Transition Finance
Playbook 2.0
SMBC Group’s Transition Finance Playbook

SMBC Group, as a responsible financial institution, will support our customers’ transition and efforts to develop new technologies, to maximize our contributions in realizing a decarbonized society.

Transitioning to a decarbonized society and preserving our planet for future generations is a pressing issue for the private sector and a long-term duty for humanity.

Recognizing this, we are committed to achieving net zero emissions in our overall loan and investment portfolio by 2050 and our entire group is thus enhancing its measures against climate change.

We joined the Net Zero Banking Alliance in October 2021 and have set 2030 medium-term Greenhouse Gas (GHG) emissions reduction targets for high emitting sectors.

There is no one-size-fits-all solution to achieving carbon neutrality, and we need to work with our customers to carefully determine a realistic pathway to 2050, while giving due consideration to the unique circumstances of each country.

As a responsible financial institution, SMBC Group will maximize its contribution to maintaining a stable energy supply and realizing long-term decarbonization, by supporting our customers’ transition and efforts to develop new technologies.

To accelerate global decarbonization, it is essential to finance the transition of emerging economies, which sometimes face limited options for their transition, particularly in Asia, and hard-to-abate sectors facing challenges to leapfrog to a low-carbon economy.

As a financial institution, our role is to understand our customer’s transition plans and assess whether they will contribute to the decarbonization and transition, and then provide transition finance to support and accelerate the transition to a decarbonized economy.

SMBC Group defines transition finance as a financial services provided to clients aiming to support them align their business and/or operations with pathways in line with the objectives of the Paris Agreement. The Transition Finance Playbook (“the Playbook”) outlines SMBC’s definition of Transition Finance, details the principles that govern SMBC’s approach and provides guidance on whether the activity being considered can be financed.

We hope the Playbook will provide guidance, as a lighthouse would, to customers aiming for transition towards a decarbonized economy.

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### Mid-term reduction targets

<table>
<thead>
<tr>
<th>Sector</th>
<th>Scope</th>
<th>KPI</th>
<th>Mid-term targets (FY2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Power Generation Scope1</td>
<td>Carbon Intensity (g-CO2e/kWh)</td>
<td>138～195</td>
</tr>
<tr>
<td>Oil &amp; gas</td>
<td>Upstream Production Scope1,2,3</td>
<td>Absolute Emissions (Mt-CO2e)</td>
<td>-12～29% (vs FY2020)</td>
</tr>
<tr>
<td>Coal</td>
<td>Upstream Production Scope1,2,3</td>
<td>Absolute Emissions (Mt-CO2e)</td>
<td>-37～60% (vs FY2020)</td>
</tr>
<tr>
<td>Automobile</td>
<td>Manufacturing operations Scope1,2,3</td>
<td>Carbon Intensity (g-CO2e/vkm)</td>
<td>120～161</td>
</tr>
<tr>
<td>Steel</td>
<td>Crude steel production Scope1,2</td>
<td>Carbon Intensity (t-CO2e/t-Steel)</td>
<td>1.2～1.8</td>
</tr>
</tbody>
</table>
The Playbook has been reviewed by the Group’s Sustainability Committee, an internal committee of the Board and approved by the Group Chief Sustainability Officer (“CSuO”) who is responsible for the planning and management of sustainability-related measures.

The Playbook refers to international guidelines, and received a Second Party Opinion (“SPO”) from DNV Business Assurance Japan Co., Ltd.

The Playbook is to be revised and updated at least once a year, taking into account changes in regulations, guidance and guidelines. The evolution of technologies used for transition will also be assessed.

We will request SPOs on a yearly basis. SMBC Group will report sustainable finance transactions including transition finance annually in our TCFD Report.

