

Section 3 Ensure sustainable and inclusive economic development

According to the World Population Prospects 2022, published by the United Nations in July 2022, the world population, which was estimated at 2.5 billion people in 1950, is projected to increase to around 8.5 billion people in 2030 and to around 9.7 billion people in 2050, peak at around 10.4 billion people during the 2080s, and stay at that level until 2100.⁸⁰

As a result of urbanization due to the increase in the world population and industrialization, demand for resources, energy, and foods has grown, leading to an increase in the amount of waste. According to the BP Statistical Review of World Energy 2022, published by BP, an oil major, global consumption of energy (primary energy) in 2021 increased 1.3% compared with 2019, before the COVID-19 crisis, led by growth in consumption in emerging countries.⁸¹ Meanwhile, “What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050,”⁸² a report published in September 2018 by the World Bank, offered an analysis projecting that unless emergency measures are taken, the global amount of waste generated will increase 70% by 2050 compared with 2016.

Under these circumstances, the world is facing complex, interconnected challenges, such as the deepening of climate change and other environmental problems, increasing inequality and poverty, and human rights issues. Those are challenges that extend across national borders and affect all people. They are urgent challenges that all people must work together to address in order to realize an inclusive and sustainable development that leaves nobody behind. Daly (1990), who was a World Bank economist, proposed the following three principles of sustainable development⁸³ (1): the rate of consumption of renewable resources must not be greater than the rate at which resources regenerate; (2) the rate of waste emission must not be greater than the natural assimilative capacity to absorb it; and (3) the rate of consumption of non-renewable resources must not be greater than the pace at which renewable substitutes can be put into place. The abovementioned challenges cannot be resolved by any single country alone. In addition, as those challenges are interconnected, if they are treated as problems for a single country or as separate problems, what has been devised as rational solutions to them may end up bringing negative results to the world as a whole in some cases.

For example, there is a term in economics called the “fallacy of composition.” It refers to the possibility that when economic agents behave in a rational and appropriate manner at the individual level, that is, from the micro viewpoint, their behavior may end up bringing unintended, negative results at the economy-wide level, that is, from the macro viewpoint. Herbert Simon proposed the “bounded

⁸⁰ United Nations, (2022), “World Population Prospects 2022,” https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf.

⁸¹ BP, (2022), “BP Statistical Review of World Energy 2022/71st Edition,” <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf>.

⁸² World Bank Group, (2018), “What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050,” <https://openknowledge.worldbank.org/bitstream/handle/10986/30317/211329ov.pdf?sequence=11&isAllowed=y>.

⁸³ Daly, H., (1990), “Toward Some Operational Principles of Sustainable Development,” *Ecological Economics*, 2 (1990): 1-6. <https://docs.ufpr.br/~jrgarcia/Economia%20Ecologica/Toward%20some%20operational%20principles%20of%20sustainable%20development.pdf>.

rationality”⁸⁴ concept and argued that even if human beings intend to make rational decisions, they can only make decisions based on bounded rationality (imperfect decision making) because of the presence of various constraining conditions, such as the limitations on information gathering capacity.

Meadows (2008),⁸⁵ who was involved in the development of a model used in “The Limits to Growth,”⁸⁶ a report compiled by the Massachusetts Institute of Technology on commission from the Club of Rome, an international research and advocacy organization, and published in 1972, stated that in an “interconnected” system that is “coherently organized in a way that achieves something,” “all interact” and “all have their roles”⁸⁷ and that in many cases, “the least obvious part of the system, its function or purpose, is often the most crucial determinant of the system’s behavior.” Meadows also pointed out that the leverage points (places in the system where a small change could lead to a large shift in behavior) of system problems “frequently are not intuitive” and that “if they are, we too often use them backward, systematically worsening whatever problems we are trying to solve.” Although “we are too fascinated by the events they (systems) generate” and by “flows” in many cases, she argued, it is important to look closely at the complex interconnections of systems, look for clues to structures that generate events and flows, and grasp the full picture. She went on to state that as “the real system is interconnected,” “it will not be possible for the global economy to succeed if the global environment fails.”

If these viewpoints are taken into consideration, when addressing the abovementioned interconnected complex challenges, it is necessary to look at the interconnections in the whole system, think from a global perspective, and act locally.

This section provides an overview of measures taken in response to risks associated with the deepening risks of climate change in particular, among other interconnected challenges that we are facing.

1. Response to climate change

Under the United Nations Framework Convention on Climate Change (UNFCCC),⁸⁸ climate change is defined as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.” The United Nations points out that since the 1800s, human activities have been the main driver of climate change and that climate change has been caused primarily because

⁸⁴ Simon, H. (1945, 1947, 1957, 1976 and 1997), *Administrative Behavior*, 4/E, (Futamura, T. et al., trans. (2009), *KEIEI KOUDOU KEIEI SOSHIKI NI OKERU ISHI KETTEI KATEI NO KENKYUU*, Diamond Inc.).

⁸⁵ Meadows, D. (2008), *Thinking in Systems* (Edahiro, J., trans. (2015), *SEKAI WA SISUTEMU DE UGOKU*, Eiji Press).

⁸⁶ Meadows, D. et al., (1972), “The Limits to Growth,” <https://www.clubofrome.org/publication/the-limits-to-growth/>.

⁸⁷ Meadows stated: “The world, or at least the parts of it humans think they understand, is organized in subsystems aggregated into larger subsystems, aggregated into still larger subsystems.” She went on to say as follows: “A cell in your liver is a subsystem of an organ, which is a subsystem of you as an organism, and you are a subsystem of a family, an athletic team, a musical group, and so forth. These groups are subsystems of a town or city, and then a nation, and then the whole global socioeconomic system that dwells within the biosphere system.”

