in public advocacy for support programs to complement the private sector's efforts [on-going].

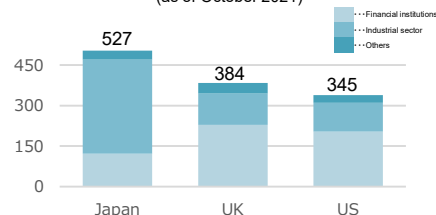
[Key priority #4] Climate-related disclosure

- Climate-related disclosures have been increasingly becoming important. They are the key foundation for banks to engage with clients and provide sustainable finance.
- A client's climate-related disclosures are interlinked with the bank's climate-related disclosures in calculating financed emissions.

Domestic development of climate-related disclosures

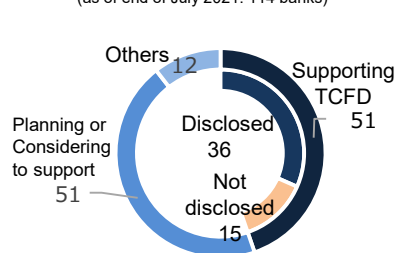
Overview of TCFD supporters

Organisations supporting the TCFD by country
(as of October 2021)



Japan currently has the largest number of companies/organisations (527) supporting the TCFD recommendations. However, there is a move to mandate sustainability disclosures in Europe.

TCFD supporters of JBA member banks
(as of end of July 2021: 114 banks)



Revision of the Corporate Governance Code

In June 2021, the Tokyo Stock Exchange revised the Securities Listing Regulations corresponding to the **revision of Japan's Corporate Governance Code**. Listed companies on the Prime Market are required to "develop a basic policy and disclose initiatives on the company's sustainability" and "enhance the quality and quantity of disclosure based on the TCFD recommendations or an equivalent framework".

Challenges of climate-related disclosure

Companies

- Challenges for calculating Scope 3 emissions (this requires a number of estimates and data to improve accuracy).
- Information disclosed by certain companies is still limited*.
* For example, disclosure lacks descriptions of Scope 3 emissions, emissions by business line, emissions from consolidated companies and reduction targets.



As Scope 3 emissions (Financed Emissions) amount to the majority of banks' GHG emissions, enhancing companies' disclosures and enhancing banks' disclosures are interlinked.

Banks

- **The metrics and calculation methods of Scope 3 emissions are still in the development phase.** The limitation of clients' GHG emission disclosures also limits banks' ability for Scope 3 disclosure.
- **There are challenges related to scenario analysis** (e.g. high uncertainty in analyses and complicated scenario design).
- There are many banks considering TCFD disclosures, while those are facing **lack of resources**.

Enhancement of disclosures for promoting transition finance

Appropriately assessing the client's transition efforts is a fundamental point for transition finance. In particular, satisfying the following four key elements is essential for transition finance, as recommended in the ICMA Handbook³⁰: (i) Issuer's climate transition strategy and governance; (ii) Business model environmental materiality; (iii) Climate transition strategy to be science-based including targets and pathways; and (iv) Implementation transparency.

Action Plan

Share views through relevant government councils and the TCFD Consortium [already initiated].

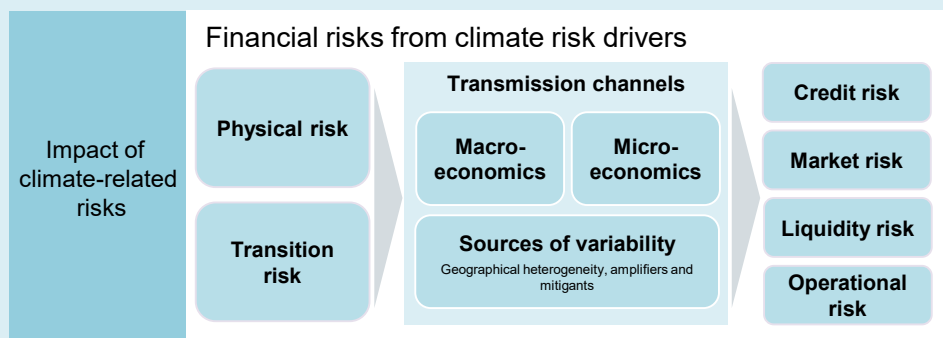
Monitor the progress of TCFD disclosure by our member banks, and host study sessions [already initiated].

Cooperate with international for a such as PCAF on Scope 3 emissions calculations.

