# Disclosure based on TCFD framework

Takara Bio Group strives to proactively disclose information to its stakeholders by accurately assessing the risks and opportunities related to climate change, clarifying the impact on its business operations, and clarifying measures to be taken as we work towards the realization of a sustainable society and the sustainable growth of our Group. All assessments are based on scenario analysis in accordance with the Task Force on Climate-related Financial Disclosures (TCFD).

## Governance

As a global company with operations around the world, Takara Bio Group regards climate change as an important management issue. Under the supervision of the Board of Directors, Takara Bio Group Sustainability Promotion Committee, the decision-making body for environmental issues, examines scenarios related to climate change, identifies risks and opportunities, and discusses countermeasures, which are reflected in the business operations of each group company. This Committee reports to the Board of Directors at least once a year and discloses information to stakeholders based on TCFD (Figure 1).

**Figure 1. Governance Framework**

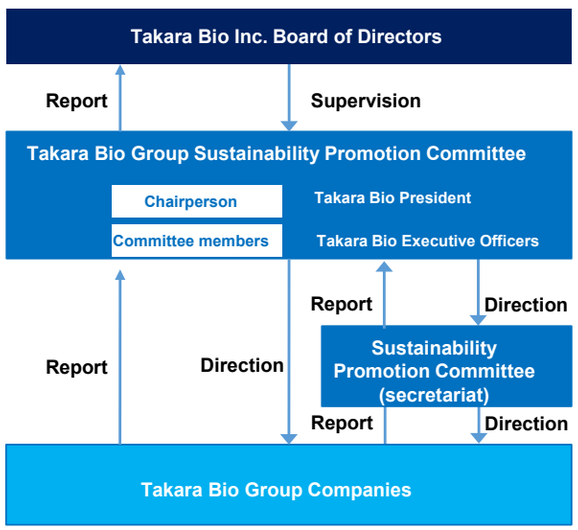



**Table 1. Scenario Analysis Results (Excerpt)**

† **Time axis**
Short-Term: Up to 2025; Medium-Term: Up to 2030; Long-term: Up to and after 2030

‡ **Impact**
Qualitative assessment of the likelihood of a risk materializing, the resulting risks, status of current measures, etc., and classification of the impact as large, medium or small.

**2°C or lower scenario**

| Social changes | Risks/Opportunities | Type | Business Impact | Time Axis † | Impact ‡ | Countermeasure |
|---|---|---|---|---|---|---|
| Rising energy costs | Transition risk | Market | Risk of financial impact from higher energy prices resulting in increased manufacturing costs | Short - medium term | Medium | • Energy conservation and facility renewal at manufacturing sites (ongoing)<br>• Introduction of renewable energy (under investigation) |
| Orders and regulations on products and services | Transition risk | Policy and law | Risk that use of specified substances will become prohibited by laws and regulations causing a suspension in the supply of raw materials such as plastic products, making the supply of products and services difficult | Medium - long term | Medium | • Responses based on laws and regulations in each country, trends in relevant organizations, and trends in new environmental regulations (under investigation)<br>• Development and use of substitutes (under investigation) |

**4°C scenario**

| Social changes | Risks/Opportunities | Type | Business Impact | Time Axis † | Impact ‡ | Countermeasure |
|---|---|---|---|---|---|---|
| Frequent and serious abnormal weather (heavy rains, floods, etc.) | Physical risk | Acute Chronic | Risk of financial impact due to suspension in the supply of products and services due to damage to manufacturing sites caused by flood, etc. | Medium - long term | Medium | • Decentralization of manufacturing sites (ongoing)<br>• BCP risk management (ongoing) |
| | | | Risk of damage to manufacturing sites due to flood damage, etc. and the need for equipment replacement, resulting in financial impact. Or risk that business continuity becomes difficult due to leakage of hazardous substances, etc. due to damage to biohazard facilities | Medium - long term | Medium | • Decentralization of manufacturing sites (ongoing)<br>• BCP risk management (ongoing) |
| | | | Risk of financial impact due to disruption of supply chain due to flood, etc. and suspension of supply of products and services | Medium - long term | Medium | • Decentralization of manufacturing sites (ongoing)<br>• BCP risk management (ongoing) |
| | | | Risk of financial impact due to suspension of operations at manufacturing sites and supply of products and services due to drought | Short - medium term | Medium | • Decentralization of manufacturing sites (ongoing)<br>• BCP risk management (ongoing) |
| Infectious disease outbreak | Physical risk | Chronic | Risk of reduced economic and R&D activities due to infectious disease outbreaks. Or the risk that the supply chain will be disrupted, resulting in a shortage of raw materials, etc., resulting in financial impact from the suspension of the supply of products and services. | Short - medium term | Medium | • Decentralization of manufacturing sites (ongoing)<br>• More global business expansion (ongoing) |
| Development of new products and services through R&D and technological innovation | Opportunities | Products/services | Opportunities for increased research and development in this field and expansion of related new products and services due to the spread of climate-related infectious diseases | Short - medium term | Medium | • Research and development of new products and services, and research on new market needs (ongoing) |

