“GOVERNMENT”

ACTIONS TOWARD INTEGRATING THE CIRCULAR ECONOMY, NATURE-POSITIVE, AND NET-ZERO GHG EMISSIONS

The global annual average temperature in 2024 was the warmest year in the observational record. With extreme weather events occurring worldwide and the number of large-scale natural disasters increasing, climate change issue has reached a point where it is described as a “climate crisis” that threatens the very foundations of survival for humanity and all living things. In Japan as well, the year 2024 was the warmest annual average temperature in the observational record, alongside declining agricultural yields and quality, increased risks of heat illness, and other impacts of climate change appearing nationwide. Taking this situation into consideration, the Sixth Basic Environment Plan states that in order to realize a circulation and symbiosis based society, which is the ideal form of sustainable society, environmental policies in individual fields such as the circular economy, nature-positive, and net-zero GHG emissions (net-zero) must be implemented in an integrated manner to advance Integrated improvements on Environment, Economy and Society, and that a cross-sectional approach is needed to ensure that specific measures resolve multiple different issues in an integrated manner, in order to create synergies that will also lead to the resolution of structural issues in the economy and society.

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Chapter 2 looks at each of the actions to simultaneously achieve a circular economy, nature-positive, and net-zero.

1 CIRCULAR ECONOMY

In order to advance actions with all stakeholders toward transitioning to a circular economy, the Fifth Fundamental Plan for Establishing a Sound Material-Cycle Society was formulated in August 2024 as a national strategy that brings together government-wide measures aimed at creating a sound material-cycle society. At the end of 2024, the Inter-Ministerial Council on the Circular Economy compiled a "Package for Accelerating the Transition to a Circular Economy," and actions are being made based on this.

Thorough resource circulation throughout the entire life cycle through cooperation between business operators for resource circulation

Cooperation between arterial industries which are responsible for manufacturing and retail, and venous industries which are responsible for waste management and recycle business, is growing increasingly important. This cooperation between business operators (known as arterial-venous cooperation) enables the creation of new market value by maximizing the utilization of Japan's advanced technological capabilities cultivated over many years.

It is crucial for companies in the manufacturing and retail companies to cooperate with companies in the waste management and recycle business to establish a system that reliably supplies recycled materials of the required quality and quantity.

To this end, we will promote the expansion of the use of recycled materials and their stable supply, the improvement of environmentally conscious design and the utilization rate of recycled materials, the advancement of recycling methods such as the dismantling, crushing, and sorting of used products, and the steady advancement of actions based on various recycling acts. This will enable us to promote thorough resource circulation throughout the entire life cycle based on the medium- to long-term policy directions for each material and product.

Realization of diverse local circulation systems and regional revitalization

Local governments are expected to serve as coordinators to promote cooperation and collaboration among local citizens, business operators, NPOs, NGOs, and other entities, to build resource circulation systems that utilize local circulative and renewable resources. They build systems to efficiently circulate local resources at the optimal scale for each resource type, thereby advancing reuse, recycling, repair, maintenance, sharing, and subscription services.

Through these actions, utilizing local recyclable and renewable resources as raw materials for new products or as feedstock for fertilizers and animal feed is expected to generate new added value and employment opportunities in the region, thereby revitalizing the local economy. Simultaneously, reducing the volume of waste requiring disposal is anticipated to contribute to cutting public expenditures.

Additionally, in local communities, efforts are being promoted to provide diverse options such as products made from recycled or renewable resources produced through resource circulation actions in each region, along with repair services and reused goods accompanied by labeling indicating their environmental value. This aims to encourage consumers to raise their awareness, translate it into actual actions, and promote shift of lifestyles, thereby realizing a high-quality life.

Example case

From a town of recycling to a town shaping the world's future (Osaki town, Kagoshima Prefecture)

Originally lacking a waste incineration facility, Osaki Town succeeded in extending the lifespan of its existing waste landfill site by recycling waste and reducing its volume. The town has implemented thorough waste separation, considering factors such as volume, cost, and sorting methods, while gradually increasing the number of items. With the addition of "disposable diapers" starting in FY2023, they now collect and sort 28 different items.

