

# **Achieving Net Zero GHG Emissions by 2050 in Japan**

## **Policies and Measures Update (as of February 2021)**

**Ministry of the Environment, Japan**

# GHG net zero by 2050, Japan

## Update of development of Policy and measures



- **Rapid but steady movement on declaration on GHG net zero by 2050**
  
- **Medium/Long-term Plan and Strategy**
- **Legal framework for Carbon Neutrality**
- **Budget**
  
- **Support for decarbonization of subnationals**
  - **Zero Carbon Cities**

# GHG net zero by 2050, Japan

## Update of development of Policy and measures



### ■ Rapid but steady movement on declaration on GHG net zero by 2050

#### □ Government

GHG net zero by 2050 declaration by PM SUGA, who instructed all ministers to pursue their efforts (October 2020)

#### □ Congress

Climate Crisis Declaration adopted by all parties in both House of Representatives and House of Councilors (November 2020)

#### □ Local governments

More than 281 cities/local governments declared net zero by 2050 (They cover more than 101 millions, about 80% of Japan's population)

### ■ Medium/Long-term Plan and Strategy

- ✓ Review of the Plan for Global Warming Countermeasures (cabinet decision) and Strategic Energy Plan started in autumn 2020.
- ✓ PM SUGA expressed that he will announce 'an aspiring 2030 target' by COP26 in his policy address to the Parliament (Jan. 18, 2021).
- ✓ The Long-Term Strategy under the Paris Agreement, decided in 2019, will also be revised

# GHG net zero by 2050, Japan

## Update of development of Policy and measures



### ■ Legal Framework for Carbon Neutrality

**The government decided the draft of amendment of the Act on Promotion of Global Warming Countermeasures:**

- ✓ **Establishment of the fundamental principles in light of the Paris Agreement and the declaration to realize carbon neutrality by 2050**
- ✓ **Establish a plan/accreditation system to promote businesses that contribute to decarbonization utilizing regional renewable resources**
- ✓ **Encourage digitization and open data regarding companies' GHG emissions information to promote decarbonization in corporate management**

Drive realization of decarbonized society by 2050/accelerate initiatives towards 2030

# GHG net zero by 2050, Japan

## Update of development of Policy and measures



### ■ Budget

- ✓ **Economic package for recovery from COVID19 pandemic**
  - e.g., subsidies for EV, insulation of houses, 2 trillion yen fund to promote ecological businesses and innovation
- ✓ **Budget plan for FY 2021**
  - e.g., support for the decarbonization of local governments in developing projects, building capacity and introducing renewable energy equipment