## Strategy

Takara Bio Group recognizes that the global average temperature increase due to climate change will have an enormous impact on society, and believes that it is important to contribute to activities to curb temperature increases. Our Group is identifying the business impacts of climate-related risks and opportunities, and is formulating strategies to enhance its ability to respond to a 2°C or lower scenario. Scenario analysis was carried out using a “2°C or lower scenario,” in which the average global temperature increase is restricted to 2°C or lower than pre-industrial levels, and a “4°C scenario,” in which the average global temperature is increased by 4°C. This analysis evaluated the degree of impact on our business operations and the likelihood of these scenarios occurring, examined countermeasures, and summarized the risks and opportunities that would have a large impact on our Group in Table 1. In the scenario analysis, we referred to the Intergovernmental Panel on Climate Change (IPCC), RCP2.6 (2°C or lower scenario), RCP8.5 (4°C scenario), and WRI Aqueduct (global water risk mapping tool developed by the World Resources Institute).

**Business Risks and Opportunities from Climate Change (summary)**

Transition Risk:
- Risk of financial impact from higher energy and raw material costs (e.g., carbon tax)
- Risk of difficulty in supplying products and services due to import and export restrictions on raw materials and products based on restrictions on specified substances (example: Suspension of supply of raw materials for plastic products)

Physical Risk:
- Risk of financial impact from high tides due to rises in sea-levels, floods due to river flooding, droughts, etc. (example: Damage to manufacturing sites)
- Risk of reduced global life science research activity and reduced business opportunities due to climate change (example: Global pandemics)

Opportunities:
- Opportunities to expand business through the development of new products and services related to climate change (Example: New products and services derived from global pandemics)

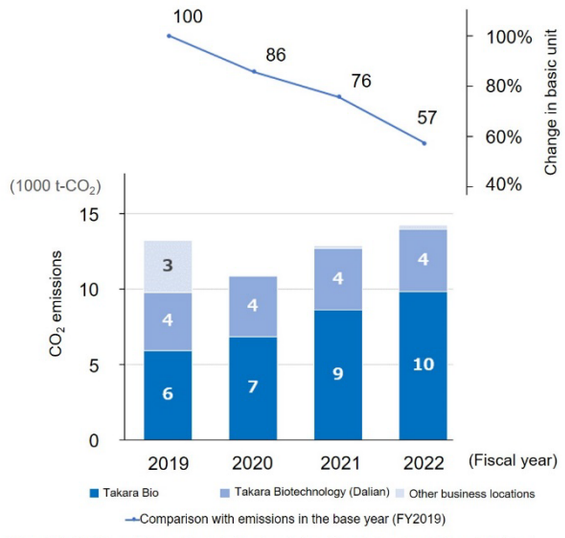
## Risk Management

Takara Bio Group has established the framework to minimize adverse effects and losses caused by the materialization of risks, including scenario analysis and the assessment of risks associated with climate change in line with TCFD recommendations. We are assessing the degree of impact and the risk level depending on the frequency of occurrence at major manufacturing sites where business continuity and financial impact are significant. Identified risks, opportunities and countermeasures are discussed by the Sustainability Promotion Committee, which is chaired by the President and is comprised of executive officers responsible for each of our business segments, and reports to the Board of Directors.

## Indicators and Targets

In its Sustainability Management Promotion Policy formulated in June 2021, Takara Bio Group focused on the environment as one of its key initiatives, and set a target of reducing $CO_2$ emissions per unit of sales in fiscal 2031 to 50% of fiscal 2019 levels. As of fiscal 2022, our Group's $CO_2$ emissions (basic unit) were 57% of the fiscal 2019 level (Figure 2).
We will continue to review risks and opportunities and implement specific measures and reflect them in our medium- to long-term management strategy to enhance our management strategy against climate change.

**Figure 2. Group $CO_2$ Emissions***




* Group's total $CO_2$ emissions: Scope 1 (direct emissions from fuel use) and Scope 2 (indirect emissions from energy sources such as purchased electricity)