**International guidelines**
- White Paper on Financing credible transitions (Climate Bonds Initiative, 2020)
- Green Loan Principles (Loan Market Association and others, 2021)
- Green Loan Guidelines (Ministry of Environment, Japan, 2022)
- Asia Transition Finance Guidelines (Asia Transition Finance Study Group, 2022)

**SPO**
- DNV Business Assurance Japan Co., Ltd.
Net Zero Banking Alliance (NZBA) - Transition Finance Guide

NZBA published the Transition Finance Guide in October 2022. This guide aims at improving the overall understanding of transition finance, by providing core guiding principles and references that can be leveraged when considering Transition Finance transactions. SMBC was a member of the NZBA Financing & Engagement work track and involved in the drafting.

The Transition Finance Guide recommends that Banks develop and disclose their own transition finance framework that reflects the bank’s business models and operating footprint or geographies. SMBC has addressed this recommendation with the Playbook. We hope that many financial institutions will create their own transition finance frameworks in the future.


Japan Transition Roadmaps

In Japan, sector roadmaps targeting 11 sectors such as electricity, oil, gas, steel, and automobile have been developed as an annex to the "Basic Guidelines on Climate Transition Finance" (Financial Services Agency, Ministry of Economy, Trade and Industry, Ministry of the Environment, May 2021)

Sector roadmaps can be referred to when Japanese companies are considering leveraging transition finance. When considering transition finance, SMBC Group refers to country specific roadmaps, among others, which take into account the unique circumstances of each country and region.

Top Risks and Risk Appetite Framework

As an increase of extreme weather events and natural disasters or inadequate responses to climate change may involve risks that have a significant impact on corporate management, SMBC Group recognizes that risks related to climate change are one of our Top Risks.

To achieve our net zero target, SMBC Group “Risk Appetite Framework”, based on securing appropriate risk-return levels, aims at ensuring an adequate management of our scope 3 Financed Emissions, by promoting engagement with high-emitting sectors to better understand their strategy and actions.

*The Risk Appetite Framework of SMBC Group, is one of two pivots of our business management alongside business strategies. It functions as a management framework for sharing information on the operating environment and risks facing SMBC Group among management and for facilitating appropriate risk taking based thereon.

Mitigating risk by promoting emission reduction in the real economy

We believe that supporting our customers in reducing GHG emissions in the real economy will also mitigate SMBC Group’s climate related risks.

By establishing the Playbook, we aim to identify the activities which contribute to the decarbonization of real economy and engage with our customer to establish appropriate transition plan and strategies.

Through these activities, we aim to make our portfolio greener.

Transaction assessment framework

SMBC has established a structure in which departments with specific knowledge and independent from Sales Office assesses the eligibility for transition finance.

In addition, our financing is as always conditioned to the assessment of various risks, including credit risks.
### Transition finance is underpinned by the following four principles.

<table>
<thead>
<tr>
<th>Do No Significant Harm</th>
<th>No carbon lock-in</th>
<th>Best available technology</th>
<th>Just transition</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Shield" /></td>
<td><img src="image2.png" alt="Lock" /></td>
<td><img src="image3.png" alt="Technology" /></td>
<td><img src="image4.png" alt="Scale" /></td>
</tr>
</tbody>
</table>

#### Do No Significant Harm

No investment should lead to significant harm. This principle has been included in most of the taxonomies and regulations related to the green transition. In the context of this Playbook, DNSH principle means that:

- At the minimum, all investments should comply with SMBC Group Environmental and Social Framework.
- Where regulations apply, such as activity specific DNSH conditions or requirements for Environmental Impact Assessments, investments should comply with those in addition to complying with SMBC Group Environmental and Social Framework.

#### No carbon lock-in

Carbon lock-in occurs when fossil fuel-intensive systems perpetuate, delay, or prevent the transition to low-carbon alternatives. Avoiding carbon lock-in is a key principle of transition finance.

In the event the asset commercial contract ends after 2050, we will confirm if the borrower/sponsor has publicly committed to reach net zero and has publicly committed to avoid carbon lock-in and carefully monitor the asset's decarbonization process.