They have achieved Japan's highest resource recycling rate a total of 16 times, including 12 consecutive years starting in FY2006, and in FY2023, they achieved a recycling rate of 83.0%. As a result, benefits include reduced per capita waste disposal costs through waste separation and recycling, revenue generated from the sale of recyclable resources, and increased employment at recycling centers.

Osaki Town Vision Map for the Future

Source: Osaki Town

Example case

Integration of "environmental conservation policy" and "industrial promotion" (Kitakyushu City, Fukuoka Prefecture)

Kitakyushu City, which has long flourished as a transportation hub, coal distribution center, and steel town, is leveraging its experience overcoming pollution caused by rapid economic growth to promote advanced actions for a sound material-cycle society. As Japan's largest-scale "Kitakyushu Eco-Town Project," it has attracted a cluster of recycling companies (25 companies as of March 2025) and also created approximately 1,000 employees. In addition, the "Kitakyushu Committee for Promoting the Circular Economy Vision" was established in 2022, and the city and companies work together to promote a "circular economy model" through arterial-venous cooperation, such as building a recycling system for PV panels, automotive rechargeable batteries, food resources, etc.

Diverse recycling in Kitakyushu City

Eco-industrial clusters through the Eco-Town Project

Automobile recycling

Home appliance recycling

Plastic bottle recycling

Secondary battery recycling

Waste wood and plastic recycling

Building a recycling system that addresses new social issues

PV panel recycling

Food resource recycling

Automotive rechargeable battery recycling

Source: City of Kitakyushu

Construction of proper international circular resource systems and promotion of overseas expansion of the circular industry

Japan will promote integrated resource circulation measures both domestically and internationally by leading discussions on circular economy and resource efficiency measures including the 3Rs, international agreements on resource circulation, the proper import and export of recyclable waste, countermeasures against plastic pollution, and will international resource circulation, and also leading the formation of international rules in cooperation with international organizations and private companies. In addition, it is important to construct international resource circulation systems based on the Japan-ASEAN partnership and the G7 agreement to strengthen domestic and international recovery and recycling of critical minerals and other materials.

Furthermore, Japan will promote overseas expansion of our country's outstanding schemes, human resource development, systems, technologies, and other capabilities as integrated packages to developing countries, including ASEAN, thereby strengthening proper waste management and resource circulation. These actions contribute to reducing environmental pollution and other issues, thereby alleviating global resource constraints.

