

# A NEW STAGE FOR GLOBAL WARMING COUNTERMEASURES

“The Paris Agreement is a monumental triumph for people and our planet,” stated Ban Ki-moon, Secretary-General of the United Nations after the adoption of the agreement on the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) held in Paris. All participants shared their delight, with comments such as “a turning point for the world”, and “an agreement of conviction, an agreement of solidarity”. In this chapter, we describe the circumstances brought about by the agreement and highlight Japan’s commitments.

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# A NEW INTERNATIONAL FRAMEWORK TO ADDRESS GLOBAL WARMING

## The Paris Agreement

The Paris Agreement was adopted at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) held in Paris, France from November 30 to December 13, 2015. It is the first legally binding international agreement since the Kyoto Protocol eighteen years earlier.

The Paris Agreement is considered a groundbreaking international framework. It is the first international treaty to agree to “holding the increase in the global average temperature to well below 2°C above pre-industrial levels.” It includes “pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels” and sets a goal “to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.”

In addition, this agreement is applicable to all parties. Each party shall communicate or update its Nationally Determined Contributions (NDCs) every five years, and engage in adaptation planning processes and the implementation of actions, as appropriate. And as Japan had insisted, the new international framework is a fair and effective one applicable to all parties.

At the opening ceremony of the COP21 leaders’ segment, Prime Minister Shinzo Abe reasserted this policy, indicated that the new international framework should include the setting of a long-term goal as well as the establishment of a common process for the review of NDCs (Photo below) and also announced “Actions for Cool Earth 2.0 (ACE 2.0)”. Representing the Japanese government at the high-level segment, Minister of the Environment Tamayo Marukawa stated that the legal agreement should include a global long term goal, a cycle whereby all Parties communicate and update their NDCs, and a report and review system. Japan strongly welcomes and highly appreciates the adoption of the Paris Agreement, which is a fair and effective international framework applicable to all parties.



Opening Ceremony of COP21 leaders' segment

Photo: Cabinet Public Relations Office

# JAPAN'S GLOBAL WARMING COUNTERMEASURES

## History of global warming countermeasures by Japan

Japan formulated its Action Program to Arrest Global Warming in 1990, and has continued to implement global warming countermeasures ever since. In 1997, the Kyoto Protocol was adopted at COP3, with Japan committing to reduce total greenhouse gas emissions by 6% compared to the FY 1990 level in the first commitment period (2008-2012). Consequently, in 1998 Japan enacted the Act on Promotion of Global Warming Countermeasures, a framework under which the national government, local governments, businesses, and citizens address global warming together. Based on this act, the Kyoto Protocol Target Achievement Plan was approved by Cabinet in April 2005, and Japan has implemented the countermeasures comprehensively and strategically. As a result, average net emissions over the five years of the first commitment period of the Kyoto Protocol came to 1.278 billion tonnes, a 1.4% increase compared to the FY 1990 level, but when forest sinks and Kyoto Mechanism Credits are factored in, the result was an 8.7% reduction compared to FY 1990, which met the Kyoto Protocol target (6% reduction compared to the base year).

In order to continue with the implementation of global warming countermeasures thereafter, the Act on Promotion of Global Warming Countermeasures was revised in 2013, and the Plan for Global Warming Countermeasures was formulated as a plan for the comprehensive and strategic implementation of Japan's global warming countermeasures to replace the Kyoto Protocol Target Achievement Plan. Furthermore, based on the Cancun Agreement adopted at COP16 in 2010, at COP19 in 2013 Japan announced a 3.8% reduction target for Japan's greenhouse gas emissions in FY 2020 compared to the 2005 level.

## Japan's mid-term reduction target (FY 2030)

In July 2015, Japan decided on its Intended Nationally Determined Contribution, including its FY 2030 mid-term reduction target, and submitted it to the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat on the same day. Japan's FY 2030 mid-term reduction target is at the level of 26.0% by FY 2030 compared to FY 2013 (25.4% reduction compared to FY 2005). The target was set based on the amount of domestic emission reductions and removals assumed to be obtained.