#### Best available technology

BAT is the technology approved by legislators, regulators, or the industry for meeting output standards for a particular process. In the context of climate change mitigation, SMBC defines BAT as the technology that abates the most GHG emissions for a specific process, such as energy production, taking into account feasibility in the location, financial viability, and social circumstances.

#### Just transition

A Just transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind. In the context of the Playbook, the Just transition principle means that the investment should maximize social and economic opportunities through consultations with impacted groups. For example, SMBC should assess the extent to which the project or its main sponsor will address employment related issues stemming from the project being implemented.
Overview of the Playbook

The sectors covered in this Playbook are Power and Oil and Gas sectors, which need the most support for transition. We plan on broadening the scope to other high emitting sectors.

Sectors

- Power, Oil and Gas, Steel, and Automobile (to be extended)

Products

- Project Finance
- Finance in the format of General Corporate Purpose (GCP)
- Finance in the format of Use of Proceeds (UoP)

Definitions

SMBC Group’s definitions and approach to Transition Finance differs by the financing products.

Classification  |  Project Finance  |  General Corporate Purpose  |  Corporate finance use of proceeds  
---|---|---|---
Green  |  No GHG emissions or close to no GHG emissions (=Green asset in IT)  |  No GHG emissions or close to no GHG emissions  |  No GHG emissions or close to no GHG emissions (=Green asset in IT)  
  |  Emission reduction targets set  |  ①  |  ①  
Bright Yellow  |  No GHG emissions or close to no GHG emissions, attached to O&G upstream asset (=bright yellow asset in IT)  |  No GHG emissions or close to no GHG emissions  |  No GHG emissions or close to no GHG emissions, attached to O&G upstream asset (=bright yellow asset in IT)  
  |  Emission reduction targets set  |  ①  |  ①  
Yellow  |  Asset aligned with 1.5°C from a timeline and sectoral perspective (=yellow asset in IT)  |  Borrower’s transition plan aligned with Paris Agreement 1.5°C pathway  |  Asset aligned with 1.5°C from a timeline and sectoral perspective (=yellow asset in IT)  
  |  NZ targets set for 2050  |  ②  |  ①  
Others  |  Red assets in IT and large emitters complying with SMBC Group Environmental and Social Framework, SMEs, etc.  
Red  |  Red assets in IT and large emitters not complying with SMBC Group Environmental and Social Framework

"Green" is not directly related to specific Green Finance products provided by SMBC Group.
The approach to assess transition finance differs between Project Finance, General Corporate Purpose, and Use of Proceeds. For Project Finance and Use of Proceeds, since the assets to be financed are defined, we first determine if the assets are aligned with the objectives of the Paris Agreement. Then, we assess the transition strategy of the borrower or the main sponsor.

For finance where the use of proceeds is not identified, we assess the customer’s transition strategy (Details in Page 8-12).

### Project Finance, Use of Proceeds

| 1 Financing Assets | • Assets are assessed based on SMBC’s Internal Taxonomy  
|                    | • The Internal Taxonomy has been developed according to best practice, regional differences and pathways and technological information. To the extent possible, it takes into account alignment with national transition plans / pathways. |
|                    | *Refer to the Appendix for illustrative examples of Transition Activities |
| 2 Transition Strategies | • Assess the project’s main sponsor’s** or the borrower’s transition strategy |
|                    | *Refer to the General Corporate Finance table for the detailed criteria  
|                    | **The main sponsor is defined as the sponsor with the most influence on the project’s decision making process |

### General Corporate Finance

| Main Criteria | • Participation in sectoral / national initiatives to address climate change, or has pledged to address climate change with international initiatives such as RE100 and SBTi  
|               | • Commitment for net zero by 2050  
|               | • Disclosure of GHG emissions  
|               | • Reduction targets for GHG emissions  
|               | • Concrete transition strategies to achieve the targets  
|               | ✓ The borrower has a science-based climate transition strategy which includes credible targets and pathways, aligned with the 1.5°C pathway  
|               | ✓ The borrower’s climate transition strategy is operationalized by an investment plan  
|               | • Clear governance oversights to implement the transition strategy  
|               | • Appropriate KPIs |
Decision process for UoP (Power Sector)

Does the activity correspond to a Green, Yellow or Red Asset, as defined in the internal taxonomy?