# GHG net zero by 2050, Japan

## Update of development of Policy and measures



### ■ Support for decarbonization of subnational - Zero Carbon Cities

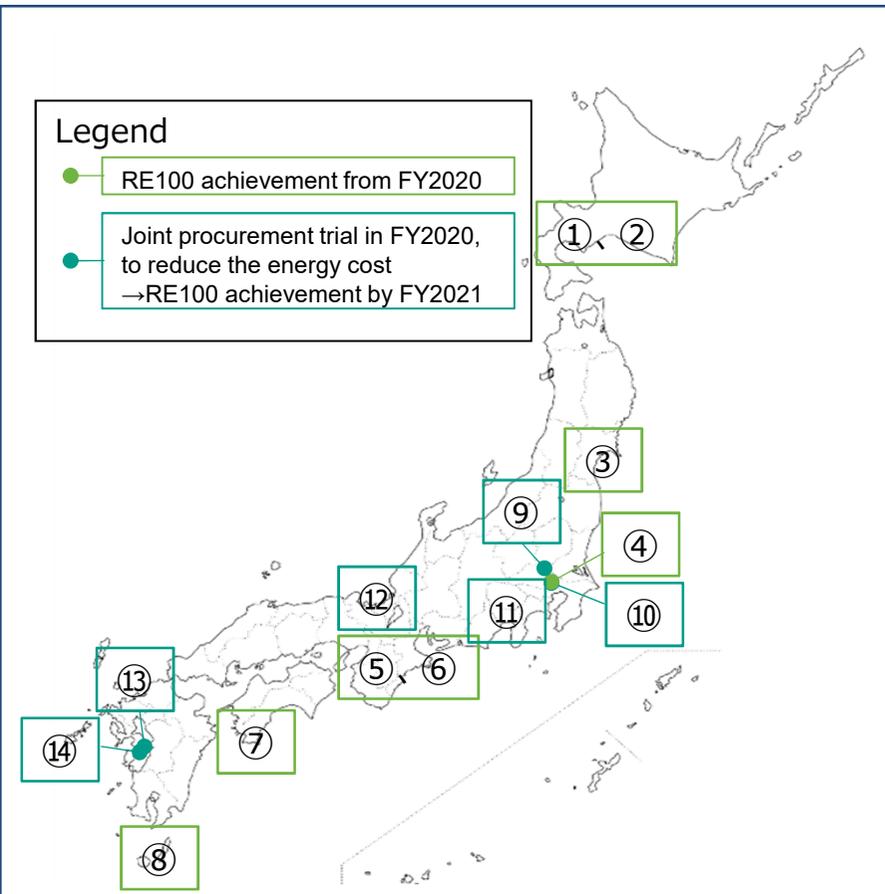
- ✓ **281 local governments including Tokyo, Kyoto, and Yokohama announced their commitment to net zero carbon emissions by 2050.**
- ✓ **These local governments represent 101 million people (79.9% of Japan's population), and 4.2 trillion USD in GDP.**
- ✓ **New Committee of Ministers and Mayors** (Council for National and Local Decarbonization) **launched in Dec. 2020**
- ✓ **Roadmap will be developed by this summer for decarbonization of all local governments by 2050**

# Ministry of the Environment's efforts to achieve Renewable Energy 100% (RE100)



- MOE is committed to achieve the “Ministry of the Environment RE100” Initiative to meet 100% of its own power supply with renewable energy by the year 2030.
- Nine facilities are powered by 100% renewable energy in FY 2020.

MOE plans to take on the challenge of switching to 100% renewable energy at energy-intensive facilities such as National Institute for Minamata Disease in FY 2021.



Milestone for achieving MOE RE100		
Fiscal Year	Facilities achieving RE100	RE Achievement (Estimate)
2020	① Shikotsu-Toya National Park Lake Shikotsu Visitor Center ② Shikotsu-Toya National Park Office ③ Michinoku Coastal Trail, Natori Trail Center. ④ Shinjuku Gyoen National Garden ⑤ Yoshino Ranger Station ⑥ Ise-Shima National Park Yokoyama Visitor Center ⑦ Tosashimizu Ranger Office ⑧ Yakushima Ranger Office (incl. World Heritage Conservation Center) ⑨ Ise-Shima National Park Office	10~15%
2021	⑩ National Environmental Research and Training Institute ⑪ Kokyo Gaien National Garden ⑫ Biodiversity Center of Japan ⑬ Kyoto Gyoen National Garden ⑭ National Institute for Minamata Disease ⑮ Minamata Disease Archives	35~40%
~2025 (Estimate)	Main building of MOE, Nuclear Regulation Authority Other Facilities under the MOE direct control *Considering joint procurement by each block	85~90%
~2030 (Estimate)	Facilities outside the MOE direct control	100%

