

# TRENDS

## An Era that Demands the Ability to Respond to Global Environmental Problems

### A Paradigm Shift toward Sustainability

International efforts addressing the global environment have entered a new stage. The international community has long recognized that addressing environmental problems is one of society's most important tasks. In recent years, however, the role of business has been newly reconsidered as indispensable for finding solutions. Companies greatly influence the global environment, and so they are expected to both reduce their environmental impact and actively contribute to solving the problems at hand. Now, companies must not only respond to risks but also tackle social issues such as environmental problems as new business opportunities. When faced with such a paradigm shift, what are the most important points to keep in mind?

#### Entering a New Stage in the Response to Global Environmental Problems

In September 2015, the United Nations (UN) adopted the 2030 Agenda for Sustainable Development, a declaration that from 2015 to 2030 all UN member states would promote a peaceful society by striving to achieve various goals for sustainable development, including eradicating poverty and hunger and addressing problems relating to energy and climate change.

The Sustainable Development Goals (SDGs) form the core of this agenda. Many of these 17 objectives are linked to initiatives leading to solutions to environmental problems (see [Figure 1](#)).

The goals are highly varied. For example, in addition to Goal 13, which addresses responses to climate change, Goal 6 pertains to clean water; Goal 7 to energy; Goal 9 to infrastructure, industry, and innovation; Goal 11 to cities; Goal 12 to production and consumption; Goal 14 to oceans and

marine resources; and Goal 15 to terrestrial ecosystems and other aspects of life on land. Behind these goals are worsening environmental problems, such as frequent occurrences of extreme weather around the world with the progression of global warming, resource depletion, and biodiversity loss. These goals show that a sustainable society cannot be built without solving environmental problems.

Prior to the SDGs, the Millennium Development Goals (MDGs) were strongly oriented toward UN support for developing and emerging countries, with the primary goals of alleviating poverty, improving health, and protecting the environment. In contrast, the SDGs can be regarded as universal goals for all countries, including developed countries. A further characteristic of the SDGs is that goal attainment emphasizes the roles of not only governments, non-governmental organizations (NGOs), and non-profit organizations (NPOs), but also “the importance of the role played by companies.”

Figure 1 | SDGs

The SDGs are a list of common goals for the international community through 2030 and include objectives that can be achieved by promoting environmental initiatives.



SDG: Sustainable Development Goal  
Source: United Nations Information Centre

Regarding adoption of the SDGs, then Secretary-General of the United Nations Ban Ki-moon said, “Business is a vital partner in achieving the Sustainable Development Goals. Companies can contribute through their core activities, and we ask companies everywhere to assess their impact, set ambitious goals and communicate transparently about the results.” Environmental problems without a doubt pose a “risk” to companies, but recognition that solutions to the social problem of environmental issues can become “business opportunities” is rapidly spreading. Already, many global companies have begun their efforts. Along with adopting the SDGs, some companies are actively committed to using renewable energy, as well as contributing to areas such as health care, food security, and water management.

What lies behind this trend is the idea that creating an attitude focused on social issues—one that strengthens partnerships by embracing these initiatives—is a new competitive axis. In other words, an era has begun in which the ability to respond to social issues has become a driving

force of corporate innovation and influences its competitiveness.

Based on the above international trends, in May 2016 the Japanese government established the “Sustainable Development Goals Promotion Headquarters,” with Prime Minister Shinzo Abe as its Chair and all Ministers of the Cabinet as members. The SDGs Implementation Guiding Principles decided by the Promotion Headquarters on October 18, 2016, state that “Japan aims to become a role model for the world in the implementation of measures to achieve the SDGs and will make efforts both in Japan and in cooperation with other countries to achieve sustainable societies worldwide where no one will be left behind.”

Focusing on solutions to environmental problems, a panel discussion entitled “A Paradigm Shift in Corporate Management in Response to Dramatically Changing Environmental Problems” was held in October 2016 at the Hitachi Social Innovation Forum 2016 TOKYO. One panelist, Professor Taketoshi Taniguchi of Todai Policy Alternatives Research Institute, pointed out that a



Professor Taketoshi Taniguchi  
Todai Policy Alternatives Research Institute

paradigm shift in corporate responses to environmental problems is occurring, and described how “various attempts have been made by international organizations, governments, the business world, NGOs, NPOs, ventures, and others to produce and connect with wisdom, and we are just beginning to think about how to scale this up in the future.”

Professor Taniguchi presented three paradigm shifts related to environmental problems.