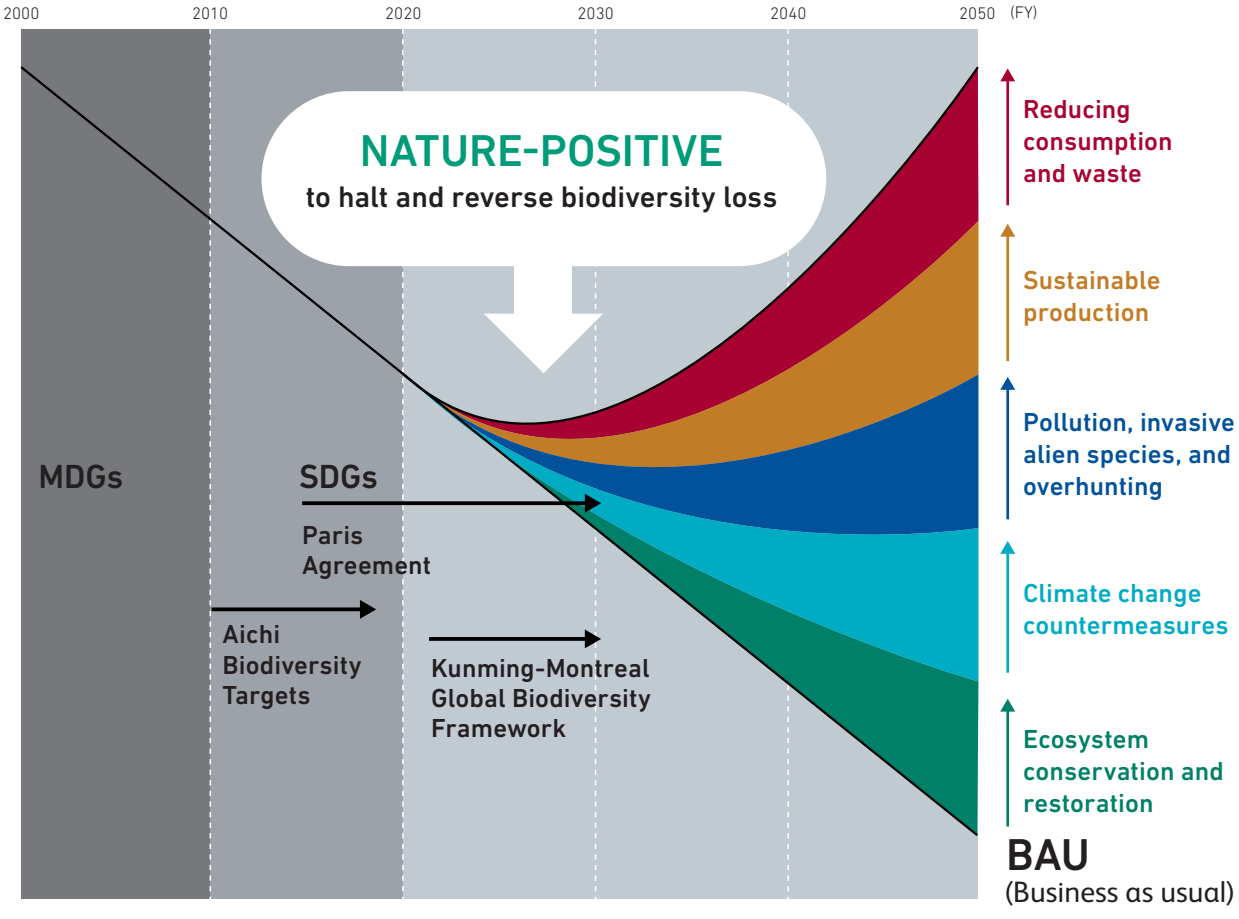
2 NATURE-POSITIVE

Japan's current state toward nature-positive

"Nature-positive" means "halting and reversing biodiversity loss to put nature on a path to recovery". This is not just about conventional nature conservation, but is a concept that involves transforming society and the economy as a whole to contribute to the conservation of biodiversity by linking measures in various fields, such as climate change countermeasures and resource circulation. It goes one step further than halting the biodiversity loss, which has been the aim of previous targets such as the Aichi Biodiversity Targets, and embodies a strong determination not only to halt the loss but also to turn it into recovery. The term "nature-positive" began to gain international recognition after it was used in the "G7 2030 Nature Compact," an annex to the Leaders' Communiqué from the 2021 G7 Cornwall Summit held in the United Kingdom. This concept is also reflected in the 2030 mission of the GBF (Global Biodiversity Framework) adopted at CBD-COP15 in December 2022.

According to the "the Japan Biodiversity Outlook 3 (JBO3)," Japan's biodiversity has been continuously declining over the past 50 years. To improve the deteriorating state of biodiversity, the National Biodiversity Strategy and Action Plan of Japan 2023-2030 sets the goal of achieving "nature-positive by 2030" and promotes various actions to this end. For example, the actions toward the 30 by 30 target discussed in the next section are one of them.

Conceptual diagram of nature-positive



Source: Created by the Ministry of the Environment based on the "Global Biodiversity Outlook 5 (GBO5)"

30 by 30 target

The so-called "30 by 30 target," which aims to effectively conserve more than 30% of both land and sea as healthy ecosystems by 2030, is one of the key targets for achieving nature-positive.

This 30 by 30 target is positioned as GBF Target 3 and serves as the successor to Target 11 of Aichi Biodiversity Targets, which aimed to "conserve at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas by 2020 systems of protected areas and other measures."