## ■ References

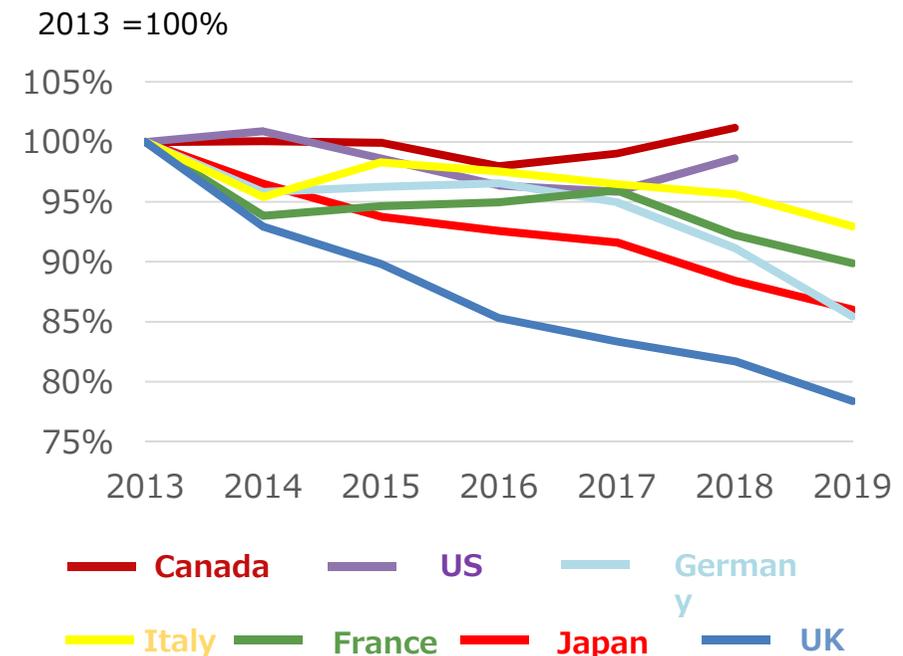
# Japan's NDC and revision of the Plan for Global Warming Countermeasures

- Japan has **started to revise the Plan for Global Warming Countermeasures** with the submission of the NDC to the UNFCCC in March 2020 as a turning point.
- **The review of reduction target** will be carried out consistently with the revision of the energy mix so as not to be held up until the next deadline for quinquennial submission pursuant to the Paris Agreement, and **will aim at aspiring figures to reflect further ambitious efforts.**

## Summary of Japan's NDC (March, 2020)

- Confirmed to continue to aim at resolutely achieving the level of a reduction of 26.0% by FY 2030 compared to FY 2013.  
→ will pursue further efforts to reduce GHG emissions beyond this level.
- Carries out a review on the Plan for Global Warming Countermeasures.  
→ will submit the information necessary to UNFCCC after its revision
- The review of reduction target will be carried out consistently with the revision of the energy mix, and will aim at aspiring figures to reflect.  
→ make sure not to be held up until the next deadline for quinquennial submission pursuant to the Paris Agreement

## GHG reduction level of G7 since 2013



## Procedure from now on

- Japan will continue the discussion on the review of the Plan for Global Warming Countermeasures at the joint meetings of Central Environment Council and Industrial Structure Council, while considering the impact of the COVID-19 pandemic and the prolonged schedule of COP26.

# Implementation of measures

- For 2050 carbon neutrality, **the decade from 2021 to 2030 is decisive.**
- We will trigger a regional decarbonization domino effect by implementing measures such as doubling the share of renewable energy consumption in regions.

“Zero carbon cities”: More than 250 local governments (representing more than 95 million people)  
Shift from “Declaration” to “Realization” (Budgeting)

- **Integrated support**, including support to the establishment of information infrastructure, planning, and to the introduction of renewable energy equipment
- Decarbonization measures will **foster a circular economy and increase the resilience of regions**

Council for National and Local Decarbonization

- ✓ Roadmap for decarbonization of all local governments by 2050
- ✓ Aim to realize model decarbonized regions by 2025

Carbon pricing

- ✓ Resume the examination of carbon pricing to promote the growth strategy in cooperation with the Ministry of Economy, Trade and Industry

Act on Promotion of Global Warming Countermeasures

- ✓ Examine the positioning of “2050 carbon neutrality” and the establishment of a system to foster the regional use of renewable energy