⁸⁸ Adopted in May 1992 and put into effect in March 1994 (the number of parties to the convention: 198 countries and organizations). <https://unfccc.int/>.

the burning of fossil fuels (e.g., coal, oil and gas) generated greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.⁸⁹ In January 2023, the World Meteorological Organization (WMO) announced, based on six international climate datasets, that the average global temperature in the eight years since 2015 has been the highest on record and that the average global temperature in 2022 rose approximately 1.15 degrees Celsius (1.02 to 1.28 degrees Celsius) compared with the pre-industrial levels.⁹⁰

In recent years, abnormal weather events⁹¹ and climate disasters, including heat waves, droughts, and massive floods, have occurred across the world. According to the Japan Meteorological Agency,⁹² among the events that occurred in 2022 are abnormally high temperatures in China, the area extending from central Europe to the northern parts of North Africa and the area extending from northern Australia to New Zealand, abnormally high precipitation in the area extending from the southern parts of East Asia to Southeast Asia, and southeastern Australia, and abnormally low precipitation in the area extending from central Europe to the northwestern parts of North Africa and the central parts of South America. The Summary for Policymakers, Working Group 1, Sixth Assessment Report, compiled by the Intergovernmental Panel on Climate Change (IPCC), stated: “Human-induced climate change is already affecting many weather and climate extremes in every region across the globe.”⁹³ Meanwhile, according to the Global Risks Report 2023,⁹⁴ published in January 2023 by the World Economic Forum, failure to mitigate climate change was ranked No. 1 in the ranking table of risks that could have a severe impact in the next 10 years, followed by failure of climate-change adaptation, and natural disasters and extreme weather events (Table I-2-3-1).

⁸⁹ See the website of the United Nations (<https://www.un.org/en/climatechange/what-is-climate-change>).

⁹⁰ See the website of the WMO (<https://public.wmo.int/en/media/press-release/past-eight-years-confirmed-be-eight-warmest-record#:~:text=GENEVA%2C%2012%20January%202023%20%2D%20The,by%20the%20World%20Meteorological%20Organization>).





⁹¹ An abnormal weather event, as defined by the Japan Meteorological Agency, is in principle a “phenomenon that occurs at a frequency of once every 30 years or less in a certain location (region) at a certain time of the year (weak, month, or season).”

⁹² See the website of the Japan Meteorological Agency (https://www.data.jma.go.jp/gmd/cpd/monitor/annual/annual_2022.html).

⁹³ IPCC, (2019), “Summary for Policymakers, Working Group 1, Sixth Assessment Report,” (Ministry of Education, Culture, Sports, Science and Technology and Japan Meteorological Agency (2022), “IPCC DAIROKUJI HYOKA HOKOKUSHO DAIICHI SAGYOU BUKAI HOKOKUSHO SEISAKU KETTEISHA MUKE YOUYAKU ZANTEIYAKU”) <https://www.ipcc.ch/report/ar6/wg1/chapter/summary-for-policymakers/>https://www.data.jma.go.jp/cpdinfo/ipcc/ar6/IPCC_AR6_WGI_SPM_JP.pdf (For English) https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

⁹⁴ World Economic Forum, (2023), “The Global Risks Report 2023,” https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf.

Table I-2-3-1. Global risks ranked by severity over the next 10-year period

1	Failure to mitigate climate change	Risk categories  Environmental  Geopolitical  Societal  Technological
2	Failure of climate-change adaptation	
3	Natural disasters and extreme weather events	
4	Biodiversity loss and ecosystem collapse	
5	Large-scale involuntary migration	
6	Natural resource crises	
7	Erosion of social cohesion and societal polarization	
8	Widespread cybercrime and cyber insecurity	
9	Geoeconomic confrontation	
10	Large-scale environmental damage incidents	

Source: *Global Risks Report 2023* (World Economic Forum).

Rockström (2015),^{95 96} a Swedish environmental scientist, observed that the Earth is a self-regulating system in which everything is interconnected, with the process divided into two stages, and warned that although the Earth retains a high level of resilience and tries to remain in its original state in the first stage, it starts to shift away from the state of equilibrium and passes the point of no return in the second stage, when the resiliency has been lost and various parameters have reached critical points. According to the update of the analysis and assessment regarding planetary boundaries (2015), meaning critical points where global catastrophe will be brought about, the Earth has already crossed the critical points with respect to four of the nine selected most important environmental elements—climate change, biosphere integrity, land system change, and biogeochemical flows. Furthermore, in 2022, another research team gave the assessment that the planetary boundary has been crossed with respect to novel entities related to pollution from chemicals, including plastics.⁹⁷

The scientific basis of global debate on climate change lies in assessment reports published by the IPCC every several years. The IPCC, which is an intergovernmental organization established in November 1988 by the United Nations Environment Program (UNEP) and the WMO, had 195 countries and regions as members as of March 2023.⁹⁸ Under the IPCC's objective of giving scientific foundations to climate change policy, scientists recommended by governments participate in the panel to conduct climate change-related assessments from scientific, technical, social, and economic viewpoints, and compile reports. Assessments reports are comprised mainly of the Working Group Reports, compiled by three working groups divided by assessment subject, and the Synthesis Report. The report compiled

⁹⁵ Rockström, J. et al., (2015), *Big World Small Planet*, (Takeuchi, K. and N. Ishii, supervised (2018) *CHIIISANA CHIKYUUNO OOKINA SEKAI PURANETARII BAUNDARII TO JIZOKU KANOU NA KAIHATSU*, Maruzen Publishing).

⁹⁶ Rockström stated that although scientific understanding of the function of geological systems has made significant progress, it is still imperfect and that science has not yet accurately identified the climate thresholds. Therefore, he argued, if we do something somewhere in the world, the action immediately affects the living environment of people in other regions of the Earth.

⁹⁷ Persson, L., (2022), "Outside the Safe Operating Space of the Planetary Boundary for Novel Entities," *Environmental Science and Technology*. <https://pubs.acs.org/doi/10.1021/acs.est.1c04158>.

⁹⁸ See the website of the IPCC (<https://www.ipcc.ch/about/>).

by Working Group I (WGI), which assesses climate systems and the physical science basis, forms the foundation of assessment reports. If we look at the impact of human activities on global warming based on the reports so far compiled by WG I (summaries for policymakers) (Table I-2-3-2), while the scenarios differ across the reports, the level of confidence about assessment has been progressively rising with the publication of each report, resulting in the use of increasingly explicit wordings in the assessment. The WGI report that forms a part of the Sixth Assessment Report,⁹⁹ published in August 2021, concluded: “It is unequivocal that human influence has warmed the atmosphere, ocean and land.” It also pointed out that in line with the escalation of global warming, the “frequency and intensity of hot extremes, marine heatwaves, heavy precipitation, and, in some regions, agricultural and ecological droughts” will increase.¹⁰⁰

Table I-2-3-2. Assessment of impact of human activities on global warming

Assessment reports	Release Year	Overview
First	1990	There is concern that human activities may be inadvertently changing the climate of the globe through the enhanced greenhouse effect, by past and continuing emissions of carbon dioxide and other gases which will cause the temperature of the Earth's surface to increase - popularly termed the "global warming." If this occurs, consequent changes may have a significant impact on society. There are many uncertainties in our (IPCC) predictions particularly with regard to the timing, magnitude and regional patterns of climate change. The unequivocal detection of the enhanced greenhouse effect from observation is not likely for a decade or more.
Second	1995	The balance of evidence suggests that there is a discernible human influence on global climate.
Third	2001	In the light of new evidence and taking into account the remaining uncertainties, most of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations.
Fourth	2007	Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations.
Fifth	2013	It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century.
Sixth	2021	It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.

