

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.

Transition Finance is 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.

Mid-term reduction targets

Sector	Scope	KPI	Mid-term targets (FY2030)
Power	Power Generation Scope1	Carbon Intensity (g-CO ₂ e/kWh)	138~195
Oil & gas	Upstream Production Scope1,2,3	Absolute Emissions (Mt-CO ₂ e)	-12~29% (vs FY2020)
Coal	Upstream Production Scope1,2,3	Absolute Emissions (Mt-CO ₂ e)	-37~60% (vs FY2020)
Automobile	Manufacturing operations Scope1,2,3	Carbon Intensity (g-CO ₂ e/vkm)	120~161
Steel	Crude steel production Scope1,2	Carbon Intensity (t-CO ₂ e/t-Steel)	1.2~1.8

Playbook – Governance

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.

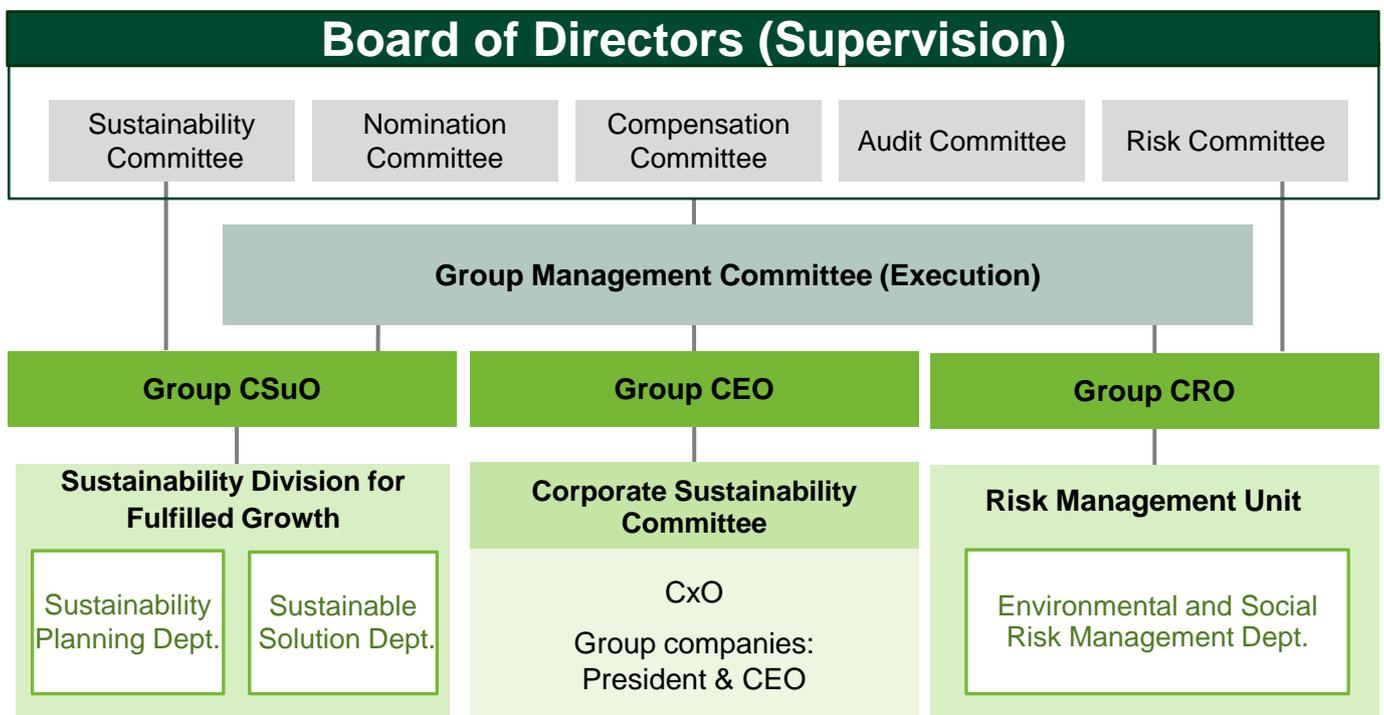
We will request SPOs on a yearly basis. SMBC Group will report sustainable finance transactions including transition finance annually in our annual reporting such as TCFD Report.