Plan for Global Warming Countermeasures and Long-Term Strategy

- ✓ Foster discussions to enhance measures to achieve the 2030 target
- ✓ Discuss the direction toward achieving the 2050 target

## Facilitation of decarbonization of subnationals

- a **new council for national and local decarbonization**, consists of **Ministers and Mayors**, launched in December 2020.
- **Expected outcome: Roadmap for 2050 carbon neutrality of all local governments by 2050**

**Participants in the meeting: 【National government】**

**(Chair) Chief Cabinet Secretary**  
**(Vice Chairs)**

**Minister of the Environment**

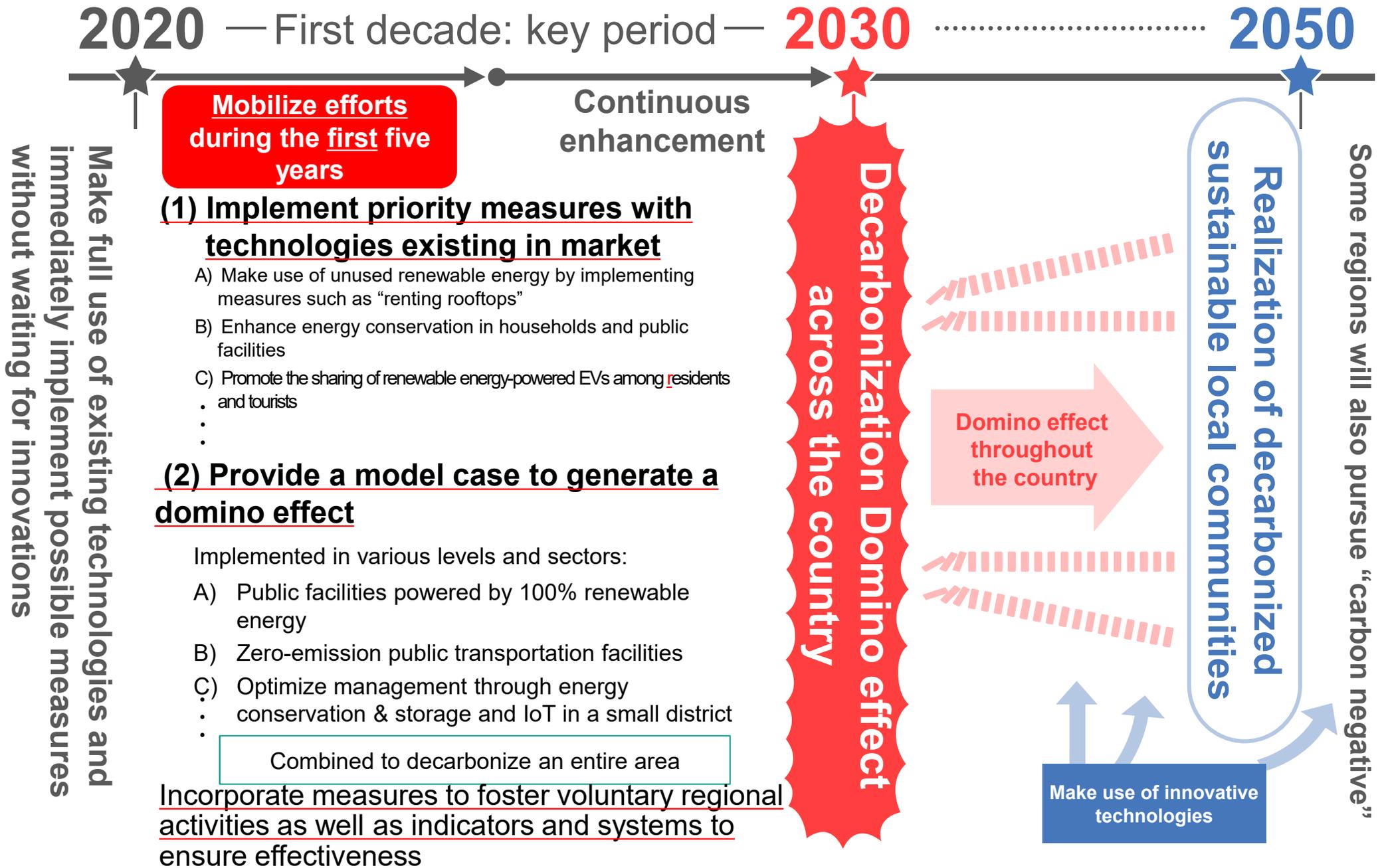
**Minister of Internal Affairs and Communications**