### Estimated emissions of greenhouse gases in each sector in Japan's INDC

(mil. t-CO<sub>2</sub>)

	Estimated emissions of each sector in FY 2030	FY 2013 (FY 2005)
<b>Energy originated CO<sub>2</sub></b>	<b>927</b>	<b>1,235 [1,219]</b>
Industry	401	429 [457]
Commercial and other	168	279 [239]
Residential	122	201 [180]
Transport	163	225 [240]
Energy conversion	73	101 [104]

(mil. t-CO<sub>2</sub>)

	Emissions target of each gas in FY 2030	FY 2013 (FY 2005)
<b>Non-energy originated CO<sub>2</sub></b>	<b>70.8</b>	<b>75.9 [85.4]</b>
Methane (CH <sub>4</sub> )	31.6	36.0 [39.0]
Nitrous oxide (N <sub>2</sub> O)	21.1	22.5 [25.5]
Four fluorinated gases	28.9	38.6 [27.7]
HFCs	21.6	31.8 [12.7]
PFCs	4.2	3.3 [8.6]
SF <sub>6</sub>	2.7	2.2 [5.1]
NF <sub>3</sub>	0.5	1.4 [1.2]

(mil. t-CO<sub>2</sub>)

	FY 2030 removal target	FY 2013 (FY2005)
<b>LULUCF sector</b>	<b>37.0</b>	<b>- [-]</b>
Forest management	27.8	- [-]
Cropland management /Grazing land management	7.9	- [-]
Revegetation	1.2	- [-]

## Plan for Global Warming Countermeasures

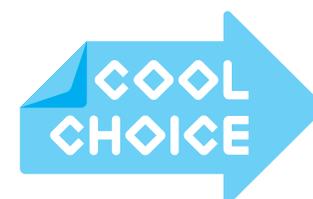
In December 2015, Japan formulated its Policy for Global Warming Prevention Measures Based on the Paris Agreement. This policy includes formulation of the Plan for Global Warming Countermeasures based on the Act on Promotion of Global Warming Countermeasures with the aim of meeting the FY 2030 mid-term reduction target. In addition to this, it was decided that Japan would actively contribute to the development of detailed international rules for the implementation of the Paris Agreement, and would implement the domestic procedures required to ratify the Paris Agreement.

In May 2016, the Cabinet approved both the Plan for Global Warming Countermeasures based on the Act on Promotion of Global Warming Countermeasures and the Government Action Plan. As Japan's sole comprehensive plan regarding global warming, the Plan for Global Warming Countermeasures provides the following basic directions for global warming countermeasures: actions to achieve the mid-term target (26% reduction by FY 2030), strategic actions towards the long-term goal (80% reduction by FY 2050), and actions toward global greenhouse gas reduction. It also describes basic matters regarding measures taken by businesses and citizens, and regarding policies and measures taken by national and local governments for achieving the target. Based on this plan, Japan is promoting global warming countermeasures comprehensively and strategically.

Furthermore, in May 2016, the Act on Promotion of Global Warming Countermeasures was revised in order to strengthen actions for tackling global warming. The revised Act stipulates that the Plan for Global Warming Countermeasures needs to specify issues related to promotion of public awareness and international cooperation, and it also promotes actions for tackling global warming at local level.

## National campaign for global warming countermeasures (COOL CHOICE)

COOL CHOICE is an initiative in which industry, academia, the private sector, and consumers participate as one united front, with prime minister Shinzo Abe standing at its fore. Launched in July 2015, it is a national campaign aimed at meeting the new mid-term reduction target. The COOL CHOICE logo is an easy-to-understand arrow symbol designed to make it easy to choose products, services, and behavior that are low-carbon or save energy. It promotes smart choices that allow individual consumers to immediately engage in global warming countermeasures on their own.



未来のために、いま選ぼう。

Trademark of "COOL CHOICE"  
For the Future, Choose Now

### The Plan for Global Warming Countermeasures

#### Introduction

- Scientific findings on global warming
- Actions during the 1st commitment period of the Kyoto Protocol, Actions by 2020 under the Cancun Agreement
- Establishment of an international framework after 2020 and communication of Japan's INDC

#### Ch. 1

#### Basic direction regarding the promotion of global warming countermeasures

- **Directions to pursue**
  1. Actions to achieve mid-term target (26% reduction by 2030)
  2. Strategic actions towards long-term goal (80% reduction by 2050)
  3. Actions toward global greenhouse gas reduction
- **Basic concepts**
  1. Integrated improvements of the environment, economy and society
  2. Steady implementation of measures listed in Japan's INDC
  3. Response to Paris Agreement
  4. Enhancement of R&D and contribution to global greenhouse gases emissions reduction through Japan's leading technologies
  5. Transformation in consciousness of all actors, evocation of action and enhancement of collaboration
  6. Emphasis on PDCA cycle