International guidelines

- Climate Transition Finance Handbook (International Capital Market Association, 2020)
- Basic Guidelines on Climate Transition Finance (Japan Financial Services Agency, Ministry of Economy, Trade and Industry, and Ministry of the Environment Japan, 2021)
- NZBA Transition Finance Guide (United Nations Environment Programme Finance Initiative, 2022)
- 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.
Link:https://webmagazine.dnv.co.jp/assets/images/sus_list/data/sus_finance_list/_pdfreport_e/94.%20Sumitomo%20Mitsui%20Banking%20Corporation_SPO.pdf



Examples of Transition Finance initiatives

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.

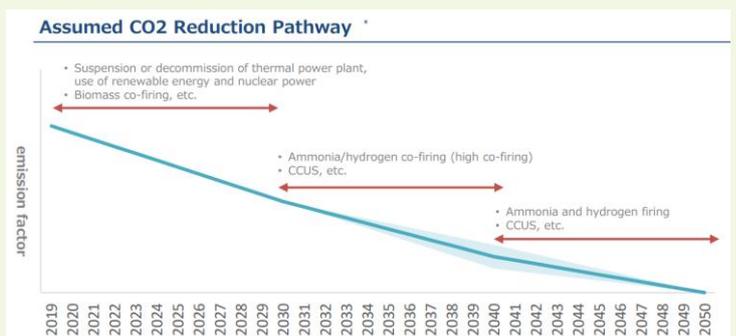
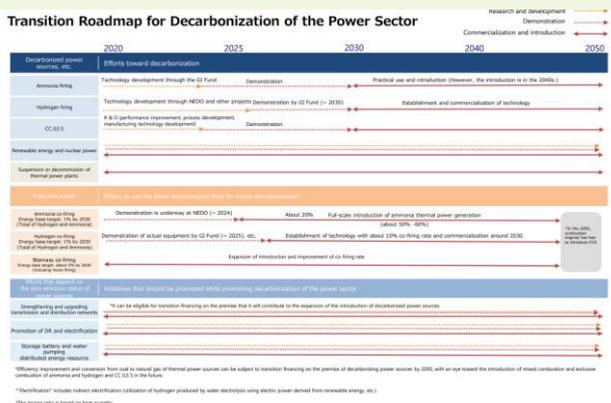
The Transition Finance Guide recommends that Banks develop and disclose their own transition finance framework that reflects the bank's business models and operating footprint or geographies. SMBC has addressed this recommendation with the Playbook. We hope that many financial institutions will create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

Reference : <https://www.unepfi.org/industries/banking/net-zero-banking-alliance-transition-finance-guide/>

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.



Reference : https://www.meti.go.jp/english/policy/energy_environment/transition_finance/index.html

Risk Management Structure

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.

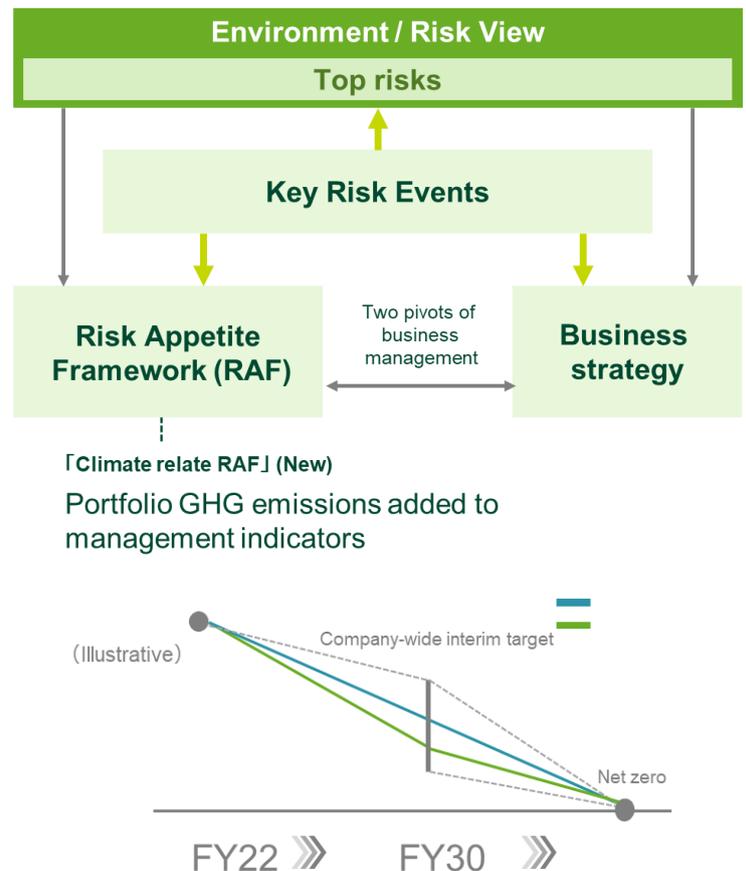
*The Risk Appetite Framework of SMBC Group, is one of two pivots of our business management alongside business strategies. It functions as a management framework for sharing information on the operating environment and risks facing SMBC Group among management and for facilitating appropriate risk taking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