Source: Provisional translations of *IPCC First to Sixth Assessment Reports*, reports by IPCC Working Group I, *Summary for Policymakers* (MEXT, Japan Meteorological Agency) (For English) <https://www.ipcc.ch/>.

⁹⁹ See the website of the IPCC (<https://www.ipcc.ch/assessment-report/ar6/>).

¹⁰⁰ IPCC, (2019), “Summary for Policymakers, Working Group 1, Sixth Assessment Report,” (Ministry of Education, Culture, Sports, Science and Technology and Japan Meteorological Agency (2022), “IPCC DAIROKUJI HYOKA HOUKOKUSHO DAIICHI SAGYOU BUKAI HOUKOKUSHO SEISAKU KETTEISHA MUKE YOUYAKU ZANTEIYAKU”) https://www.data.jma.go.jp/cpdinfo/ipcc/ar6/IPCC_AR6_WGI_SPM_JP.pdf (For English) <https://www.ipcc.ch/report/ar6/wg1/resources/spm-headline-statements/>.

Regarding climate change risks, private-sector initiatives are also underway. In 2015, the Financial Stability Board (FSB), upon the G20's request, established the Task Force on Climate-Related Financial Disclosures (TCFD). In its final report¹⁰¹ published in June 2017, the TCFD recommended that in order to encourage investors and financial institutions making investments conscious about environmental, social and governance (ESG) issues to make appropriate investment decisions, companies should disclose consistent, comparable, reliable, and clear climate-related financial information in an efficient manner. It broadly classified climate change risks into those related to the transition to a low-carbon economy and those related to the physical impacts of climate change. It also referred to the importance for companies to recognize risks and opportunities associated with climate change and incorporate them into management strategies. Every year since 2018, the TCFD has published the Status Report, which summarizes the status of disclosure of climate change-related financial information by around 1,400 large companies. In the 2022 Status Report,¹⁰² it was reported that the number of companies disclosing climate change-related information was steadily increasing, although there remains significant room for progress in disclosure. In Japan, more than 1,300 companies, the largest number in the world, have expressed support for the disclosure initiative as a result of efforts such as the establishment of the TCFD Consortium and the introduction of the de facto mandatory TCFD disclosure due to the revision of the Corporate Governance Code in 2021. According to the Survey of TCFD Disclosure in Japan (FY2022),¹⁰³ published in January 2023 by the Japan Exchange Group, which operates the Tokyo Stock Exchange, the Osaka Exchange, and the Tokyo Commodity Exchange, among the 165 companies covered by both the FY2021 and FY2022 editions of the survey, the percentage of those that made disclosure regarding all disclosure items recommended by the TCFD increased. In addition, in the assessment of the quality of disclosure related to climate change by the Carbon Disclosure Project (CDP), 92 Japanese companies, the largest number in the world, were included in the "A list," which represents the highest rating. This means that Japanese companies lead the world not only in terms of the quantity but also the quality of disclosure.

To respond to climate change and other environmental problems, it is essential for each and every individual person to view those problems as their own and work together to address them under mutual trust between industry, government, academia, and ordinary people.

This subsection will look at major international frameworks that form the basis of measures to respond to climate change and major countries' initiatives.

(1) International frameworks

Measures to respond to climate change can be broadly divided into two categories: "mitigation" measures and "adaptation" measures. Mitigation measures are those to curb greenhouse gas emissions,

¹⁰¹ TCFD, (2017), "Recommendations of the Task Force on Climate-related Financial Disclosures," <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>.

¹⁰² TCFD, (2022), "2022 Status Report," <https://assets.bbhub.io/company/sites/60/2022/10/2022-TCFD-Status-Report.pdf>.

¹⁰³ Japan Exchange Group (2023), "The Survey of TCFD Disclosure in Japan (FY2022)," <https://www.jpx.co.jp/corporate/sustainability/esgknowledgehub/disclosure-framework/nlsgeu0000053pgw-att/TCFDsurveyjp.pdf>. (The survey covered the component issues of the JPX Nikkei Index 400).

which are the cause of climate change, and those to maintain and strengthen the carbon-absorbing (carbon sink) function of forests. Adaptation measures are those to prevent and mitigate the existing or future effects of climate change. It is considered to be important to implement an effective combination of the two categories of measures.¹⁰⁴

While one of the top priority mitigation measures is reducing greenhouse gas emissions, in recent years, there has been increasing awareness that more consideration should be given to adaptation measures. In addition, the argument is growing, mainly in developing countries, that preparing for loss and damage associated with the negative effects of climate change that cannot be avoided through adaptation as a measure to deal with the impact of climate change is necessary.

(A) Sustainable development goals (SDGs)

In September 2015, the United Nations Sustainable Development Summit was held, and “Transforming our world: the 2030 Agenda for Sustainable Development,”¹⁰⁵ was adopted as an outcome document. Based on the Agenda, which is a plan of action for people, planet, and prosperity, the Sustainable Development Goals (SDGs) for realizing a world that leaves no one behind were set. The SDGs comprise 17 goals and 169 targets that should be achieved by 2030 in an integrated manner, rather than individually. Climate change is addressed under Goal 13 “Take urgent action to combat climate change and its impacts,” which comprises five targets (Table I-2-3-3).

Table I-2-3-3. SDGs and targets of Sustainable Development Goal 13

Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

¹⁰⁴ See the website of the Ministry of the Environment.

¹⁰⁵ United Nations, (2015), “Transforming Our World: The 2030 Agenda for Sustainable Development.”

Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
13.2	Integrate climate change measures into national policies, strategies and planning
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
13.a	Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
13.b	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

Source: Provisional translation¹⁰⁶ (MOFA).