#### Ch. 2

#### Greenhouse gas reduction target

- **Japan's greenhouse gas emission reductions target**
  - Reduction of 26% by FY2030 (25.4% compared to FY2005)
  - More than 3.8% reduction by FY2020 compared to FY2005
- **Planning period**
  - From date of cabinet decision (May 13, 2016) to FY2030

#### Ch. 3

#### Policies and measures for achieving targets

- **Basic roles of national government, local governments, businesses and citizens**
- **Measures and Policies for Greenhouse Gas Emissions Reduction and Removal**
  - Energy-originated CO<sub>2</sub>
    - Measures and Policies by Sectors (industrial, commercial and other, residential, transport, energy conversion)
  - Non-energy-originated CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O
  - Four fluorinated gases: HFCs, PFCs, SF<sub>6</sub> and NF<sub>3</sub>
  - Removals by Land Use, Land Use change and Forestry (LULUCF)
  - Cross-sectional strategies
  - Foundational measures
- **Basic matters regarding measures to be taken by Local Governments**
- **Expected Efforts of Business Operators with Large Emissions in Particular**
- **Promotion of nationwide campaign**
- **Promotion of global emission reduction, international collaboration and cooperation**
  - Response to Paris Agreement
  - Global emission reduction due to Japan's contribution
    - Joint Crediting Mechanism (JCM)
    - Actions by industries
    - Support of reduction of emissions from deforestation and degradation (REDD+)
  - Cooperation with other countries and international organizations

#### Ch. 4

#### Progress Management of the Plan

Yearly progress review, consideration of the plan's revision every 3 years

#### Appendix (Target of each measure)

- Energy-originated CO<sub>2</sub>
- Non-energy-originated CO<sub>2</sub>
- CH<sub>4</sub>, N<sub>2</sub>O
- Four fluorinated gases
- Removals by LULUCF
- Cross-sectional policies

# PLAN FOR ADAPTATION TO CLIMATE CHANGE

## Assessment of climate change impacts

In March 2015, the Central Environment Council formulated the “Report on Assessment of Impacts of Climate Change in Japan and Future Challenges”, which summarised impacts in seven sectors with 30 categories and 56 sub-categories, and made clear the impacts of global warming based on the judgment of experts in light of scientific

findings, viewing each impact from the standpoint of significance, urgency, and confidence. Nine categories, including paddy field rice, fruit trees, plant pests/weeds, flood, storm surges/high waves, and heat illness, were assessed as having very high significance, high urgency, and high confidence.

### Outline of Assessment of Climate Change Impacts

Sectors	Categories	Sub-categories	Significance	Urgency	Confidence	
Agriculture, Forest/Forestry, Fisheries	Agriculture	Paddy field rice	●	●	●	
		Vegetables	—	▲	▲	
		Fruit trees	●	●	●	
		Barley / Wheat, Soybean, Feed crops, and other crops	●	▲	▲	
		Livestock Farming	●	▲	▲	
		Plant pests and weeds	●	●	▲	
	Forest / Forestry	Water, Land and Agricultural Infrastructure	●	●	●	
		Timber production (e.g. Plantations)	●	●	■	
	Fisheries	Non-wood forest products (e.g. Mushrooms)	●	●	■	
		Migratory fish stocks (Ecology of fishes)	●	●	▲	
		Propagation and Aquaculture	●	●	■	
Water Environment, Water Resources	Water Environment	Lakes / Marshes, Dams (Reservoir)	●	▲	▲	
		Rivers	◆	■	■	
	Water resources	Coastal areas and Closed sea areas	◆	▲	■	
		Water supply (Surface water)	●	●	▲	
		Water supply (Groundwater)	◆	▲	■	
		Water demand	◆	▲	▲	
Natural Ecosystems (covers ecosystem services and impacts on ecosystems)	Terrestrial ecosystems	Alpine / Subalpine zone	●	●	▲	
		Natural forests / Secondary forests	●	▲	●	
		Countryside-landscape (Satochi-Satoyama)	◆	▲	■	
		Planted forests	●	▲	▲	
		Damage from wildlife	●	●	—	
		Material balance	●	▲	▲	
		Freshwater ecosystems	Lakes / Marshes	●	▲	■
	Rivers	●	▲	■		
	Coastal ecosystems	Marshlands	●	▲	■	
		Subtropics	●	●	▲	
	Marine ecosystems	Temperate / Subarctic	●	●	▲	
		Phenology	◆	●	●	
	Natural disasters, Coastal areas	Rivers	Shifts in distribution and populations (covers ecosystem services and impacts on native ecosystems)	●	●	●
			Floods	●	●	●
		Coastal areas	Inland waters	●	●	▲
			Sea-level rise	●	▲	●
			Storm surges, High waves	●	●	●
Mountain areas		Coastal erosion	●	▲	▲	
		Debris flows, Landslides, and other disasters	●	●	▲	
Others		(e.g., Strong winds)	●	▲	▲	
		Industrial / Economic activities (covers services and impacts on complex impacts)	—	▲	▲	
Human Health		Winter warming	Mortality in winter season	◆	■	■
	Heat stress		Risk of mortality	●	●	●
	Infection	Heat illness	●	●	●	
		Water- and food-borne diseases	—	—	■	
		Vector-borne diseases	●	▲	▲	
	Industrial / Economic activities (covers services and impacts on complex impacts)	Other infectious diseases	—	—	—	
		Manufacture	—	▲	▲	
		Energy	Energy demand and supply	◆	■	■
		Commerce	—	—	■	
		Finance, Insurance	—	—	■	
Life of Citizenry, Urban Life	Tourism	Leisure	●	▲	●	
	Construction	—	—	—		
	Medical	—	—	—		
	Others	Other impacts (e.g., Overseas impact)	—	—	■	
	Urban infrastructure, Critical services	Water supply, Transportation, and the others	●	●	■	
		Life with sense of culture and history	Phenology	◆	●	●
Others	Traditional events / local industry	—	●	■		
	Impacts on life due to heat stress	●	●	●		

