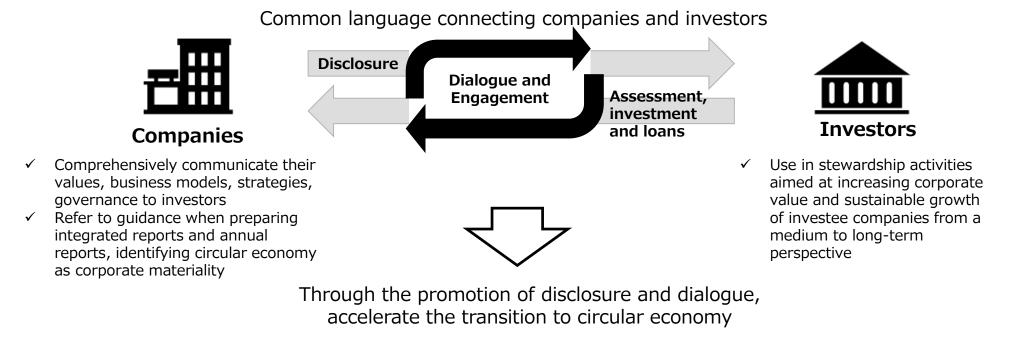
(Summary) Guidance for Disclosure and Engagement for Promoting Sustainable Finance toward a Circular Economy

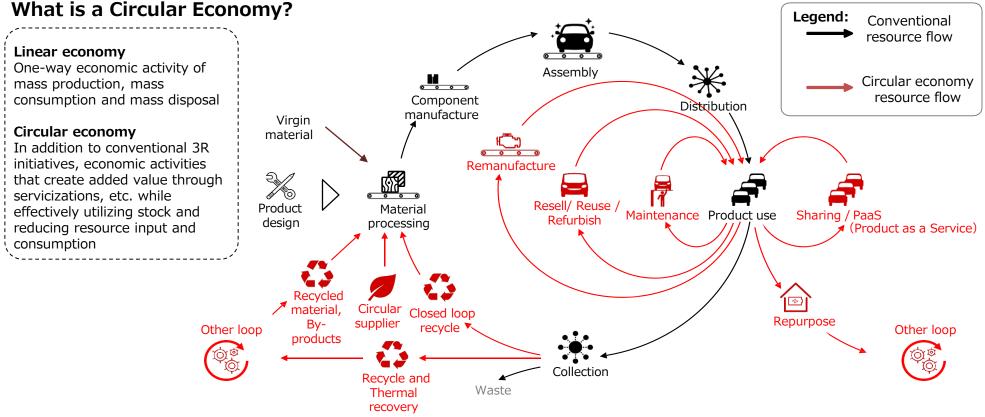
Purpose of the Guidance

- The purpose of this guidance is to promote disclosure and dialogue in order to accelerate the transition towards a circular economy, which is the first of its kind in the world developed by the Japanese Government.
- Encouraging dialogue and engagement between companies and investors and providing appropriate financing will promote innovation in technology and business models.
- The guidance **presents the key points of disclosure and dialogue in this area**, with reference to widely recognized and used frameworks such as TCFD recommendations.
- As the ESG disclosure frameworks are harmonized internationally, the government will present the guidance in various occasions to expand its use domestically and internationally.



Background

- Global challenges include increasing demand for resources, energy and food, increasing waste, and worsening environmental problems such as climate change. It is necessary to shift from the conventional linear economy of mass production, mass consumption and mass disposal to a circular economy over the medium to long-term. The transition to circular economy can enhance the sustainability of business activities and provide a source of medium to long-term competitiveness.
- In particular, plastic resource circulation is a matter of global concern due to the marine plastic litter issue and it is predicted that plastic waste exceeding the weight of fish will flow into the marine environment by 2050.
- ESG investment is increasing year by year both in Japan and overseas. As the market size of circular businesses is expected to expand, sustainable finance for circular economy is gathering momentum.



Key points of disclosure and dialogue on circular economy (1)

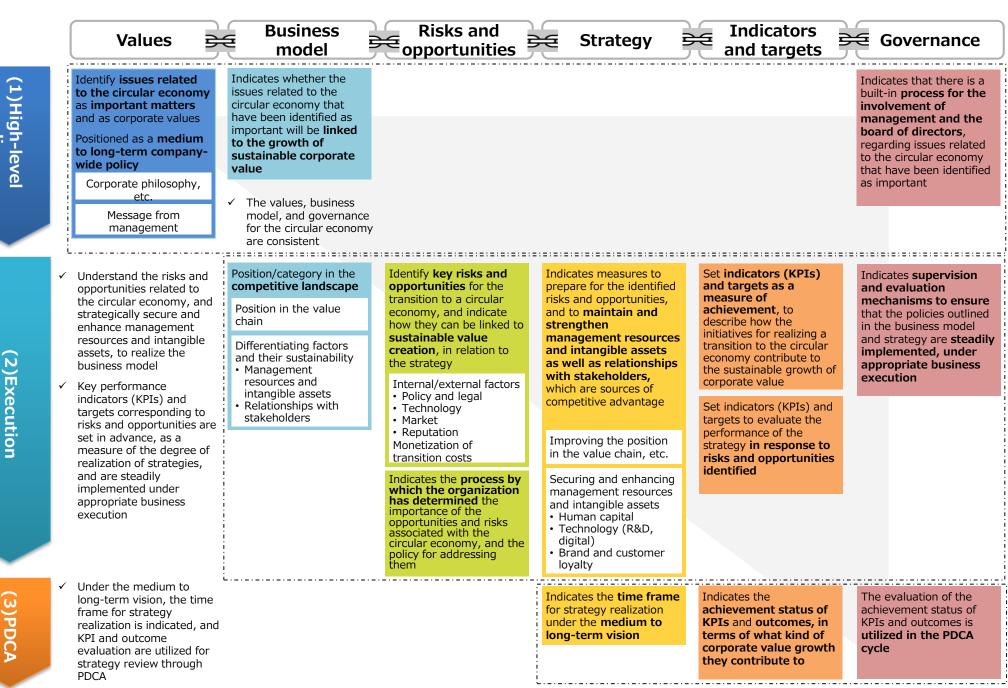
- Key points are arranged according to six items than should be focused on; Values, Business model, Risks and opportunities, Strategy, Indicators and targets, and Governance.
- Given that diverse efforts involving a wide range of materials, products, and services can contribute to the transition to a circular economy, it is important for companies to communicate their diverse approaches for transition as a consistent value creation story rooted in "values" and "business model". Appropriate evaluation by investors from a medium to long-term perspective is also essential.