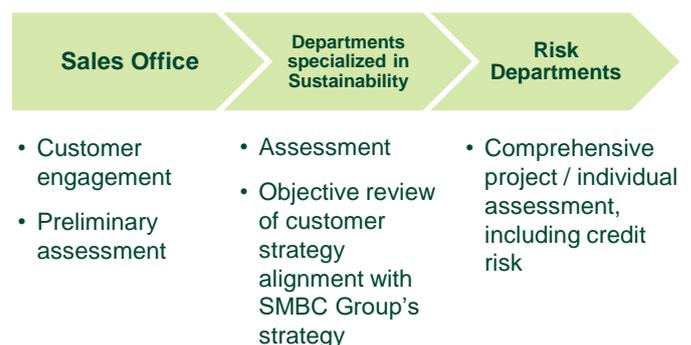
Through these activities, we aim to make our portfolio greener.



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.



Playbook – Four underlying principles

Transition finance is underpinned by the following four principles.

Do No Significant Harm



No carbon lock-in



Best available technology



Just transition



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 and Definitions

Overview of the Playbook

The sectors covered in this Playbook are Power, Oil and Gas, Steel and Automobile 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 | <ul style="list-style-type: none"> ● 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.

Key Items related to

- Transition Strategy
- Asset

IT: SMBC Internal Taxonomy
NZ: Net-zero

Classification	Product type		
	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
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, attached to O&G upstream asset (=bright yellow asset in IT) + Emission reduction targets set
Yellow	Asset aligned with 1.5°C from a timeline and sectoral perspective (=yellow asset in IT) + NZ targets set for 2050	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
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