Significance: ● Particularly High ◆ Not Particularly High — N/A (currently cannot be assessed)

Urgency: ● High ▲ Medium ■ Low — N/A (currently cannot be assessed)

Confidence: ● High ▲ Medium ■ Low — N/A (currently cannot be assessed)

Source: Central Environment Council “Report on Assessment of Climate Change in Japan and Future Challenges (Comment Submission)”

## National Plan for Adaptation to the Impacts of Climate Change

The “National Plan for Adaptation to the Impacts of Climate Change” (National Adaptation Plan) was approved by Cabinet in November 2015. Through the implementation of an adaptive strategy, the National Adaptation Plan (NAP) aims to minimize or avoid damage from the impacts of climate change on people’s lives, property, lifestyles, the economy, and the natural environment, regardless of the type of climate change

impact that occurs, creating a secure, safe, and sustainable society that can quickly recover from change. It indicates basic adaptive measures for government ministries and agencies to take in seven sectors—Agriculture, Forests/Forestry, Fisheries; Water Environment/Water Resources; Natural Ecosystems; Natural Disasters/Coastal Areas; Human Health; Industrial/Economic Activity; and Life of Citizenry and Urban Life.

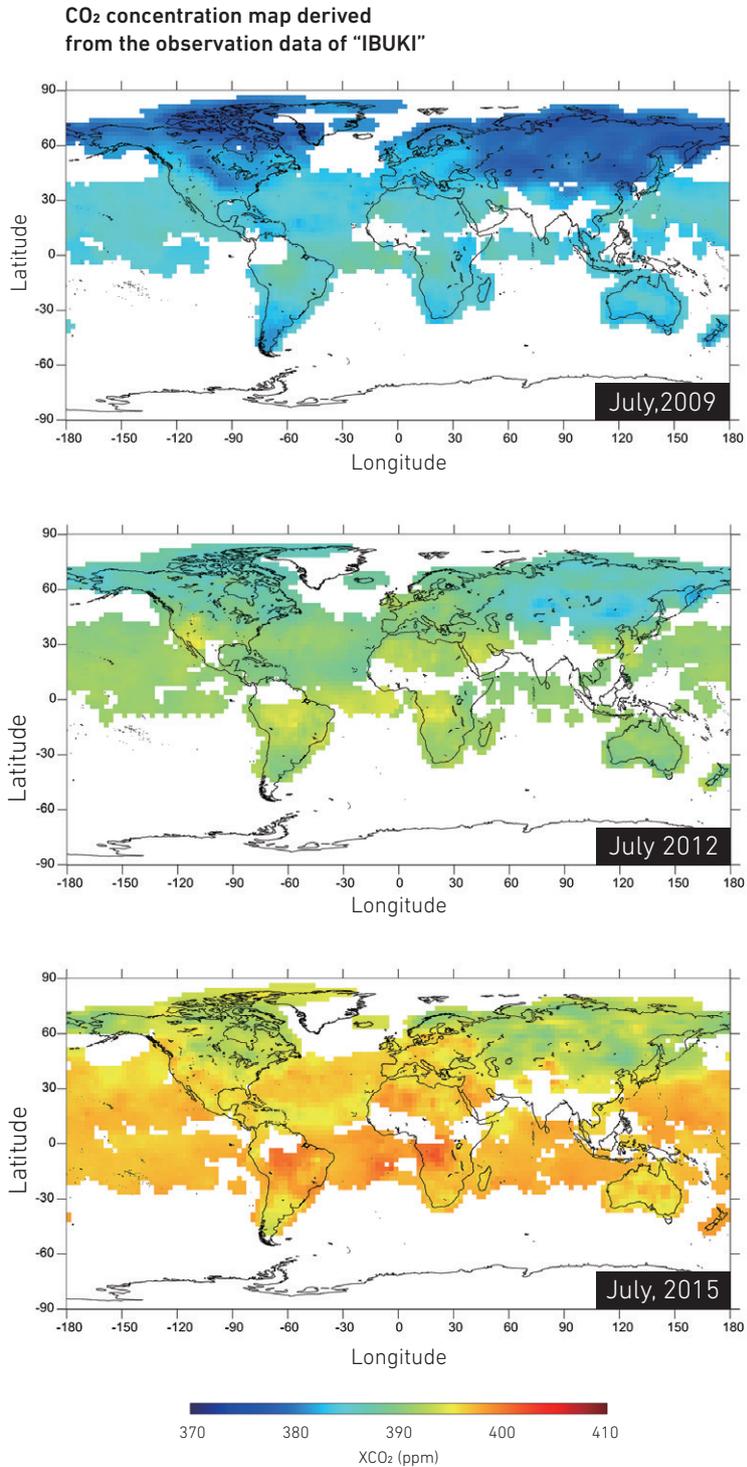
### Climate Change Impacts and Basic Adaptation Policies and Measures

Sector		Projected Climate Change Impacts	Basic Adaptation Policies and Measures Includes measures for other purposes, that also contribute to adaptation
Agriculture, Forest / Forestry, Fisheries	Agriculture	Declining ratio of first-class rice	Development and dissemination of high-temperature-resistant varieties; establish soil and water management
		Poor coloring of apples and other fruits; northward shift of locations suitable for cultivation	Switch to superior colored varieties of fruit; development of breeding materials adapted to high temperature conditions; and dissemination of cultivation management technologies
		Increasing frequency and severity of mountainous disasters	Implementation of studies on situations of occurrences of plant pests; disseminate timely and appropriate information; import /domestic quarantine
	Forest / Forestry	Increasing frequency of occurrence and intense of mountainous disasters	Ascertaining more accurately which areas are at high risk of mountain disasters occurring; development of afforestation structures and forests preparing for occurrence of debris flows or wood debris runoff
Fisheries	Changes in distributed migration range including sardine (e.g., shift northward)	Improvement in the precision of fishing ground projection; provision of real-time monitoring information	
Water Environment, Water Resources	Water Environment	Deterioration of water quality	Measures for wastewater from factories and business premises; measures for domestic wastewater
	Water Resources	Increase in droughts due to an increase in the number of rainless days and a decrease in the total amount of snowfall	Optimal use of existing facilities, use of rainwater, reclaimed waste water, and creation of collaborative frameworks among stakeholders for actions including promoting the formulation of timelines (sequenced action plans) in order to mitigate damage as a drought