The first is “social change through comprehensive and sustainable economic growth and innovation,” as seen in the SDG Compass. Second, the development of “bottom-up initiatives by the business world” has begun. Third, “investment behavior that emphasizes the environment” has become active, and this leads to overall social value. Professor Taniguchi’s view is that environmental problem-solving and corporate economic activity have begun to merge, and that there are expectations that further reforms will come in the future.

---

### Focus on Non-financial Value

---

Among these paradigm shifts, the recent increase in attention to environmental, social, and governance (ESG) investment can be considered a permeation of “investment behavior that emphasizes the environment.” An ESG investment considers the three viewpoints of ESG as

non-financial information in addition to ordinary financial information.

After the collapse of Lehman Brothers, ESG was born out of a reevaluation of short-term investment based on quarterly performance. ESG first proliferated mainly in Europe and the USA, but is now a global trend common among institutional investors. In Japan as well, the Government Pension Investment Fund (GPIF) announced its signing of the UN’s Principles for Responsible Investment (PRIs) in September 2015, calling immediate attention to ESG investment.

The PRIs are an initiative that was formulated by the United Nations Environment Programme and the UN Global Compact in 2006 and proposed for each country’s financial industry. The PRIs state that ESG viewpoints should be considered when setting investment decision-making processes and stock ownership policies. Many institutional investors, money management companies, consulting companies, and others from various countries around the world have adopted the PRIs. The GPIF—one of the world’s largest institutional investors, with an operating budget of about 130 trillion yen—agreed to the PRI framework, indicating that ESG investment was judged to be in accordance with its investment principles. This will have a big impact.

In addition, the GPIF states that “proper consideration of ESG in investee companies means to ‘increase corporate value and sustainable growth’ as the basis for ‘increasing return on investment over the medium to long term for (pension) insurance recipients.’” (GPIF press release, September 28, 2015, in Japanese).

Such emphasis on ESG by institutional investors will accelerate the transformation of companies receiving investments. Indeed, many global companies are beginning to describe financial information and ESG thinking as “Integrated Reporting.”

## Response to Global Warming

Among global environmental problems, movements responding to “climate change” (global warming) have accelerated in recent years. The Paris Agreement was adopted at the Twenty-first Session of the Conference of the Parties, held in December 2015, and established international rules for countermeasures against global warming from 2020 onward. It came into effect on November 4, 2016, ahead of schedule. The Paris Agreement stipulates that signatory countries will limit the temperature rise due to global warming to less than 2°C above pre-industrial levels—while striving for an even further limitation of only 1.5°C—and will aim at balancing long-term emission and removal levels. This is an ambitious goal, but it is also strongly expected to be effective because it was ratified by major emitting countries including China and the USA, respectively the largest and second largest greenhouse gas (GHG) emitters (see [Figure 2](#)).

Behind this is a heightened sense of crisis about climate change. From 2013 to 2014, the Intergovernmental Panel on Climate Change

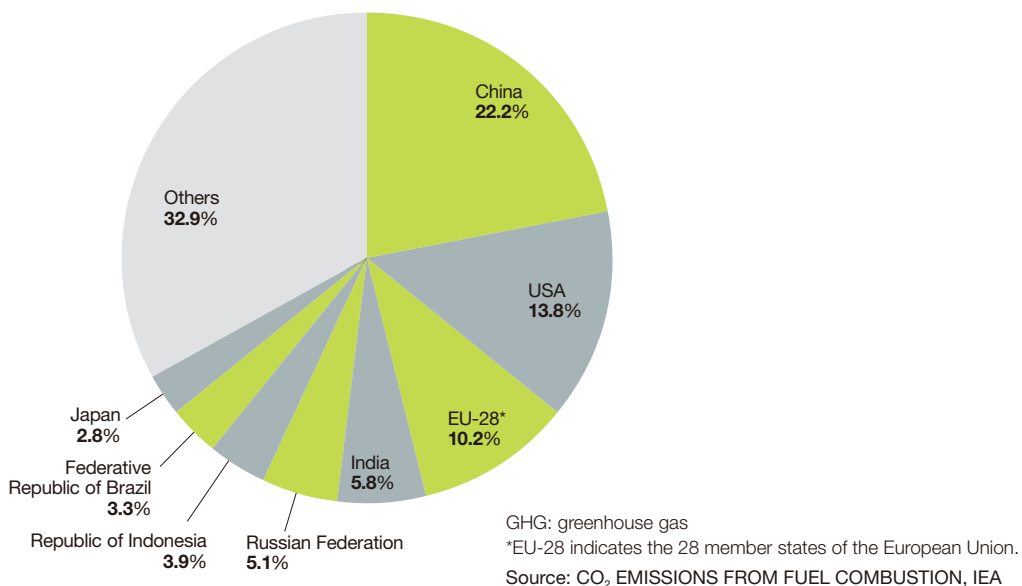
(IPCC), in which thousands of experts participate, published its Fifth Assessment Report. It concludes, “It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcings together.” This is a stronger wording than the “very likely” used in the Fourth Assessment Report.