[Key priority #5] Climate-related financial risks

- Banks need to start building capabilities to effectively manage climate-related financial risks, such as scenario analysis, given the iterative nature.
- In some jurisdictions, there are increasing signs of trying to incorporate climate-related financial risks into stress testing and/or capital requirements. The JBA needs to actively participate in international discussions.

Impact of climate-related risks on the financial system



The impacts of climate change materialise over time with a **complex path and depend on future policy and social economic conditions. These potential impacts may be significant.**

Consideration of capital requirements in EU/UK

EU
(EBA³¹)

Require banks to identify, disclose and manage ESG risks as part of their risk management and to conduct regular climate stress testing. Consider whether environmental and/or social risk factors are to be incorporated into prudential treatments (by June 2023).

UK
(PRA³²)

Consider the possibility of incorporating forward-looking elements of climate-related financial risks into Pillar 1 (by Q4 2022).

Risk analysis methodologies and challenges

Risk analysis methodologies

Given the nature of climate-related risks, "**scenario analysis**" is an effective tool.
The NGFS provides several scenarios and recommends quantitative analysis using stress testing as a scenario analysis approach for financial authorities.
The FSB noted that the goal is for all financial risk decisions to appropriately take account of climate change.

Scenario analysis challenges

- Examples of scenario analysis challenges include:
- **A lack of data** on the impact of GHG emissions and reductions;
 - **A globally accepted impact analysis method is yet to be established** due to its long-term nature and geographical differences; and
 - **High uncertainty in analyses and complicated scenario design.**

Key focus should be on (a) **continuously enhancing analytical methodologies of scenario analysis** and (b) **improving the quantity and quality of data** through, for example, the establishment of a global carbon footprint system³³.

Action Plan

Participate in international discussions on climate-related financial risks [on-going].
(e.g., share views at international conferences, provide comments to public consultations)

Provide comments on JFSA's draft supervisory guidance on climate transition support and risk management [by the end of FY2021].

Notes

1. The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) published in August 2021.
<https://www.ipcc.ch/report/ar6/wg1/>
2. According to the ICMA, a “Just Transition” is defined as a transition that “seeks to ensure that the substantial benefits of a green economy transition are shared widely, while also supporting those who stand to lose economically – be they countries, regions, industries, communities, workers or consumers”. The Just Transition concept links to the United Nations’ Sustainable Development Goals (SDGs).
<https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/CTF-Handbook-QA-09122020.pdf>
3. IEA (International Energy Agency), “World Energy Outlook 2021” (2021)
<https://www.iea.org/reports/world-energy-outlook-2021>
4. WWF Japan (World Wide Fund for Nature Japan), “2050 Zero Scenarios for Decarbonizing Japan (Cost Analysis)” (May 2021) (Only available in Japanese)
<https://www.wwf.or.jp/activities/data/20210909climate02.pdf>
5. Basel Committee on Banking Supervision “Climate-related risk drivers and their transmission channels” (April 2021)
<https://www.bis.org/bcbs/publ/d517.pdf>
6. Basel Committee on Banking Supervision “Consultative Document - Principles for the effective management and supervision of climate-related financial risks” (November 2021)
<https://www.bis.org/bcbs/publ/d530.pdf>
7. Based on the results of individual interviews and surveys conducted by the JBA.
8. Scope 3 emissions refer to indirect greenhouse gas emissions from business activities in a company’s supply chain, other than direct emissions (Scope 1: direct greenhouse gas emissions by the reporting company itself) and energy-derived indirect emissions (Scope 2: indirect emissions from the use of electricity, heat or steam supplied by others.).(MOE and METI, “Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain” (2012))
https://www.env.go.jp/earth/ondanka/supply_chain/gvc/en/files/GuideLine.pdf
9. Divestment: An investment method whereby, from ESG perspectives, securities and other instruments related to a specific company or industry are excluded from the investment portfolio or are disposed of if they have already been purchased.