Under the wedding cake model, devised by the Stockholm Resilience Centre in Sweden, which is an international research hub for resilience and sustainability sciences, the abovementioned 17 goals are viewed as forming a layered structure resembling a wedding cake, are classified into three layers and are comprehensively sorted (Figure I-2-3-4). This model conceptualizes the development of “economy” (Goals 8, 9, 10, and 12) as being founded on “society” (Goals 1, 2, 3, 4, 5, 7, 11, and 16), which in turn is supported by “biosphere” (Goals 6, 13, 14, and 15). Placed at the apex of the structure is Goal 17 “Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.”

Figure I-2-3-4. Wedding cake model



¹⁰⁶ https://www.mofa.go.jp/mofaj/gaiko/oda/sdgs/pdf/000101402_2.pdf
(For English) <https://sdgs.un.org/goals>.

Source: Stockholm Resilience Centre.¹⁰⁷

At the SDG Summit, held in September 2019, a review of past SDGs-related initiatives was conducted at the leaders' level, and it was agreed that the 10-year period from January 2020 to the deadline for the achievement of the goals should be characterized as “a decade of action” to accelerate initiatives to achieve the SDGs.¹⁰⁸ The United Nations publishes the Sustainable Development Report on the achievement and progress in SDGs every year, in which the achievement level of the SDGs on a country-by-country basis is assessed on a four-grade scale and the rankings and the scores are disclosed. According to the 2022 edition of the report,¹⁰⁹ although the achievement level of the SDGs improved between 2015 and 2019 on a worldwide basis, progress was not observed between 2019 and 2021 due to the COVID-19 pandemic and other impacts, indicating that the SDGs initiatives stagnated.

Mazzucato (2021),¹¹⁰ a British economist, pointed out that as capitalism has had no answer to the environmental crisis, a form of public-private partnership that is quite different from existing ones is necessary in order to honor the commitment to achieving the SDGs by 2030 and argued that governments' roles and required capacities should be fundamentally reconsidered. Mazzucato went on to state that it is important to create a problem-solving economy that pays attention to issues that really matter to people and the planet (mission economy).

(B) United Nations Framework Convention on Climate Change (UNFCCC)

In May 1992, the UNFCCC, which aims to ultimately stabilize the concentration of greenhouse gases (e.g., carbon dioxide and methane) in the atmosphere, was adopted. Based on the convention, an international conference called the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP) has been held every year since 1995 (except in 2020, when the conference was not held because of the COVID-19 pandemic) in order to hold discussions among the parties to the conference on concrete policies on climate change. Until now, the COP has been held 27 times. The main contents and results of the negotiations are as described below.

At COP3, held in Kyoto in 1997, under the leadership of Japan as chair, the Kyoto Protocol was unanimously adopted (put into effect in February 2005).¹¹¹ The Kyoto Protocol required developed countries (including countries in transition to a market economy) to set and achieve targets for greenhouse gas (GHG) emissions in order to reduce overall GHG emissions by at least 5% compared with 1990 during the commitment period of 2008 to 2012 based on the idea that developed countries should play the leading role in responding to climate change in accordance with their common but differentiated responsibilities and capabilities.

¹⁰⁷ <https://www.stockholmresilience.org/research/research-news/2016-06-14-the-sdgs-wedding-cake.html>.

¹⁰⁸ See the website of the United Nations (<https://sustainabledevelopment.un.org/sdgsummit>).

¹⁰⁹ Sachs, J. et al., (2022), “Sustainable Development Report 2022,” Cambridge University Press. <https://s3.amazonaws.com/sustainabledevelopment.report/2022/2022-sustainable-development-report.pdf>.

¹¹⁰ Mazzucato, M., (2021), *Mission Economy A Moonshot Guide to Changing Capitalism*, (Seki, M. and E. Suzuki, trans. (2021), *MISSHON EKONOMII*, NewsPicks).

¹¹¹ See the website of the UNFCCC (https://unfccc.int/kyoto_protocol#:~:text=In%20short%2C%20the%20Kyoto%20Protocol,accordance%20with%20agreed%20individual%20targets).

At COP21, held in Paris (France) in 2015, the Paris Agreement was adopted (put into effect in November 2016).¹¹² The Paris Agreement, which replaced the Kyoto Protocol as a framework for GHG emissions beyond 2020, called for all signatory countries, whether they be developed or developing countries, to keep the rise in the average global temperature well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further, to 1.5 degrees Celsius or lower. To that end, it also set the long-term goal of realizing the peaking of global GHG emissions as early as possible and balancing GHG emissions and sinks (e.g., forest sinks) in the second half of this century. All signatory countries have been obligated to submit and update every five years GHG emission reduction plans as “Nationally Determined Contributions.”

At COP27, held in Sharm el-Sheikh (Egypt) in 2022, the Sharm el-Sheikh Implementation Plan and the Sharm el-Sheikh mitigation ambition and implementation work program (a work program to enhance mitigation ambition and implementation in the period through 2030), which called for strengthening initiatives in various fields, including mitigation, adaptation, and loss and damage, were adopted.¹¹³ At the conference, in response to developing countries’ strong request, funding measures related to loss and damage were discussed as an official agenda item. In the discussion, there was a large gap between the opinions of developed and developing countries, so the discussion was brought up to the ministerial level. As a result, it was decided to establish a Loss and Damage Fund (provisional name) as a measure to respond to loss and damage.¹¹⁴

In recent years, there have been growing calls for “climate justice.” Climate justice is a term mentioned in the preamble of the Paris Agreement,¹¹⁵ and the Biden administration of the United States has placed a similar concept, “environmental justice,” at the core of its climate change policy.¹¹⁶ Against the backdrop of this situation, moves to contain the impacts of climate change through the power of law are spreading. According to a report published by the UNEP¹¹⁷ in 2021, the number of climate change litigation cases filed against governments and companies almost doubled, from 884 cases in 24 countries in 2017, to more than 1,550 cases in 38 countries in 2020. Moreover, the concept of “climate security,” which holds that climate change is not only an environmental issue but also a security issue, is spreading, mainly in Europe and the United States.

Under those circumstances, there is a huge gap between the goals under the Paris Agreement, which called for joint efforts by all signatory countries, and the reality. Therefore, alarms have been raised about the failure to achieve international targets related to climate change.

¹¹² See the website of the UNFCCC (<https://unfccc.int/process-and-meetings/the-paris-agreement>).

¹¹³ See the website of the UNFCCC (<https://unfccc.int/cop27>).

¹¹⁴ See the website of the Ministry of Foreign Affairs (https://www.mofa.go.jp/mofaj/ic/ch/page1_001420.html).