Approach to Transition Finance

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

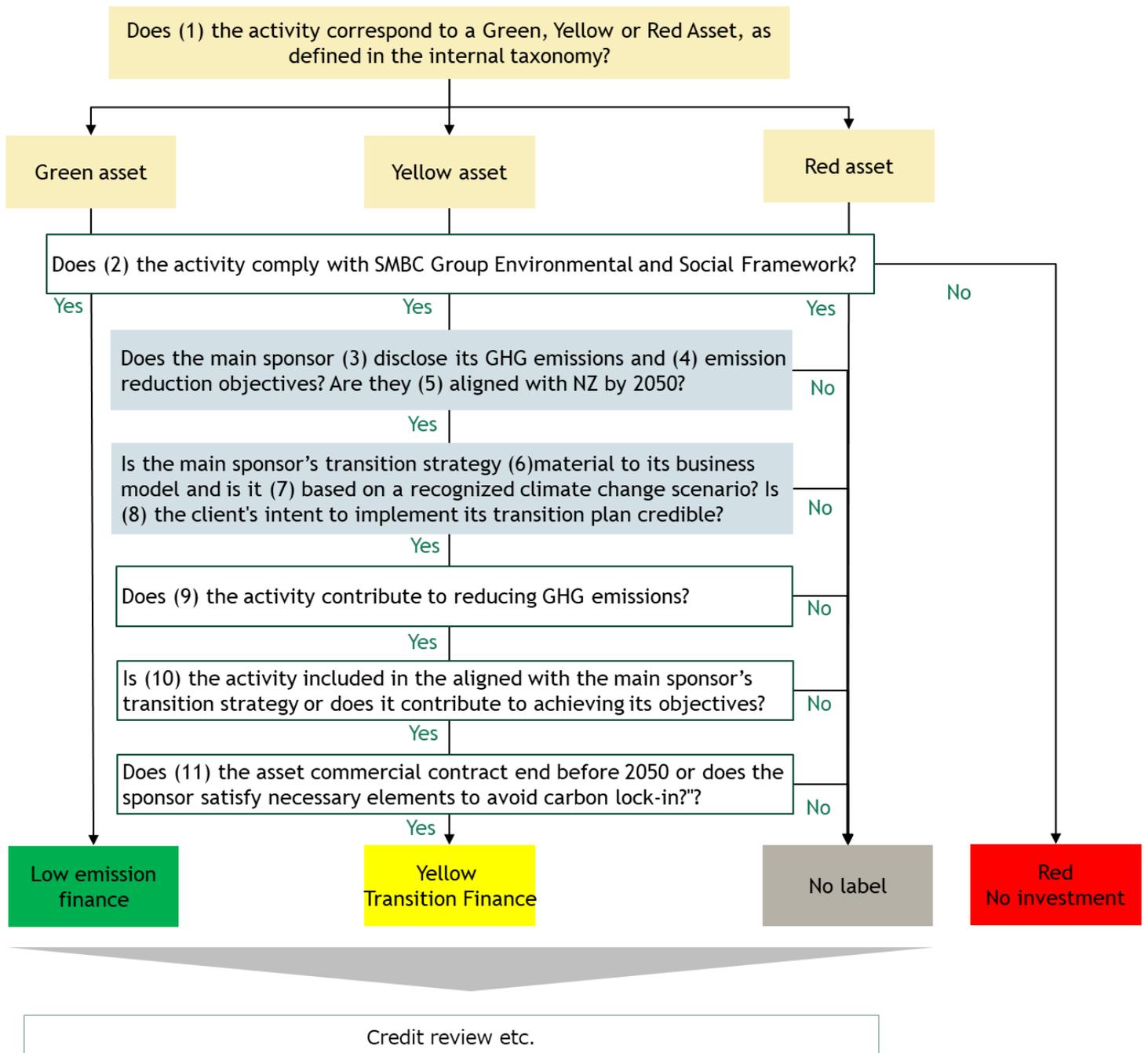
General Corporate Finance

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