Notes

10. Cabinet Secretariat, METI and other Japanese government ministries and agencies, “Green Growth Strategy Through Achieving Carbon Neutrality in 2050” (2021)
https://www.meti.go.jp/english/policy/energy_environment/global_warming/ggs2050/pdf/ggs_full_en1013.pdf
11. The American Jobs Plan
<https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>
12. The European Green Deal Investment Plan
[https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649371/EPRS_BRI\(2020\)649371_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2020/649371/EPRS_BRI(2020)649371_EN.pdf)
13. The IPSF (International Platform on Sustainable Finance) is a multilateral forum that aims to enable exchange of practices and increase international cooperation on matters related to sustainable finance. As of November 2021, policymakers from 18 jurisdictions have joined the IPSF, including the EU, Japan, China, UK, Canada, Switzerland, Singapore, New Zealand, India, Indonesia, Hong Kong and Malaysia.
https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/international-platform-sustainable-finance_en
14. The Common Ground Taxonomy is a project led by the IPSF for ensuring the comparability and interoperability of existing taxonomies across jurisdictions. It intends to provide more clarity and transparency about the commonalities and differences between approaches and potentially contribute to the analysis to lower the trans-boundary cost of sustainable investments and scale up the mobilisation of sustainable capital internationally.
https://ec.europa.eu/info/files/international-platform-sustainable-finance-common-ground-taxonomy-report-2021_en
15. The GRI (Global Reporting Initiative) is an organisation founded in 1997, led by the U.S. non-profit organisation CERES and the UN Environment Programme (UNEP) to help companies and governments around the world understand and communicate critical sustainability issues such as climate change, human rights, governance and social welfare.
<https://www.globalreporting.org/>
16. The SASB (Sustainability Accounting Standards Board) is a standard-setting body established in 2011 which published disclosure standards (SASB Standards). In June 2021, the SASB merged with the International Integrated Reporting Council (IIRC) to form the Value Reporting Foundation (VRF; see Footnote 19).
<https://www.sasb.org/>

Notes

17. The ISSB (International Sustainability Standards Board) is a board established in the IFRS Foundation that intends to develop a comprehensive global baseline of sustainability-related disclosure standards.
<https://www.ifrs.org/groups/international-sustainability-standards-board/>
18. The CDSB (Climate Disclosure Standards Board) is an NGO established in 2007. It provides companies with a global framework for reporting climate change information (a disclosure framework) and intends to promote the disclosure of climate change information in the annual securities reports, etc.
<https://www.cdsb.net/>
19. The VRF (Value Reporting Foundation) is a standard-setting body formed in 2021 through the merger of the SASB and the IIRC. It has published the Integrated Reporting Framework and the SASB Standards, etc.
<https://www.valuereportingfoundation.org/>
20. Financial Stability Board, “FSB Roadmap for Addressing Climate-Related Financial Risks” (July 2021)
<https://www.fsb.org/2021/07/fsb-roadmap-for-addressing-climate-related-financial-risks/>
21. EU Taxonomy (Sustainable finance taxonomy - Regulation (EU) 2020/852)
https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852_en
22. China Green Bond Endorsed Project Catalogue
<http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4342400/2021091617180089879.pdf>
23. ASEAN Taxonomy for Sustainable Finance
<https://asean.org/asean-sectoral-bodies-release-asean-taxonomy-for-sustainable-finance-version-1/>
24. JFSA, METI, MOE “Basic Guidelines on Climate Transition Finance”
https://www.meti.go.jp/english/press/2021/0507_001.html
25. NGFS Climate Scenarios for central banks and supervisors
https://www.ngfs.net/sites/default/files/media/2021/08/27/ngfs_climate_scenarios_phase2_june2021.pdf

Notes

26. IEA Sustainable Development Scenario
<https://www.iea.org/reports/world-energy-model/sustainable-development-scenario-sds>
27. IOSCO “Environmental, Social and Governance (ESG) Ratings and Data Products Providers Final Report”
<https://www.iosco.org/library/pubdocs/pdf/IOSCOPD690.pdf>
28. “Stranded Asset” is an asset whose value will be damaged significantly due to drastic changes in the market/social environments.
29. Ministry of the Environment, Japan “ESG Regional Finance Practice Guide 2.0” (2021) (Only available in Japanese)
<http://www.env.go.jp/policy/%E5%AE%9F%E8%B7%B5%E3%82%AC%E3%82%A4%E3%83%892.0.pdf>
30. “ICMA Handbook” refers to the “Climate Transition Finance Handbook” published by the International Capital Market Association (ICMA) in 2020. It sets out four key elements to the disclosure recommendations: (i) transition strategy and governance; (ii) business model environmental materiality; (iii) science-based strategy; and (iv) implementation transparency.
<https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/climate-transition-finance-handbook/>
31. “EBA” refers to the European Banking Authority.
32. “PRA” refers to Prudential Regulation Authority.
33. Carbon footprint is an abbreviation for Carbon footprint of Products. It is a mechanism that converts the quantity of greenhouse gas emissions generated throughout the life cycle of a product or service, from procurement of raw materials to disposal/recycling, into CO2 equivalents and displays it on the product or service to enable users to understand it easily.