¹¹⁵ See the website of the Ministry of the Environment (https://www.env.go.jp/earth/ondanka/cop/attach/paris_agr20160422.pdf).

¹¹⁶ See the website of the White House (<https://www.whitehouse.gov/environmentaljustice/>). “We’ve put environmental justice at the center of what we do, addressing the disproportionate health, environmental, and economic impacts that have been borne primarily by communities of color — places too often left behind.”

¹¹⁷ UNEP, (2021), “Global Climate Litigation Report: 2020 Status Review,” <https://www.unep.org/resources/report/global-climate-litigation-report-2020-status-review>.

For example, in the Global Assessment Report on Disaster Risk Reduction,¹¹⁸ published in April 2022, the United Nations Office for Disaster Risk Reduction (UNDRR) projected that if the current trends of human activity continue, the global number of disasters per year, which was 400 in 2015, will increase to 560, or 1.5 per day, by 2030. It went on to warn that human activity and behavior are further increasing disasters worldwide, putting at risk the lives of millions of people and all social and economic interests. It also pointed out that while 350 to 500 medium- and large-scale disasters occurred in the past 20 years, the long-term impacts of those disasters on people have been underestimated. In the Emissions Gap Report,¹¹⁹ published in October 2022, the UNEP argued that current emission reduction measures do not represent a credible path towards achieving the Paris Agreement goal of keeping the average global temperature rise below 1.5 degrees Celsius. It stated that in order to achieve that goal, it is necessary to reduce emissions 45% by 2030. The WMO announced in October 2022 that the global average concentrations of all three major greenhouse gases (carbon dioxide, methane, and nitrous oxide) in the atmosphere reached new highs in 2021.¹²⁰ The Initiative on GHG accounting of war,¹²¹ announced in November 2022, noted that GHG emissions derived from Russia's aggression against Ukraine has continued to increase, generating negative effects on climate change.

Some people are arguing that responding to climate change requires a fundamental change in approach in the first place. Paul J. Crutzen, who won the Nobel Prize in Chemistry in 2000, and others proposed the idea that a new geological period that they call the Anthropocene,¹²² as opposed to the Holocene,¹²³ has arrived in the sense that people have begun to generate a huge impact on global ecosystems and climate.¹²⁴ Saito (2021)¹²⁵ pointed out that in the Anthropocene period, in which human economic activity has extended across the whole of the Earth, climate change cannot be arrested unless the way the economy works is changed.

The Club of Rome (2022)¹²⁶ asks whether we value mankind's collective future as a civilization, as a group of eight billion individuals and as a social network that is intricately interconnected, although most people value their own future as individuals, and argues that mankind's long-term possibilities depend on whether or not its civilization can achieve a dramatic change of course over the next several

¹¹⁸ UNDRR, (2022), "Global Assessment Report on Disaster Risk Reduction," <https://www.undrr.org/media/79595/download>.

¹¹⁹ UNEP, (2022), "Emissions Gap Report," <https://www.unep.org/resources/emissions-gap-report-2022>.

¹²⁰ See the website of the WMO (<https://public.wmo.int/en/media/press-release/more-bad-news-planet-greenhouse-gas-levels-hit-new-highs>).

¹²¹ Initiative on GHG accounting of war, (2022), "Climate Damage Caused by Russia's War in Ukraine," <https://climatefocus.com/wp-content/uploads/2022/11/ClimateDamageinUkraine.pdf>.

¹²² The Holocene is the most recent geological period. It started around 17,000 years ago, when the last ice age ended. During this period, the climate has remained extremely stable, enabling people to engage in agriculture and resulting in increases in excess production.

¹²³ As of March 2023, the Anthropocene was not a period officially recognized by the International Union of Geological Sciences.

¹²⁴ See the website of the International Geosphere-Biosphere Programme (<http://www.igbp.net/news/opinion/opinion/haveweenteredtheanthropocene.5.d8b4c3c12bf3be638a8000578.html>).

¹²⁵ Saito, K. (2021), *HITOSHINSEI NO "SHIHON RON,"* Shueisha Shinsho.

¹²⁶ The Club of Rome, (2022), *Earth for All*, (The Japanese Association of the Club of Rome, supervised (2022), *Earth for All BANNIN NO TAMENO CHIKYUU "SEICHOU NO GENKAI KARA 50NEN ROOMA KURABU SHIN REPOOTO,"* Maruzen Publishing).

decades. The Club of Rome notes that if we make the right choices, we will be able to contribute to resolving the most difficult problems for mankind.

Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming,¹²⁷ compiled by an international group of 190 researchers, experts and chemists, points out that if we are on the wrong track, even if we go slowly, that does not change the fact that we are on the wrong track and states that if we view the changes occurring in the atmosphere as a message calling for us to completely change our behavior and reconsider our approach, we will be able to live in a different world.

As there are no artificial borders that inhibit flows of gases in the atmosphere, the key to addressing climate change is that all of us, at all levels, find common values across and work together across differences in argument.

(2) Major countries' initiatives

For many countries, climate change has become a top policy priority. As of April 2021, 125 countries and one region were upholding the goal of realizing carbon neutrality by 2050. Carbon neutrality refers to balancing GHG emissions and sinks and reducing GHG emissions to zero on a net basis, which means zero when the total amount of carbon sinks due to measures such as afforestation and forest management is subtracted from the total amount of emissions of carbon dioxide and other human-derived GHGs. At the G7 Hiroshima Summit, the G7 Clean Energy Economy Action Plan (May 2023) was issued. In order to achieve net zero emissions by 2050, the action plan calls for actions to accelerate the global transition to clean energy and deeper cooperation and reaffirmed the G7's unwavering commitment to the Paris Agreement.

Under the leadership of European Commission (EC) President Ursula von der Leyen, the EU, which is proactively responding to climate change, announced in December 2019 the European Green Deal¹²⁸ (a growth strategy that characterizes climate change as a priority policy area), which is intended to transform the EU into a fair and prosperous society. Under this strategy, the EU aims to reduce GHG emissions to zero on a net basis by 2050 and decouple economic growth from resource use. Furthermore, the strategy is intended to maintain and strengthen the EU's natural resources and protect citizens' health and wellbeing against environmental risks and impacts. To achieve the net zero emissions goal, it also presented an ambitious plan to reduce GHG emissions more than 55% compared with 1990 by 2030.