The Fifth Assessment Report notes extremely serious problems such as sea level rise, infrastructure outages, health hazards, and food and water shortages as risks accompanying continual temperature rise, and describes the importance of reducing such risks by suppressing the serious effects of climate change. The report also states that limiting temperature rise to less than 2°C above pre-industrial levels will require reducing global GHG emissions by 40–70% of 2010 levels by 2050, and emission levels must be reduced to zero or less by 2100 (see [Figure 3](#)).

The Paris Agreement is based on the latest knowledge of the IPCC. Voluntary GHG reduction targets submitted by each country state that China will lower the carbon intensity of its gross

**Figure 2 | GHG Emissions Share by Country (as of 2010)**

China and the USA account for more than 35% of total GHG emissions worldwide.



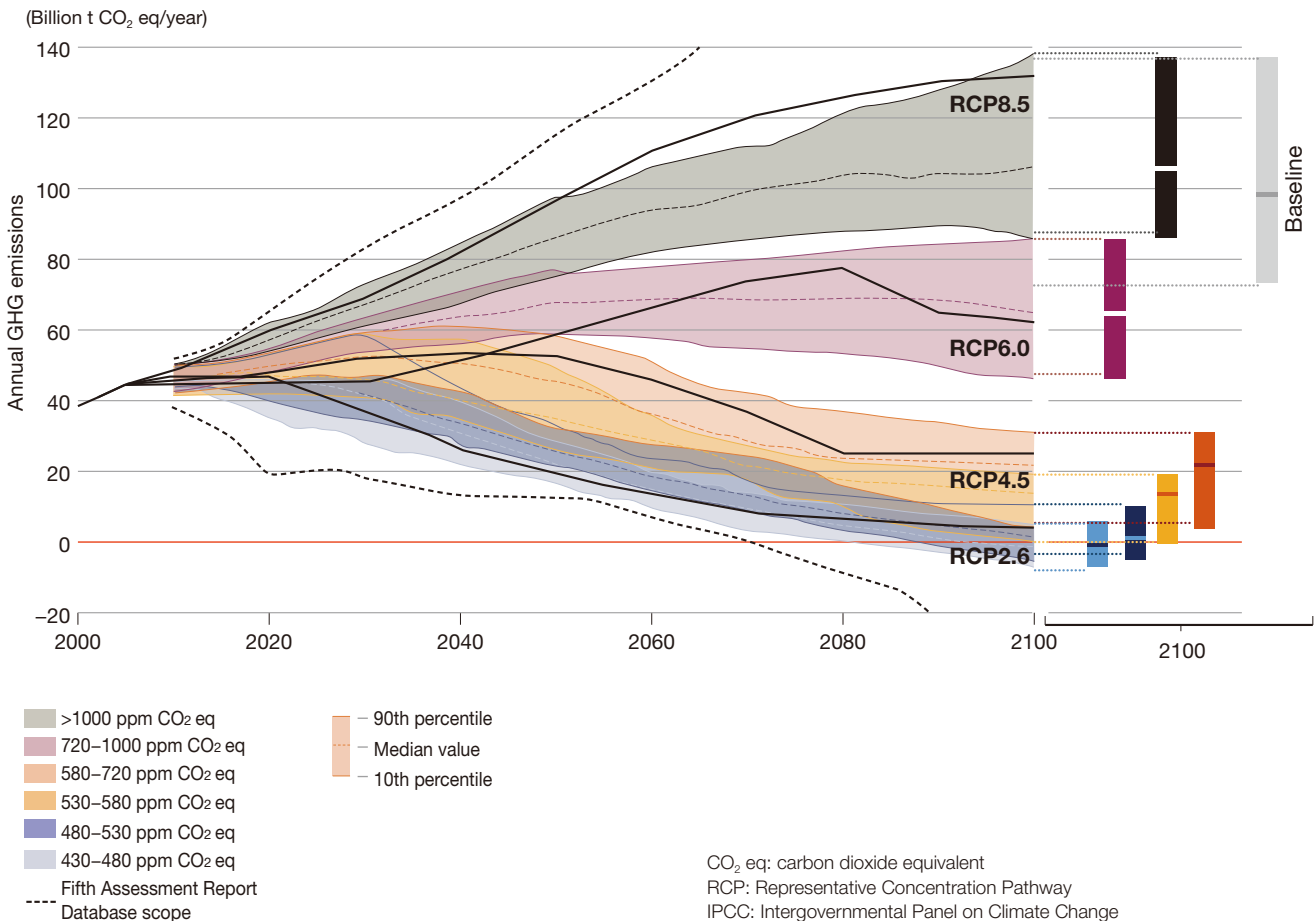
domestic product by 60–65% below 2005 levels by 2030, the USA to 26–28% below 2005 levels by 2025, the European Union to at least 40% below 1990 levels by 2030, and Japan to 26% of FY2013 levels by FY2030. Efforts for further reductions have also begun. The European Commission has announced its “Roadmap 2050,” which sets a reduction target of 80–95% below 1990 levels by 2050. In addition, the Japanese government has set long-term goals aimed at reducing GHG emissions by 80% by 2050 in its “Plan for Global Warming Countermeasures,” enacted by the Cabinet in May 2016.