Green asset

Does the borrower comply with SMBC Group Environmental and Social Framework?

Yes

Has the borrower disclosed emissions and reduction targets, committed to net-zero by 2050 prepared a strategy material to its business model and based on scientific evidence, supported by an investment plan, with clear governance arrangements for oversight?

Yes

Has the borrower set one or more KPIs to measure progress towards net-zero emissions and is it making progress towards meeting them?

Yes

Does the activity contribute to reducing GHG emissions?

Yes

Is the activity included in the borrower’s transition strategy or does it contribute to achieving its objectives?

Yes

Does the financing end before 2050?

Yes

Is the borrower committed to net-zero by 2050?

Yes

Low emission finance

No

No

No

Yellow Transition Finance

Normal loan

Red

No investment

Credit review etc.
Decision process for UoP (Oil and Gas Sector)

Does (1) the activity correspond to a Green, Bright Yellow, Yellow or Red Asset, as defined in the internal taxonomy?

- Green asset
- Bright Yellow asset
- Yellow asset
- Red asset

Does (2) the borrower comply with SMBC Group Environmental and Social Framework?

- Yes
- No

Does (2) the activity contribute to reducing GHG emissions?

- Yes
- No

Has (10) the activity contribute to reducing GHG emissions?

- Yes
- No

Is (11) the activity included in the borrower’s transition strategy or does it contribute to achieving its objectives?

- Yes
- No

Does (12) the asset commercial contract end before 2050 or does the borrower satisfy necessary elements to avoid carbon lock-in?

- Yes
- No

Has (9) the borrower set one or more KPIs to measure progress towards net-zero emissions and is it making progress towards meeting them?

- Yes
- No

Has (5) the borrower prepared a strategy material to its business model and (6) based on scientific evidence, (7) supported by an investment plan, with (8) clear governance arrangements for oversight?

- Yes
- No

Has the borrower, (4) committed to net-zero by 2050?

- Yes
- No

Does (3) the borrower disclosed emissions and reduction targets (Scope 1 to 3)*

- Yes
- No

*When the borrower has not disclosed reduction targets for Scope 3, does the borrower have a concrete plan which will reduce its scope 3? (for Green and Bright Yellow assets only)

Does (2) the financing end before 2050?

- Yes
- No

Has the borrower committed to Net Zero by 2050? (Scope 1 to 3)

- Yes
- No

Low emission finance

Bright Yellow - Emission reduction finance

Yellow Transition Finance

Normal loan

Red No investment

Credit review etc
Decision process for UoP (Other Sectors)

1. Does (1) the activity correspond to a Yellow or Red Asset, as defined in the internal taxonomy?
   - Yellow asset
   - Red asset

2. Does (2) the borrower comply with SMBC Group Environmental and Social Framework?
   - Yes
   - No
   - Has the borrower (3) disclosed emissions and reduction targets (Scope 1 to 3, when Scope 3 is material)?
     - Yes
     - No
   - Has the borrower (4) committed to net-zero by 2050?
     - Yes
     - No
   - Has the borrower (5) prepared a strategy material to its business model and (6) based on scientific evidence, (7) supported by an investment plan, with (8) clear governance arrangements for oversight?
     - Yes
     - No
   - Has (9) the borrower set one or more KPIs to measure progress towards net-zero emissions and is it making progress towards meeting them?
     - Yes
     - No
   - Does (10) the activity contribute to reducing GHG emissions?
     - Yes
     - No
   - Is (11) the activity included in the borrower’s transition strategy or does it contribute to achieving its objectives?
     - Yes
     - No
   - Does (12) the asset commercial contract end before 2050 or does the borrower satisfy necessary elements to avoid carbon lock-in?
     - Yes
     - No

   - Yellow Transition Finance
   - Normal loan
   - Red No investment

Credit review etc.
There are several pathways towards net zero. We recognize pathways should take in account each country and regions socio-economic situations as well as current activities and policies towards transition.