In March 2020, the EU announced a new industrial strategy¹²⁹ that aims for a transition to a green and digital economy and launched the new circular economy action plan as part of the strategy.¹³⁰ The EC has characterized this plan as one of the main building blocks of the European Green Deal and as a

¹²⁷ Hawken, P., (2017), *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*, (Emori, S. Supervised, trans. (2021), *DOROO DAUN CHIKYUU ONDANKA WO GYAKUTEN SASERU HYAKU NO HOUHOU*, Yama-Kei Publishers).

¹²⁸ See the website of the European Commission (https://commission.europa.eu/publications/communication-european-green-deal_en).

¹²⁹ See the website of the European Commission (https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en).

¹³⁰ See the website of the European Commission (https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf).

prerequisite to achieve the EU's 2050 climate neutrality target.¹³¹ In May 2021, the EU also published an update to the 2020 new Industrial Strategy.¹³²

In July 2021, the European Climate Law¹³³ was enacted, giving EU-wide legal binding power to the goal of reducing GHG emissions more than 55% compared with 1990 by 2030. In addition, in the same month, the EU announced the Fit for 55 package of legislation,¹³⁴ which aims to coordinate the EU's policies concerning climate, energy, land use, transportation, and tax systems with a view to achieving the goal and proposed 13 bills, including bills for revisions of existing laws and for new laws, to prohibit sales of internal combustion engine vehicles by 2035 and implement carbon border adjustment measures. In December 2021, the second set of legislation to complement Fit for 55 was announced.

Regarding a draft regulation concerning the establishment of the Carbon Border Adjustment Mechanism (CBAM), which the EC announced in July 2021, a provisional political agreement was reached in December 2022, albeit with some conditions attached.¹³⁵ Under the CBAM, business operators that import carbon-intensive products covered by the regulation (including precursors, according to the draft) from outside the EU region will be obligated to make payment equivalent to the carbon price that would be imposed if they were manufactured in the region. While some parts of the regulation remain unfixed, the application of the CBAM is scheduled to start in October 2023 with a transition period during which only the reporting obligation will be enforced.¹³⁶

The EC announced the Green Deal Industrial Plan at the World Economic Forum Annual Meeting (Davos meeting) in January 2023 and the details of the plan in February of the same year.¹³⁷ The Green Deal Industrial Plan aims to enhance the competitiveness of Europe's net-zero industry and support the fast transition to climate neutrality (Figure I-2-3-5).

¹³¹ See the website of the European Commission (https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en#:~:text=It%20is%20one%20of%20the,create%20sustainable%20growth%20and%20jobs).

¹³² See the website of the European Commission (https://commission.europa.eu/system/files/2021-05/communication-industrial-strategy-update-2020_en.pdf).

¹³³ See the website of the European Commission (https://climate.ec.europa.eu/eu-action/european-green-deal/european-climate-law_en).

¹³⁴ See the website of the European Commission (https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3541).

¹³⁵ See the websites of the European Commission and the Council of the European Union (<https://www.consilium.europa.eu/en/press/press-releases/2022/12/13/eu-climate-action-provisional-agreement-reached-on-carbon-border-adjustment-mechanism-cbam/>).

¹³⁶ See the website of the European Commission (https://taxation-customs.ec.europa.eu/green-taxation-0/carbon-border-adjustment-mechanism_en).

¹³⁷ See the website of the European Commission (https://ec.europa.eu/commission/presscorner/detail/en/ip_23_510).

Figure I-2-3-5. Major EU climate change policies



Source: Various press releases.

In February 2021, following the inauguration of the Biden administration, the United States officially returned to the Paris Agreement, from which it had withdrawn under the Trump administration.¹³⁸ In August, 2022, the Inflation Reduction Act, which mainly supports measures to respond to climate change and which represents an unprecedented scale of support for the response to climate change, was officially enacted.¹³⁹ Under this law, 369.0 billion dollars will be allocated to measures to respond to climate change.¹⁴⁰

Japan has indicated the future course to be taken by formulating the Green Growth Strategy, the Strategic Energy Plan, the Plan for Global Warming Countermeasures, and a long-term strategy that corresponds to the Long-Term Strategy under the Paris Agreement in order to honor its ambitious international commitment to achieving carbon neutrality by 2050, reducing GHG emissions 46% (compared with FY2013) by FY2030, and striving towards a higher goal of reducing GHG emissions 50%.

In January 2022, in order to contribute to the realization of green transformation (GX) in Asia, which accounts for more than half of the global emissions, Prime Minister Kishida announced the Asia Zero Emission Community (AZEC) concept, which aims for the sharing of the ideal of promoting decarbonization¹⁴¹ and cooperation in promoting energy transition¹⁴² among Asian countries.¹⁴³ GX

¹³⁸ See the website of the UNFCCC (https://unfccc.int/news/un-welcomes-us-announcement-to-rejoin-paris-agreement#:~:text=A%20new%20instrument%20of%20acceptance,States%20on%2019%20February%202021.)).

¹³⁹ See the website of the White House (<https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/08/16/remarks-by-president-biden-at-signing-of-h-r-5376-the-inflation-reduction-act-of-2022/>).

¹⁴⁰ See the website of the U.S. Department of Treasury (<https://home.treasury.gov/news/press-releases/jy1128>).

¹⁴¹ An initiative to shift away from fossil fuels.

¹⁴² A transition from the currently used fossil fuel energy sources to other energy sources that generate smaller carbon emissions.

¹⁴³ See the website of the Ministry of Economy, Trade and Industry (<https://www.meti.go.jp/press/2022/12/20221215007/20221215007.html>).

refers to the transition of the fossil fuel-centered industrial and social structures that have existed since the industrial revolution to clean energy-centered structures. In March 2023, a meeting of the partner countries' ministers in charge of energy transition was held in Tokyo, and the framework of AZEC was launched.¹⁴⁴

In December 2022, the GX Implementation Council, chaired by Prime Minister Kishida, worked out “The Basic Policy for the Realization of GX - A roadmap for the next 10 years,”¹⁴⁵ on which a Cabinet decision was made in February 2023.¹⁴⁶ Under the basic policy, the total amount of GX-related investments necessary for reducing GHG emissions by 46% in FY2030 and achieving carbon neutrality by 2050 is estimated at more than 150 trillion yen over the next 10 years, including investments by the public and private sectors. The Basic plan pointed out the need to promptly implement a growth-oriented carbon pricing concept in order to realize a huge amount of investment through cooperation between the public and private sectors. Specifically, under the growth-oriented carbon-pricing concept, the following three measures will be implemented: providing aggressive financial assistance worth around 20 trillion yen for upfront investments using the GX Economy Transition Bond. (e.g., investment promotion measures integrating regulation and support), creating an incentive for GX-related upfront investments through carbon pricing (an emission trade system and universal fees imposed on carbon emissions), and using a new financing approach. Based on the basic policy, in February 2023, a Cabinet decision was made on the bill for promoting the transition to a decarbonized growth economic structure and the bill for Partial Revision of the Electricity Business Act and Other Acts for Establishing Electricity Supply Systems for Realizing a Decarbonized Society, which were submitted to the 211th ordinary session of the Diet.¹⁴⁷

¹⁴⁴ See the website of the Ministry of Economy, Trade and Industry (<https://www.meti.go.jp/press/2022/03/20230306005/20230306005.html>).