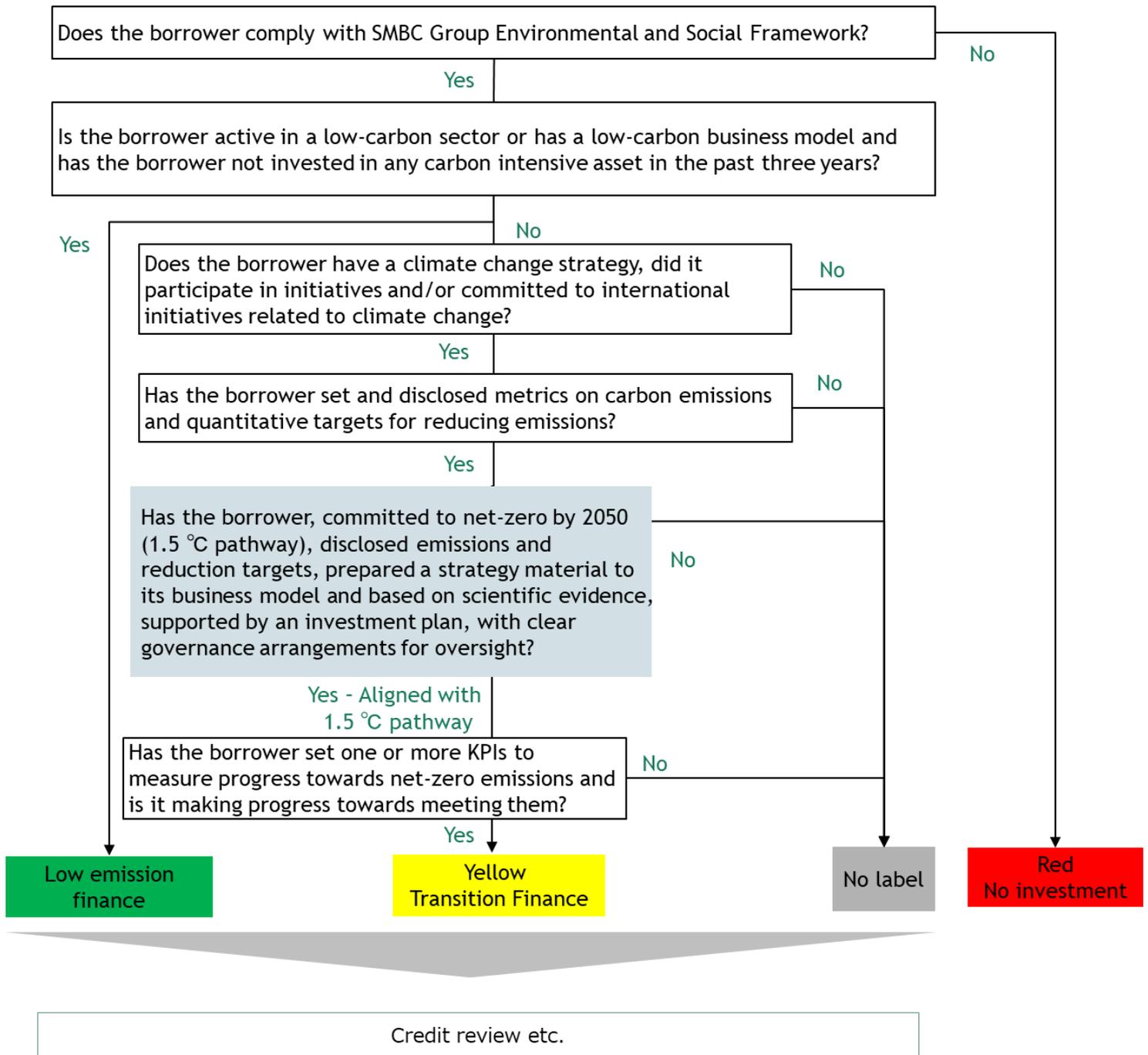
Decision process for Project Finance

Asset criteria	
Strategy related criteria	
Other criteria	



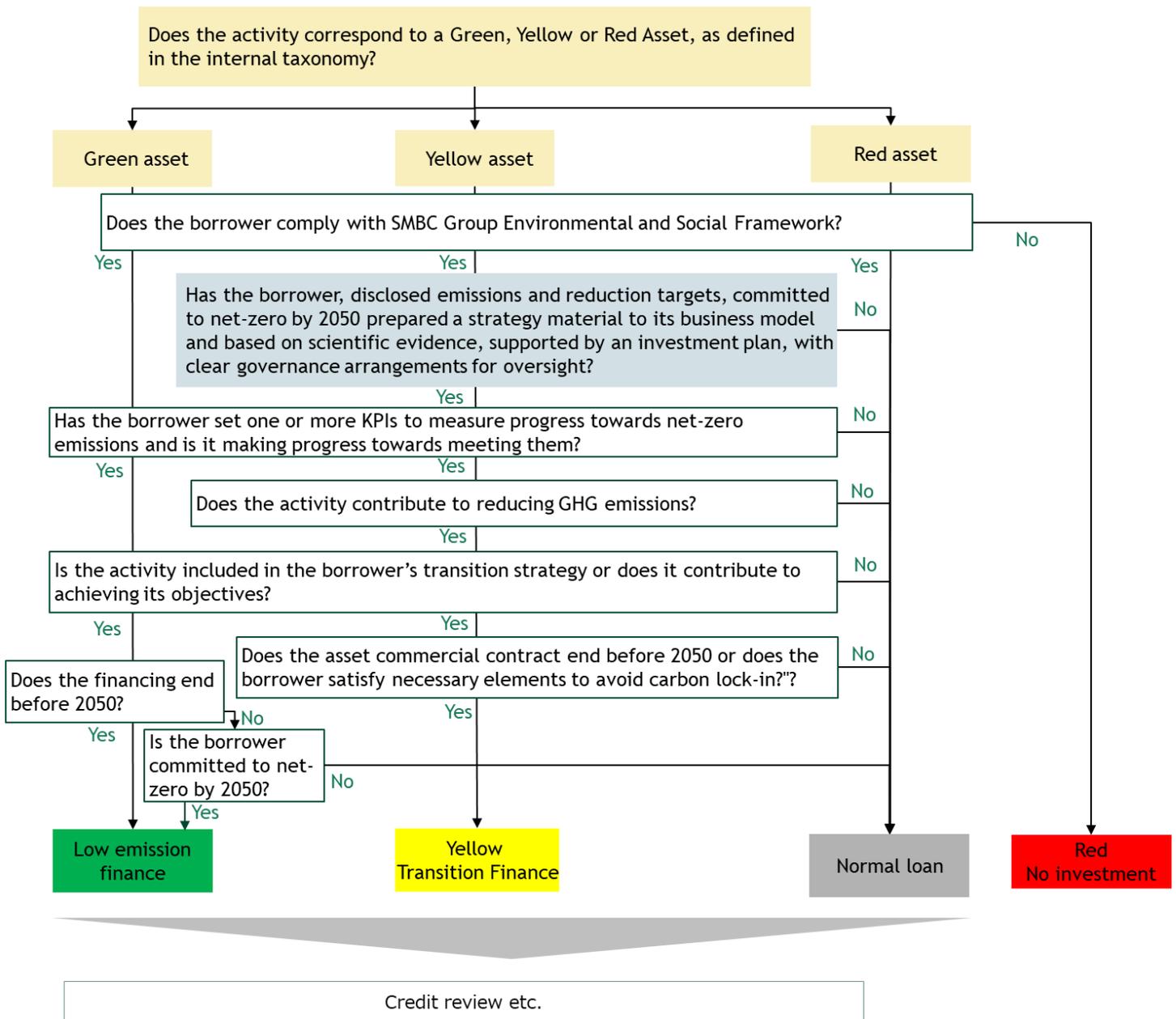
Decision process for General Corporate Finance