Natural Ecosystems	Diverse Ecosystems	Expansion of the habitat of sika deer, decreasing area suitable for the growth of reef-building coral	Management of national parks by eliminating plants which are newly distributed accompanied by climate change; creation of networks of ecosystems to allow creatures to migrate and spread to adapt to climate change
Natural Disasters, Coastal Areas	Water Disasters	Increasing frequency of heavy rainfall and short-term intense rainfall; increasing frequency and intense of water disasters accompanied by increases in precipitation from heavy rainfall events	- Disaster prevention measures to address natural hazards that could occur relatively frequently e.g., steady improvements of facilities; improvements of facilities based on disaster risk assessments; design of facilities to avoid rework - Disaster-reduction measures to cope with natural hazards that exceed the capacity of facilities  (1) Improving aspects such as facilities’ operations, design, and maintenance/upkeep procedures (e.g., making the most use of existing facilities) (2) Integrating with urban development/local development (e.g., measures to reduce inundation in cooperation with urban development/local development; providing/sharing detailed disaster risk information) (3) Preparations for evacuation, emergency operations, business continuity (e.g., avoid catastrophic damage by preparing timelines)
		Storm Surge, High Waves	Expansion of inundation damage and coastal erosion due to increases in sea-level rise, typhoons and other events
	Sediment-related Disasters	Increased frequency of sediment-related disasters; increases in sediment movement events exceeding design scale	Locating facilities and equipment to be most effective in protecting human life; promotion of baseline surveys and designation of sediment-related disaster hazard areas; implementation of urgent surveys when large scale sediment-related disasters occur
Human Health	Heat Stress	Increasing frequency of heat waves in summer; doubling of the number of heat illness patients transported by ambulance	Information provision relating to topics such as cautionary alerts; awareness raising regarding prevention and treatment, and status of outbreaks
	Infection	Expansion of suitable habitat for arthropods that are vectors for infectious diseases	Measures targeting sources of larvae of mosquito vectors and extermination of adult insects; calling attention to mosquito-prevention measures
Industrial and Economic Activity	Finance and Insurance	Increasing insured losses	Pay attention to efforts of the General Insurance Association of Japan and other organization efforts
Life of Citizenry, Urban Life	Urban Infrastructure, Critical Services	Impacts on infrastructure and critical services due to an increase in short-term intense rainfall events and droughts	Measures to prevent inundation of places such as underground stations; formulation of Business Continuity Plan (BCP) for ports and harbors; enhancing the resilience of water supply and waste disposal facilities
	Heat Island Effect	Further increases in temperature in urban areas	Improving ground cover using vegetation and water; reducing artificial exhaust heat; improving urban design