As of August 2024, approximately 20.8% of Japan's land and 13.3% of its oceans have been designated as protected areas such as national parks and OECMs (Other Effective area-based Conservation Measures: areas other than protected areas that contribute to the conservation of biodiversity). In order to achieve the target, it is essential not only to expand protected areas and improve their management quality of , but also to promote the establishment and management of OECMs.

The background for setting this target included the following scientific findings.

For example, international scientific findings indicate that in order to protect many of the world's terrestrial mammal species, it is necessary to expand existing protected areas to 33.8% of the total land area. Additionally, research reports indicate that conserving 26 to 28% of the world's land is necessary to conserve amphibians, birds, mammals, and other species globally. Regarding oceans, a review of 144 existing studies found that the majority recommend protecting over 30% of oceans, with an average requirement of protecting 37% of the world's oceans.

Scientific findings within Japan also indicate that, regarding terrestrial areas, effectively expanding protected areas to 30% could reduce the risk of species extinction by an estimated 30%.

3 NET-ZERO GHG EMISSIONSS (NET-ZERO)

The 29th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP29)

In November 2024, COP29 was held in Baku, Republic of Azerbaijan. At COP29, Keiichiro Asao, Minister of the Environment, announced Japan's commitment to actively contribute to global emissions reductions to achieve the 1.5°C. In the negotiations, regarding a New Collective Quantified Goal (NCQG), the decision to set the support goal of "at least USD 300 billion per year by 2035 for developing country Parties" was adopted. It was also decided to call on all actors to work together to enable the scaling up of financing to developing country Parties for climate action from all public and private sources to at least USD 1.3 trillion per year by 2035. In addition, detailed rules for Article 6 of the Paris Agreement, which calls for international cooperation to reduce greenhouse gas emissions, were decided and fully operationalized.

Speech by Keiichiro Asao, Minister of the Environment, at the Ministerial Session

Source: Ministry of the Environment

Taking advantage of this growing momentum, we will actively contribute to global emission reductions by further expanding and accelerating projects utilizing the Joint Crediting Mechanism (JCM) and by vigorously promoting Article 6 initiatives worldwide through the "Paris Agreement Article 6 Implementation Partnership."

Joint Crediting Mechanism (JCM), overseas expansion of environmental infrastructure

Japan has implemented a mechanism (Joint Crediting Mechanism: JCM) in which Japanese companies and the government cooperate in terms of technology and funding to implement countermeasures in partner countries, such as those in the Global South, and the resulting GHG reduction and removal benefits are distributed according to the degree of contribution of both countries. To date, more than 270 projects have been implemented. The "Action Plan for the Next Decade," adopted at the second Asia Zero Emission Community (AZEC) Leaders Meeting held in Vientiane, Laos in October 2024, also included cooperation on high-integrity carbon markets, encompassing the expansion of JCM partner countries within AZEC. Moreover, to promote the utilization of the JCM, the "Act Partially Amending the Act on Promotion of Global Warming Countermeasures (Act No. 56 of 2024)" was enacted in June 2024 to codify procedures for issuing credits and other matters. Based on this Act, the designated implementing agency, the "Joint Crediting Mechanism Implementation Agency, designated by the Government of Japan," was launched on April 1, 2025.

Furthermore, to establish market mechanisms including the JCM consistent with Article 6 of the Paris Agreement, Japan is supporting the development of implementation frameworks in various countries through the "Paris Agreement Article 6 Implementation Partnership" (as of the end of January 2025, 86 countries and over 200 institutions participate), which Japan spearheaded at COP27. The utilization of market mechanisms, including the JCM, and carbon markets are expected to expand further worldwide. We will continue to strengthen international cooperation and expand support for countries' implementation of Article 6.

In addition, as a framework for cooperation between the public and private sectors, we will leverage the Japan Platform for Redesign: Sustainable Infrastructure (JPRSI), established in September 2020, to support the activities of private companies actively engaged in the overseas expansion of environmental infrastructure. Specific activities include hosting an integrated "Environment Week" featuring seminars and exhibitions, providing support for access to local information, promoting Japanese companies' environmental technologies overseas, and supporting the formation of individual cases and securing orders through task force operations and consultation desks.