Strategy related criteria	
Other criteria	



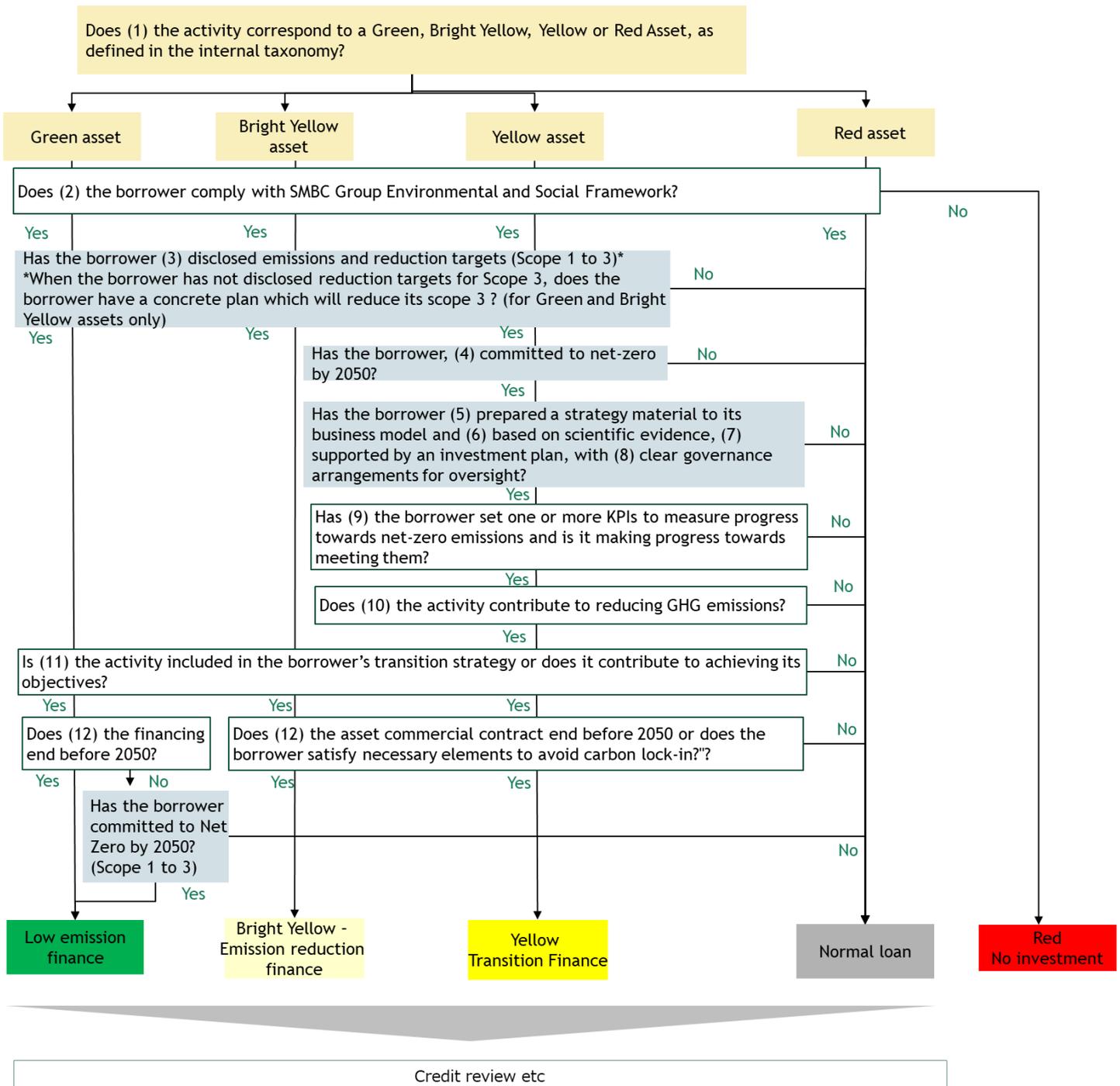
Decision process for UoP (Power Sector)