¹⁴⁵ Ministry of Economy, Trade and Industry (2023) “The Basic Policy for the Realization of GX - A roadmap for the next 10 years.” https://www.meti.go.jp/press/2022/02/20230210002/20230210002_1.pdf.

¹⁴⁶ See the website of the Ministry of Economy, Trade and Industry (<https://www.meti.go.jp/press/2022/02/20230210002/20230210002.html>).

¹⁴⁷ See the website of the Ministry of Economy, Trade and Industry (<https://www.meti.go.jp/press/2022/02/20230210004/20230210004.html>, <https://www.meti.go.jp/press/2022/02/20230228005/20230228005.html>).

2. Response to human rights issues

As a result of the advance of globalization, the adverse impact of business activities on human rights has expanded, and in recent years, there has been increasingly brisk international discussion on corporate responsibility for human rights abuses by business activities. There have been cases in which global business enterprises were criticized by name by non-governmental organizations (NGOs). When business enterprises' efforts to respect human rights in their supply chains are considered to be insufficient, they could face many risks, including boycotts against their products and services due to human rights abuses, downgrading in an investment market, exclusion from candidates for investment, withdrawal of investments, and suspension of business transactions with existing customers. For business enterprises, it is necessary to implement and strengthen their efforts to respect human rights, including companies which have business relationships in their supply chains, from the viewpoints of eliminating those potential business management risks, increasing value added, and building resilient and inclusive supply chains.

(1) International initiatives to require business enterprises to respect human rights

In June 2011, the Guiding Principles on Business and Human Rights (UN Guiding Principles) were unanimously endorsed by the United Nations Human Rights Council. The UN Guiding Principles, which are founded on the three pillars—the state's duty to protect human rights, the corporate responsibility to respect human rights, and access to remedy—require states and business enterprises to supplement each other and fulfill their respective roles. The UN Guiding Principles prescribe that in order to meet their responsibility to respect human rights, business enterprises are required to implement the following measures: (1) establish a human rights policy; (2) conduct human rights due diligence¹⁸²; (3) provide remedy (including the establishment of a grievance mechanism). States have been called upon to develop National Action Plans (NAPs) as a means to implement the UN Guiding Principles. By the end of 2022, more than 20 countries, including Japan, formulated NAPs.

Furthermore, the OECD Guidelines for Multinational Enterprises and the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy were updated in 2011 and 2017, respectively, and states' obligation to protect human rights and corporate responsibility to respect human rights were included.

As shown above, it has become an international principle that business enterprises are responsible for respecting human rights, in addition to the state's obligation to protect human rights. They are therefore required to conduct business in line with those international standards.

Currently, the introduction of domestic laws to obligate business enterprises to engage in efforts to respect human rights is proceeding, mainly in Europe, while in the United States and some other countries, laws and regulations concerning human rights abuses, including prohibitions on imports of

¹⁸² Human rights due diligence refers to a series of acts undertaken by business enterprises to (1) identify, (2) prevent and mitigate adverse impacts on human rights, (3) track the effectiveness of their responses, and (4) account for and disclose information on how they address the human rights impacts.

goods produced with forced labor, have been strengthened.¹⁸³ In Germany, the Act on Corporate Due Diligence Obligations in Supply Chains (Supply Chain Act) was enacted in June 2021 and was enforced in January 2023. This law obligates business enterprises larger than the prescribed level to conduct human rights due diligence and compile and publish reports on the results of due diligence.

In Europe, the EU published guidance on due diligence to help EU companies to address the risk of forced labor in their operations and supply chains in July 2021.¹⁸⁴ In February 2022, the European Commission published the “Proposal for a Directive on Corporate Sustainability Due Diligence,” which obligates companies larger than the prescribed size and economic power to conduct due diligence on human rights and environment.¹⁸⁵ In addition, in September 2022, the European Commission published a proposal to prohibit economic operators from placing and making available on the Union market or exporting from the Union market products made with forced labour.¹⁸⁶

The Biden administration of the United States strongly emphasizes human rights in its foreign policy and is cooperating with Europe in implementing sanctions and other measures due to involvement in human rights abuses in the Xinjiang Uyghur Autonomous Region. In July 2021, the Biden administration updated the Xinjiang Supply Chain Business Advisory (July 2020), which called for industry’s attention to whether or not entities involved in human rights abuses as well as forced labor in the Xinjiang Uyghur Autonomous Region are included in their supply chains.¹⁸⁷ In December 2021, the Uyghur Forced Labor Prevention Act, which in principle prohibits imports of goods mined, produced, or manufactured in whole or in part in the Xinjiang Uyghur Autonomous Region or by entities listed by the U.S. government under the presumption that all those products have been manufactured are the result of forced labor, was enacted,¹⁸⁸ and it was enforced in June 2022. Following the suspension of goods imports based on this law, the importer needs to prove that the imported goods and their raw materials have not been mined, manufactured, or produced in the Xinjiang Uyghur Autonomous Region. In the case of goods that are subject to the law (including products and raw materials produced in the Xinjiang Uyghur Autonomous Region), the importer needs to demonstrate that the imported goods do not depend, even in part, on forced labor by submitting “clear and convincing evidence.”

Business enterprises need to make efforts to respect human rights in business activities considering the abovementioned initiatives underway in the international community. They should respect human rights and publish information while looking at the situations not only within their own organizations but also throughout their entire supply chains and value chains.