When identifying transition eligible assets, we took into consideration industry-specific best practices, regional differences and transition pathways, among others, while considering consistency with taxonomies and roadmaps in each country. We will revise and update at least once a year in consideration of updates in technological innovation, various regulations, taxonomies and guidance.

In addition to the asset eligibility, we also assess the client’s transition strategy.

This asset list is not exhaustive, does not cover all regions included in the SMBC’s Internal Taxonomy, and does not include "green" assets (such as renewable energy, green hydrogen, and EV, among others).

### Japan

<table>
<thead>
<tr>
<th>Power Sector</th>
<th>Energy Sector</th>
<th>Steel Sector</th>
<th>Auto mobile Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combined cycle gas fired power generation</strong></td>
<td><strong>Gas exploration and production</strong> Only when the offtake is in Japan</td>
<td><strong>Conventional BF-BOF, EAF</strong></td>
<td><strong>PHEV</strong></td>
</tr>
<tr>
<td><strong>Hydrogen co-firing gas, coal power generation</strong> At least 10% co-firing for gas and 20% co-firing for coal, limited to low emission hydrogen</td>
<td><strong>Gas storage and distribution</strong></td>
<td><strong>The facility has more than 3tCO2e/t: -30% reduction</strong></td>
<td><strong>HEV</strong></td>
</tr>
<tr>
<td><strong>Ammonia co-firing gas, coal power generation</strong> At least 20% co-firing, limited to low emission ammonia</td>
<td></td>
<td><strong>The facility has more than 2tCO2e/t: -10% reduction</strong></td>
<td><strong>Manufacture of batteries for PHEV/HEV</strong></td>
</tr>
<tr>
<td><strong>Biomass co-firing gas, coal power generation</strong></td>
<td></td>
<td><strong>Conventional BF-BOF, EAF</strong></td>
<td><strong>HEV</strong></td>
</tr>
<tr>
<td><strong>Nuclear power generation</strong> Limited to Generation III+ and beyond</td>
<td></td>
<td><strong>Conventional EAF (100% scrap based): -25% reduction</strong></td>
<td><strong>Manufacture of batteries for PHEV/HEV</strong></td>
</tr>
<tr>
<td><strong>Thermal power generation with CCS</strong></td>
<td></td>
<td><strong>Conventional DRI</strong></td>
<td><strong>HEV</strong></td>
</tr>
<tr>
<td><strong>Energy efficiency measures</strong></td>
<td></td>
<td><strong>Coal based process: -20% reduction</strong></td>
<td><strong>Fuel conversion in manufacturing process</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Gas based process: -12% reduction</strong></td>
<td><strong>Energy efficiency in manufacturing process</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Fuel conversion in manufacturing process</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Conversion from petroleum-based fuels to natural gas, etc.</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix
### Examples of Transition Activities

#### Asia

<table>
<thead>
<tr>
<th>Power Sector</th>
<th>Energy Sector</th>
<th>Steel Sector</th>
<th>Automobile Sector</th>
</tr>
</thead>
</table>
| - Combined cycle gas fired power generation  
  Only for peaking for some countries | - Biomass co-firing gas, coal power generation | - Conventional BF-BOF, EAF  
  The facility has more than 3tCO2e/t:  
  -30% reduction  
  The facility has more than 2tCO2e/t:  
  -10% reduction | - PHEV  
  Only when export to specific countries  
  Otherwise: follow IEA NZE scenario (29 g-CO2-eq/km (WTW)) |
| - Hydrogen co-firing gas, coal power generation  
  At least 10% co-firing for gas and 20% co-firing for coal, limited to low emission hydrogen with CCS | - Nuclear power generation  
  Limited to Generation III+ and beyond | - Conventional EAF (100% scrap based): -25% reduction  
  Conventional DRI  
  Coal based process: -20% reduction  
  Gas based process: -12% reduction | - HEV  
  Only when export to specific countries |
| - Ammonia co-firing gas, coal power generation  
  At least 20% co-firing, limited to low emission ammonia with CCS | - Thermal power generation with CCS | - Energy efficiency in manufacturing process | - Manufacture of batteries for PHEV/HEV  
  Same as PHEV/HEV |