Asset criteria	
Strategy related criteria	
Other criteria	



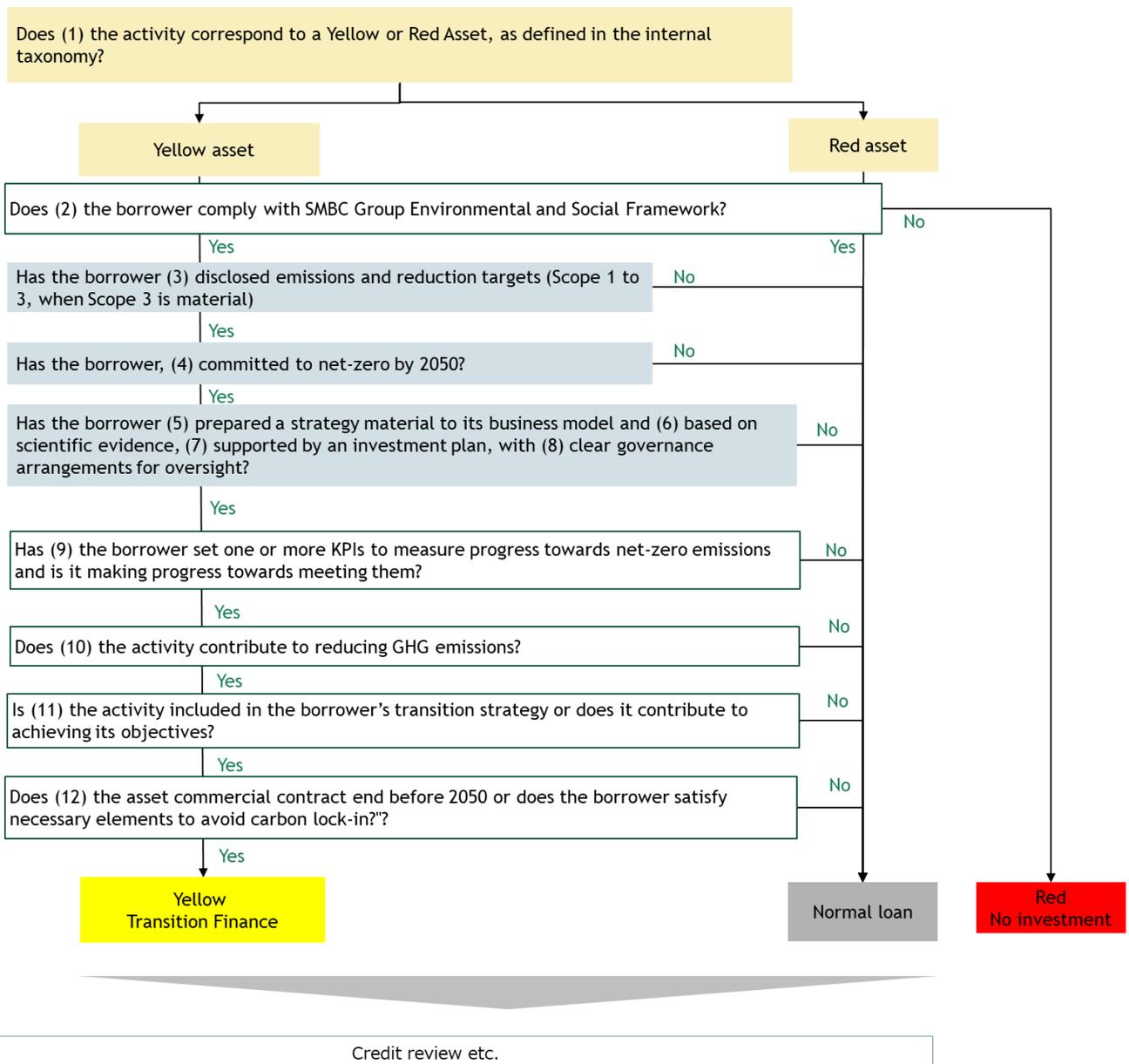
Decision process for UoP (Oil and Gas Sector)