¹⁸³ At the end of the Guidelines on Respecting Human Rights in Responsible Supply Chains, an overview of foreign legal systems is provided in Japanese.
<https://www.meti.go.jp/press/2022/09/20220913003/20220913003-a.pdf>.

¹⁸⁴ See the website of the European Commission
(https://ec.europa.eu/commission/presscorner/detail/en/ip_21_3664).

¹⁸⁵ See the website of the European Commission
(https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1145).

¹⁸⁶ See the website of the European Commission
(https://ec.europa.eu/commission/presscorner/detail/en/ip_22_5415).

¹⁸⁷ See the website of the U.S. Department of State (<https://www.state.gov/xinjiang-supply-chain-business-advisory/>).

¹⁸⁸ See the website of the U.S. Congress (<https://www.congress.gov/bill/117th-congress/house-bill/6256/text?r=1&s=1>).

(2) Japan's efforts

Based on the UN Guiding Principles, the government of Japan formulated the National Action Plan on Business and Human Rights (2020-2025) in October 2020 and expressed expectations for Japanese business enterprises, regardless of their size and sector of industry, to introduce the human rights due diligence process.

In September-October 2021, the Ministry of Economy, Trade and Industry, together with the Ministry of Foreign Affairs, conducted the first governmental survey on Japanese companies' efforts related to business and human rights as part of the follow-up on the Action Plan (the Questionnaire Survey on the Status of Efforts on Human Rights in the Supply Chains of Japanese Companies¹⁸⁹). According to the survey results, around 70% of the respondent companies had formulated a human rights policy, while only around 50% had conducted human rights due diligence. As their challenges when conducting business management that respects human rights, many companies cited "the absence of an established method for evaluating the status of efforts to respect human rights in supply chains," "the difficulty of identifying the scope of due diligence due to the complexity of the supply chain structure," and "inability to secure sufficient manpower and budget funds." On the other hand, as their obtained results and benefits by conducting business management that respect human rights, many companies cited "reduction of human rights risk within the company," "contributions to the SDGs," "reduction of human rights risk in supply chains," "improvement of the evaluation rating assigned by the ESG evaluation organizations." As for requests for the government, the largest percentage of companies expressed expectations for the development of guidelines. Half of the companies that had not made progress in efforts to respect human rights replied that they did not know specifically how to implement concrete measures. This indicates that it is necessary to help companies deepen their understanding and further promote their efforts amid the expansion and increasing complexity of supply chains.

In light of that situation, in March 2022, in order to enable companies to make active efforts to respect human rights in line with international standards, the Ministry of Economy, Trade and Industry established the Study Group on Guidelines for Respecting Human Rights in Supply Chains and held further discussion. In September 2022, the Inter-Ministerial Committee on Policy Promotion for the Implementation of Japan's National Action Plan on Business and Human Rights adopted and published the Guidelines on Respecting Human Rights in Responsible Supply Chains.

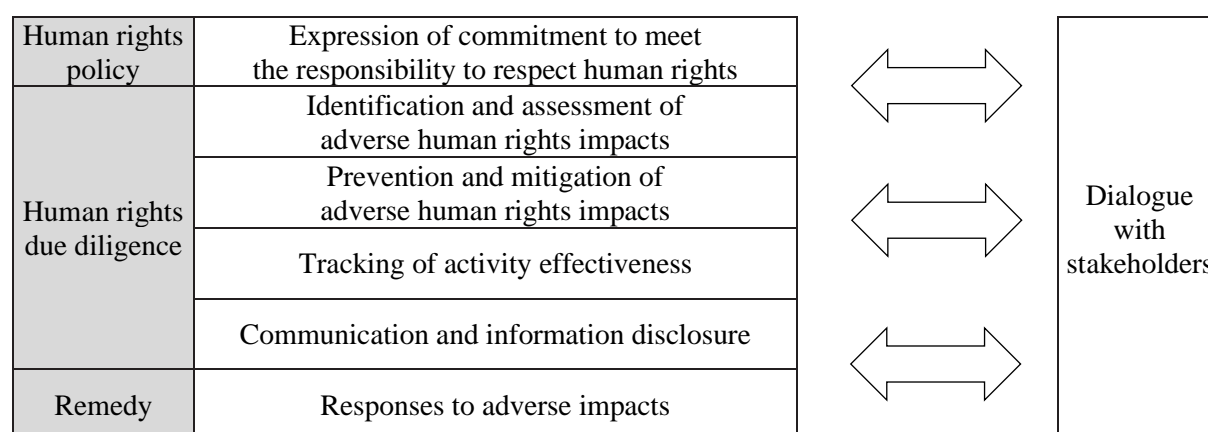
Although the Guidelines are not legally binding, based on the UN Guiding Principle, the OECD Guidelines for Multinational Enterprises, the ILO MNE Declaration, and other international standards, the Guidelines aim to help deepen business enterprises' understanding and promote their efforts by explaining activities that business enterprises are requested to undertake to respect human rights, in a concrete and easy-to-understand manner tailored to the actual situation of business enterprises engaging in business activity in Japan. The Guidelines are applicable to all business enterprises engaging in business activity in Japan, regardless of their size, sector, and other factors. The Guidelines require

¹⁸⁹ See the website of the Ministry of Economy, Trade and Industry (https://www.meti.go.jp/english/press/2021/1130_002.html).

business enterprises to respect internationally recognized human rights¹⁹⁰ and, in order to meet corporate responsibility to respect human rights, business enterprises are required to (1) formulate and publish their human rights policy approved by the management, including top executives, (2) conduct human rights due diligence, and (3) provide a remedy when they cause or contribute to adverse human rights impact.

Human rights due diligence as referred to in the Guidelines, by its nature, does not guarantee the result that there are no human rights abuses but it is a continuous process to prevent and mitigate adverse human rights impacts while holding dialogue with stakeholders (Figure I-2-3-6).

Figure I-2-3-6. Overview of Respect for Human Rights in Responsible Supply Chains



Source: *Guidelines on Respecting Human Rights in Responsible Supply Chains* (METI).

In order to promote business enterprises' efforts to respect human rights, the government of Japan will provide information to businesses and implement awareness-raising and enlightening activities. It will also strive to realize, through international cooperation, an environment in which business enterprises can actively engage in respecting human rights on a level playing field, and where the predictability of measures taken by countries is enhanced.

¹⁹⁰ Include, at the least, the human rights indicated in the International Bill of Human Rights and the principles concerning fundamental rights as stated in the ILO Declaration on Fundamental Principles and Rights at Work.