# RESEARCH AND DEVELOPMENT

## GOSAT—Greenhouse gases Observing SATellite

The Ministry of the Environment (MOE), the National Institute for Environmental Studies (NIES), and the Japan Aerospace Exploration Agency (JAXA) have jointly developed the Greenhouse Gases Observing Satellite (GOSAT), also known as “IBUKI”, which is the world’s first spacecraft specifically for observing greenhouse gases. GOSAT has been monitoring carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>) in the atmosphere from space, and can calculate the whole-atmospheric mean concentrations of these gases (through observations from the surface to the top of the atmosphere). As observed by GOSAT, the whole-atmospheric monthly mean concentrations of carbon dioxide, while varying from season to season, are increasing as years go by, and the global atmospheric monthly mean CO<sub>2</sub> concentration observed vertically through the whole atmosphere exceeded 400 ppm in December 2015 for the first time.



Source: Japan Aerospace Exploration Agency, National Institute for Environmental Studies and Ministry of the Environment

## Floating offshore wind turbine

Japan is a maritime country with the sixth largest exclusive economic zone in the world. Compared to land-based systems, ocean-based wind power has greater potential for providing substantial amounts of renewable energy. Japan's first commercial-scale floating wind turbine demonstration project, with a maximum power output of 2MW, was trialed in FY 2010 off the coast of Kabashima Island in Nagasaki Prefecture by the Ministry of the Environment. The technology for practical implementation was successfully established, and in addition, the floating structure was confirmed to act as a fish aggregating device (a floating fishing reef).



Floating offshore wind turbine demonstration project near Kabashima Island, Nagasaki

## Thermal grid system

In FY 2015, Japan's demonstration project using a thermal grid system reduced CO<sub>2</sub> emissions by more than 70% in summer. The system linked air

conditioning heat sources (chillers) and air conditioning equipment (loads) in existing buildings with double loop piping.

## Hydrogen filling stations supplying hydrogen from renewable sources

In FY 2011, the Japanese government launched a demonstration project in Saitama City with Japan's first small-scale solar hydrogen filling station that produced hydrogen from solar power, establishing technology for practical implementation. In order to make hydrogen available for fuel cell vehicles,

the project is now providing support for the establishment of hydrogen filling stations that supply hydrogen derived from renewable energy. The aim is to deploy about one hundred hydrogen filling stations by FY 2020.

## 5

## GREEN FINANCE

### ESG investing

As of March 2016, 41 of Japan's pension funds and investment managers, including the Government Pension Investment Fund (GPIF), were signatories to the Principles for Responsible Investment (PRI). ESG investing (investing that takes environmental, social and governance factors into account) is expected to expand in Japan as the nation is influenced by world trends.

Non-financial information, including the environmental, social and governance information that is essential to decision-making in ESG investing techniques, is generally difficult to obtain and compare. The Ministry of the Environment became a world leader in this area by commencing development of a system for disclosure of non-financial information, predominantly environmental information, and is trialing a platform for operation of the system.