Six focal items

Values	 Integration to corporate philosophy and vision (Clear reference in the management message) Reason for identifying circular economy as corporate materiality Basic direction to improve corporate value with circular economy Value creation stories consistent with business models and strategies 	Strategy	 Secure and strengthen management resources and intangible assets that support the competitive advantage of circular business models, and measures to deal with the risk of losing these resources and intangible assets Position in the medium to long-term value creation story
Business model	 Analyze appropriately; the market environment assumed for circular business model and its medium to long-term trends (e.g. value chain and competitive environment, position of the company, differentiating factors) Describe how the business model will lead to sustained corporate value growth in relation to value delivered to customers 	Indicators and targets	 Set targets as a guidepost for executing strategies to grow corporate value along with KPIs to measure the degree of achievement in advance Present in a form that corresponds to the risks and opportunities identified in a circular economy Explain self-evaluation which includes the results (outcomes)
Risks and opportunit ies	 Identify risks and opportunities of the company materiality for sustainable growth of their own business models Explain how the company recover the investment over the medium to long-term while maintaining the target profitability in order to create value 	Governance	 Process incorporated in which management and the board of directors are actively involved Establish PDCA that utilizes the evaluation of KPIs and outcomes that measures the achievement status of strategy for strategy reviews 3

(Reference) Interrelationship among the items to be aware of, upon disclosure and dialogue

policy



Key points of disclosure and dialogue on circular economy (2)

- With emphasis on opportunity, the aim is to improve corporate value by linking circular economy initiatives to the creation and acquisition of new markets over the medium to long-term and competitiveness.
- It is important for companies to identify the "risks and opportunities" for sustainable growth of their "business model." Companies should also explain how to transform risks into opportunities and how to recover the investment over the medium to long-term while maintaining target profitability in relation to their strategies. In addition, investors and financial institutions should evaluate the performance from a medium to long-term perspective.

Risks of relying on a linear economy

- <Policy and legal>
- **Regulatory and tax changes** to promote the circular economy
- <Technology>
- The production facilities, etc. of linear business models become stranded assets

<Market>

 Higher resource prices and greater volatility due to resource depletion

<Reputation>

• Damage to the brand image due to products and business models that use materials with high environmental impact

etc.

Transition

Opportunities created by transition toward a circular economy

- Effective use of regulatory and tax changes to promote the circular economy in one's own business
- Reduction in manufacturing costs by improving resource efficiency through IoT

• Stabilization of raw material prices by reducing dependence on non-renewable resources and primary resources important to the company

• Improvement in reputation by responding to the environmental demands of international markets and society

etc.

Example of indicators

- Percentage of raw materials used in more durable products or/with extended use, per total raw material consumption by mass
- Development status of suitable IT and digital systems, processes or infrastructure supporting a circular business model
- Percentage of input of non-renewable materials (including reused or recycled products and materials) to the total input of raw material
- Percentage of raw materials sourced from sustainable supply chains etc.

*Risks and opportunities which affect the company's business activities, in accordance to the value creation story, should be identified.

Key points of disclosure and dialogue on plastic resource circulation

- The business environment is changing, particularly among companies in the plastic supply chain, due to rising international interest and rapid progress in the implementation of domestic and international policies. It is necessary to accelerate disclosure and dialogue between companies and, investors and financial institutions.
- The key points for disclosure and dialogue are essentially the same as those for the circular economy. Companies should incorporate "risks and opportunities" and "indicators and targets", which both have different characteristics by industry type and the material, into their value creation stories with the characteristics of plastics in mind. At the same time, investors and financial institutions should evaluate the performance from a medium to long-term perspective.

Example of risks

<Policy and legal>

• **Restrictions on the import** of plastic waste into China and other countries

<Technology>

• Decline in competitiveness of existing technologies due to development of new technologies for alternative materials to plastics by other companies

<Market>

• **Insufficient supply** of alternative materials to plastics due to increased demand

<Reputation>

• Damage to the brand values caused by the use of single-use plastics etc.

<Physical (direct) impact>

 Adverse effects caused by plastic waste leakage into the environment

etc.

Example of opportunities

- Expansion of the market due to the increased volume of domestic plastic treatment
- Improvement of competitiveness through the company's technology development of alternative materials
- Transition Expansion of the market for environmentally friendly products and services
 - **Improved reputation** by responding to the environmental demands of society
 - Creation of a market for products and services that contribute to the prevention of plastic leakage into the environment

etc.

Example of indicators

- Amount of plastic used, recycling rate
- Formulation of technology development and product development plans for alternative materials
- Percentage of the recycled or bio-based content
- Volume of plastic packaging used
- Amount of reduced marine plastic litter

etc.

*Risks and opportunities which affect the company's business activities, in accordance to the value creation story, should be identified.