- Gas exploration and production  
  Only when the offtake is in specific countries
- Gas storage and distribution

### References: ASEAN Taxonomy, local taxonomies, local policies
## Examples of Transition Activities

### North America

#### Power Sector

- **Combined cycle gas fired power generation**
  Only for peaking for some countries
- **Hydrogen co-firing gas, coal power generation**
  Must be aligned with country’s regulation
- **Ammonia co-firing gas, coal power generation**
  Must be aligned with country’s regulation
- **Biomass co-firing gas, coal power generation**
- **Nuclear power generation**
  Limited to Generation III+ and beyond
- **Thermal power generation with CCS**
  Abated by 90% for new gas plants and existing coal plants
- **Energy efficiency measures**
- **Gas exploration and production**
  Only when the offtake is in specific countries
- **Gas storage and distribution**

#### Energy Sector

- **Conventional BF-BOF, EAF**
  - The facility has more than 3tCO2e/t: -30% reduction
  - The facility has more than 2tCO2e/t: -10% reduction
- **Conventional EAF (100% scrap based): -25% reduction**
- **Conventional DRI**
  - Coal based process: -20% reduction
  - Gas based process: -12% reduction
- **Energy efficiency in manufacturing process**
- **Fuel conversion in manufacturing process**
  Conversion from petroleum-based fuels to natural gas, etc.

#### Steel Sector

- **PHEV**
- **Manufacture of batteries for PHEV**
  Same as PHEV
- **Hydrogen / ammonia from nuclear power generation**
- **Methane capture**
- **Reduction of flaring**

#### Auto mobile Sector

- **PHEV**
- **Manufacture of batteries for PHEV**
  Same as PHEV
- **Energy efficiency in manufacturing process**
- **Fuel conversion in manufacturing process**
  Conversion from petroleum-based fuels to natural gas, etc.

References: Local taxonomies, local policies
Appendix

Examples of Transition Activities

**EU 27 Countries**

**Power Sector**
- Combined cycle gas fired power generation
  Must be aligned with EU Taxonomy
- Hydrogen co-firing gas power generation
  Must be aligned with EU Taxonomy
- Ammonia co-firing gas power generation
  Must be aligned with EU Taxonomy
- Biomass co-firing gas power generation
  Must be aligned with EU Taxonomy
- Nuclear power generation
  Must be aligned with EU Taxonomy
- Thermal power generation with CCS
- Energy efficiency measures

**Energy Sector**
- Hydrogen / ammonia from nuclear power generation
  Must be aligned with EU Taxonomy
- Methane capture
- Reduction of flaring

**Steel Sector**
Determine based on the reduction of facility’s emissions intensity by 2030
- Conventional BF-BOF, EAF
  - The facility has more than 3tCO2e/t: -30% reduction
  - The facility has more than 2tCO2e/t: -10% reduction
- Conventional EAF (100% scrap based): -25% reduction
- Conventional DRI
  - Coal based process: -20% reduction
  - Gas based process: -12% reduction
- Energy efficiency in manufacturing process
- Fuel conversion in manufacturing process
  Conversion from petroleum-based fuels to natural gas, etc.

**Auto mobile Sector**
- PHEV
  Must be aligned with EU Taxonomy
- Manufacture of batteries for PHEV
  Same as PHEV
- Energy efficiency in manufacturing process
- Fuel conversion in manufacturing process
  Conversion from petroleum-based fuels to natural gas, etc.

References: EU taxonomy, local policies