## 6

## INTERNATIONAL COOPERATION

### Joint Crediting Mechanism projects

The Joint Crediting Mechanism (JCM) is a mechanism for appropriately evaluating contributions from Japan to greenhouse gas emission reductions or removals in a quantitative manner achieved through the diffusion of advanced low carbon technologies as well as implementation of mitigation actions in developing countries, and for using them to achieve Japan's emission reduction target. Japan has established the JCM with 16 partner countries. There are 13 registered JCM projects and another 76 projects in the pipeline. Accumulated emission reductions or removals by FY 2030 achieved through the JCM are estimated as ranging from 50 to 100 million tonnes-CO<sub>2</sub>.



3rd JCM Partner Countries' High-level Meeting

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# STRATEGIC ACTIONS TARGETING THE LONG-TERM GOAL

## Long-term Climate Change Strategy Advisory Group

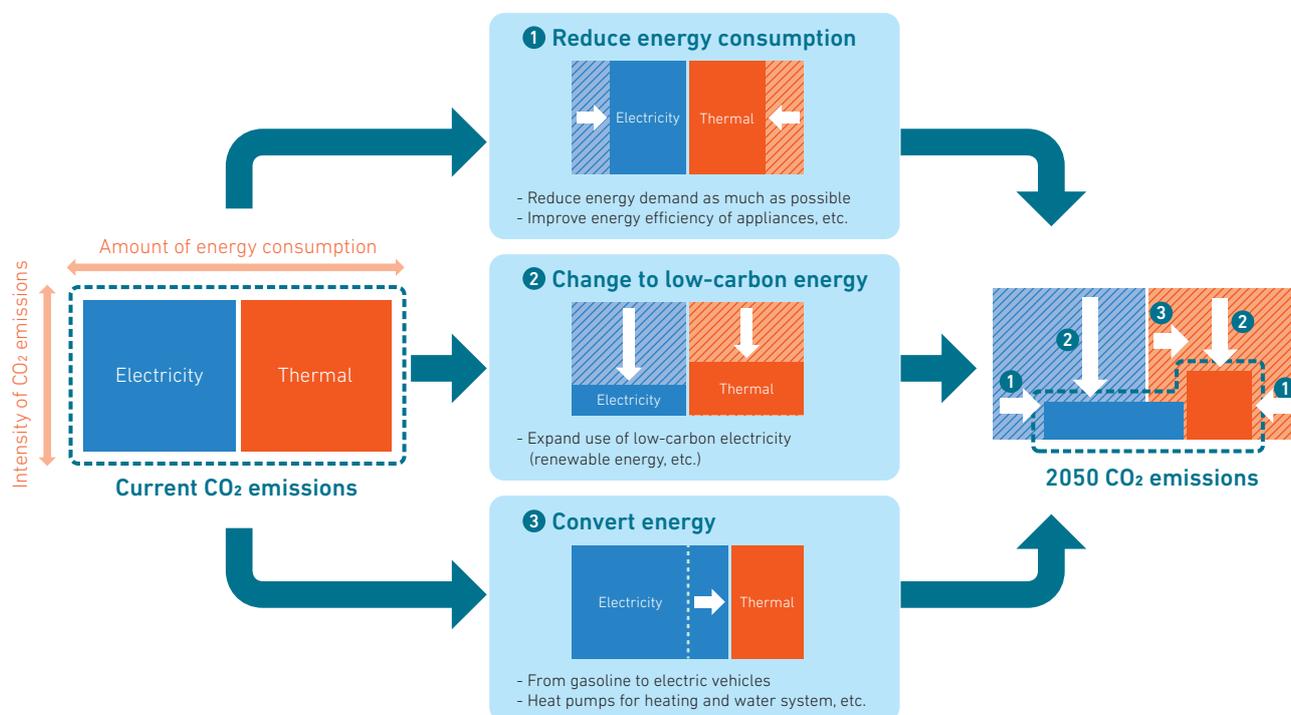
The Paris Agreement sets as a goal “to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.” Based on the Paris Agreement, Japan aims to achieve the long-term goal of reducing greenhouse gas emissions by 80% by 2050 while pursuing both global warming countermeasures and economic growth under a fair and effective international framework in which all major parties participate.