Asset criteria	
Strategy related criteria	
Other criteria	



Decision process for UoP (Other Sectors)

Asset criteria	
Strategy related criteria	
Other criteria	



Examples of Transition Activities

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

References: Japan's Transition Roadmaps, local policies

Power Sector

- **Combined cycle gas fired power generation**
- **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
- **Ammonia co-firing gas, coal power generation**
At least 20% co-firing, limited to low emission ammonia
- **Biomass co-firing gas, coal power generation**
- **Nuclear power generation**
Limited to Generation III+ and beyond
- **Thermal power generation with CCS**
- **Energy efficiency measures**

Energy Sector

- **Gas exploration and production**
Only when the offtake is in Japan
- **Gas storage and distribution**
- **Hydrogen / ammonia from nuclear power generation**
- **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**

Auto mobile Sector

- **PHEV**
- **HEV**
(for additional equipment) Only when follow IEA NZE scenario (85 g-CO₂-eq/km (WTW)) or less
- **Manufacture of batteries for PHEV/HEV**
- **Energy efficiency in manufacturing process**
- **Fuel conversion in manufacturing process**
Conversion from petroleum-based fuels to natural gas, etc.

Examples of Transition Activities

Asia

Power Sector

- **Combined cycle gas fired power generation**
Only for peaking for some countries
- **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
- **Ammonia co-firing gas, coal power generation**
At least 20% co-firing, limited to low emission ammonia with CCS
- **Biomass co-firing gas, coal power generation**
At least 20% co-firing with CCS
- **Nuclear power generation**
Limited to Generation III+ and beyond
- **Thermal power generation with CCS**
- **Energy efficiency measures**

Energy Sector

- **Gas exploration and production**
Only when the offtake is in specific countries
- **Gas storage and distribution**
- **Hydrogen / ammonia from nuclear power generation**
- **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**

Auto mobile Sector

- **PHEV**
Only when export to specific countries
Otherwise: follow IEA NZE scenario (29 g-CO₂-eq/km (WTW))
- **HEV**
Only when export to specific countries
- **Manufacture of batteries for PHEV/HEV**
Same as PHEV/HEV
- **Energy efficiency in manufacturing process**
- **Fuel conversion in manufacturing process**
Conversion from petroleum-based fuels to natural gas, etc.

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**
Must be aligned with country's regulation
- **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 Sector

- **Gas exploration and production**
Only when the offtake is in specific countries
- **Gas storage and distribution**
- **Hydrogen / ammonia from nuclear power generation**
- **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**

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

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
- **Thermal power generation with CCS**
- **Nuclear power generation (Green)**
Must be aligned with EU Taxonomy

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

Must be aligned with EU Taxonomy

- **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**

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