### The Ideal Corporate Pursuit of Environmental Management

Preliminary figures for Japan’s annual GHG emissions in FY2015 released in December 2016 are 1,321 million t carbon dioxide (CO<sub>2</sub>) equivalent. This is a 3.0% decrease compared with the previous year’s total emissions, and a 5.2% decrease compared with total emissions in FY2005. Reasons given for the decrease in emissions include “energy-related decreases in CO<sub>2</sub> emissions due to reduced electricity consumption and decreases in electricity-derived CO<sub>2</sub> emissions

**Figure 3 | GHG emissions pathways from 2000 to 2100**

The Fifth Assessment Report gives RCP scenarios for anthropogenic GHG emissions. For comparison with the baseline scenario, which has no additional efforts to limit emissions, there is a scenario with very high GHG emissions due to differences in socioeconomic development and climate policies (RCP8.5), two intermediate scenarios (RCP6.0 and RCP4.5), and a strict mitigation scenario (RCP2.6). Limiting the future temperature rise to less than 2°C above pre-industrial levels corresponds to RCP2.6.



due to improvements in the carbon intensity of electricity emissions” and “the fact that CO<sub>2</sub> emissions originating from energy in the industry and transportation sectors have been reduced.” These decreases can be attributed to the contribution of constant corporate efforts such as innovative technology development and more efficient transportation.

The Japanese government is also focusing on the contribution of domestic companies toward achieving its long-term goals. The reason for this is that Japanese companies have already contributed to local CO<sub>2</sub> emissions reductions as their global business spreads, for example, by selling products overseas and transferring technology. In the future, if energy-saving products and solutions from Japanese companies are used over the long term, the resulting CO<sub>2</sub> emission reduction effects will add up.

In the aforementioned panel discussion, Keiji Hattori (Director of the Environmental Economy Office at the Ministry of Economy, Trade and Industry) described his hopes for the activities of Japanese companies and the corporate stance that will be required in the future as follows: “In addition to the steadfastness and strength needed to create innovation that anticipates the future, I think that we need the flexibility to change according to the situation. Also, when companies set long-term goals, I hope that rather than taking an approach that reduces business activities, they will set strategies that lead to hope that business will prosper.” As shown here, there are extremely high expectations for companies with regards to solving environmental problems. What is required of companies is an attitude that emphasizes social issues and efforts toward strengthening partnerships. There is no doubt that this is a source of innovation and will lead to competitiveness. Japanese companies in particular—especially manufacturers—have something of an advantage in overcoming pollution problems due to their technological



Keiji Hattori  
Director  
Environmental Economy  
Office  
Ministry of Economy,  
Trade and Industry



Akihiro Inatsugi  
General Manager  
CSR and Environmental  
Strategy Promotion  
Department  
Bridgestone Corporation

innovation and experience in energy conservation. In the panel discussion described above, Akihiro Inatsugi (General Manager, CSR and Environmental Strategy Promotion Department, Bridgestone Corporation) introduced the group’s Long-term Environmental Vision targeting 2050 and beyond from the company’s perspective. He stated that, as the world’s largest tire and rubber company, Bridgestone had set targets for being in harmony with nature, valuing natural resources, and reducing CO<sub>2</sub> emissions, and was promoting initiatives such as “technological innovation” and “business model innovation.” In September 2016, the Hitachi Group also set long-term environmental targets for 2050, and thus has taken on this challenge.

Aron Cramer, President and CEO of Business for Social Responsibility, a NPO promoting sustainability to the global business community, said in a dialogue with Hitachi’s top executives, “Already, Hitachi as a business itself and in its corporate philosophy has the luck and strength to align with what the world of the 21st century needs.”

Realizing a sustainable future will be impossible without contributions by globally operating companies. This is an era when corporations themselves must have a strong sense of purpose.