An advisory group report, Proposal by the Minister of the Environment’s Long-term Climate Change Strategy Advisory Group in February 2016, provides one example of a society in which an 80% reduction of greenhouse gas emissions is success-

fully achieved by 2050. The example illustrates a future in which everything possible is done to reduce energy demand, low-carbon energy is supplied, and electrification is promoted (see figure “One example of directions towards long-term drastic greenhouse gas reduction”). It points out that, instead of just accumulating improvements based on the existing social structure, there is a need for disruptive innovation (innovation of the structure of society) to create a completely new structure of society as a whole.

Discussion about how to achieve this kind of long-term drastic greenhouse gas reduction has only just begun, and it is important to ask a wide range of citizens for their opinions.

One example of directions towards long-term drastic greenhouse gas reduction



Source: Long-term Climate Change Strategy Advisory Group Recommendations: Long-term Orientation for Major Greenhouse Gas Reduction and a Simultaneous Resolution to Economic and Social Issues

## OTHER INTERNATIONAL FRAMEWORKS

### The 2030 Agenda for Sustainable Development

The 2030 Agenda was adopted at the United Nations Sustainable Development Summit for the adoption of the post-2015 development agenda on September 25, 2015.

“Universality”, meaning that the goals apply to all countries including both developed countries and developing countries, is a key feature of the 2030 Agenda. Furthermore, in light of the fact that action for “integrated improvements of the environment, economy, and society” was insufficient in the Millennium Development Goals (MDGs), one of the precursors of the Sustainable Development Goals (SDGs), the agenda explicitly states that “we are committed to achieving sustainable development in its three dimensions—economic, social and environmental—in a balanced and integrated manner.” This thinking is in line with the appropriate orientation of Japan’s environmental policy.

In Japan, the government, NGOs, and businesses are beginning to take action based on the SDGs.

For example, on the day after the adoption of the 2030 Agenda, member organizations of Japanese NGOs and corporations, with cooperation from government and researchers, made a joint announcement from civil society and business regarding the adoption of the 2030 Agenda. This initiative symbolizes the global partnership that is one of the key features of the 2030 Agenda.

The relevant ministries are currently coordinating with relevant ministries, and considering the direction of actions to be taken for the SDGs by the government as a whole. In order to promote the implementation of SDGs, particularly in the environmental dimension, Japan’s Ministry of the Environment holds stakeholders’ meetings, starting in 2016, to provide a venue where businesses, civil groups, researchers, local governments and each ministry working on SDGs can get together to share and discuss advanced actions.



## G7 Ise-Shima Summit

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The G7 Ise-Shima Summit was held in Ise-Shima, Mie from May 26 to 27, 2016 under the presidency of Japan. Continuing the momentum created by two historic international agreements of 2015, the Paris Agreement and the 2030 Agenda, the summit provided an opportunity for a domestic

and international demonstration of the political will of G7 countries to aim for a new world in which environmental policies befitting the twenty-first century are spread and shared throughout the world. The G7 Ise-Shima Leaders' Declaration can be viewed at the following link.

### G7 Ise-Shima Leaders' Declaration

 <http://www.mofa.go.jp/files/000160266.pdf>

## G7 Toyama Environment Ministers' Meeting

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The G7 Toyama Environment Ministers' Meeting was held in Toyama City from May 15 to 16, 2016.

The communiqué can be viewed at the following link.

### Communiqué

 [https://www.env.go.jp/earth/g7toyama\\_emm/english/\\_img/meeting\\_overview/Communique\\_en.pdf](https://www.env.go.jp/earth/g7toyama_emm/english/_img/meeting_overview/Communique_en.pdf)

## The Tripartite Environment Ministers Meeting Among China, Japan, and Korea

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In recent years, Northeast Asia has undergone rapid economic development. At the same time, however, problems such as environmental pollution and ecosystem deterioration have also come to light, making it important to find a way to achieve sustainable development. While the respective economic and social conditions differ in the Northeast Asian nations of China, Japan and the Republic of Korea, all of these nations share the common task of having to combat environmental problems at domestic, regional, and global levels. In this context, the environment ministers of the three countries have been holding the Tripartite

Environment Ministers Meeting among China, Japan, and Korea (TEMM) on an annual basis since 1999. Within this framework, the three countries aim to take a leading role in regional environmental management, and contribute to global environmental improvement.

TEMM 18 was held from April 26 to 27, 2016 in Shizuoka City, Shizuoka Prefecture. The three ministers reviewed the progress of the Tripartite Joint Action Plan on Environmental Cooperation that was formulated in 2015, and exchanged views. The communiqué can be viewed at the following link.

### Joint Communiqué

 <http://www.temm.org/sub03/11.jsp?commid=TEMM18>