- Minister of State for Regional Revitalization
- Minister of Agriculture, Forestry and Fisheries,
- Minister of Economy, Trade and Industry,
- Minister of Land, Infrastructure, Transport and Tourism

**【Local governments】**

**Governor of Nagano Prefecture, Mayor of Yokohama City, Mayor of Ono City (Fukui), Mayor of Iki City (Nagasaki), Mayor of Karumai Town (Iwate) and Mayor of Tsunan Town (Niigata)**

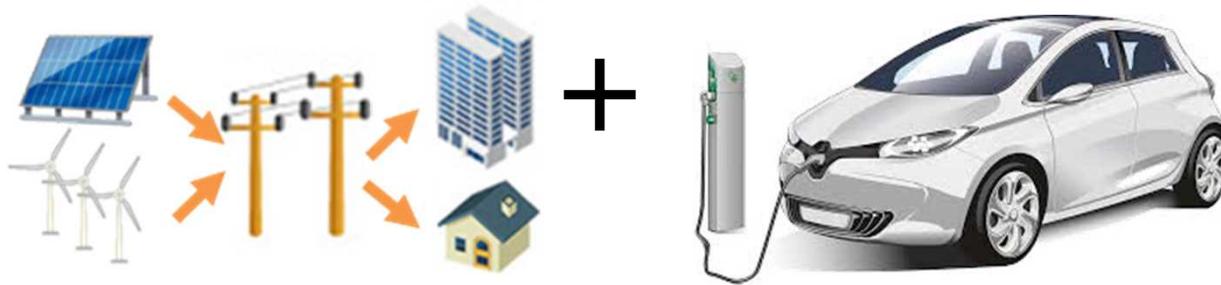
# Roadmap for decarbonization of subnationals



# Decarbonizing both housing and transportation with Moving Batteries

- ① RE100 power + EVs + charging stations
- ② Free parking spots and charging stations made available in national parks (in respectively 13 and 10 locations)

Target: Individuals, SMEs, local governments, and more

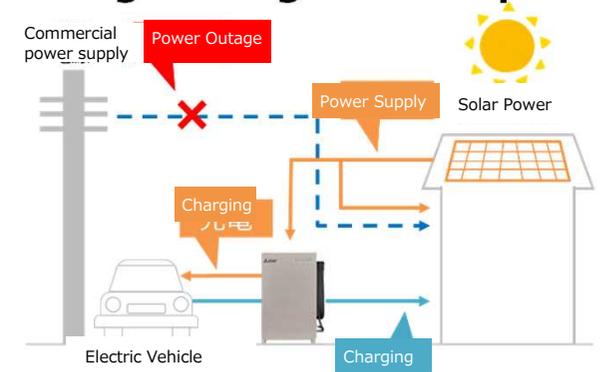


100% renewable energy supply<sup>※1</sup> Introduction of EVs<sup>※2</sup>

Originally set to 400,000 yen → Doubled to 800,000 yen

- ※1 Conditioned to 100% renewable energy supply and participation in monitoring surveys
- ※2 Incentives for purchasing EVs (electric vehicle), PHEV (plug-in hybrid vehicle), and FCV (fuel cell vehicle)

Strengthening disaster prevention



Introducing charging stations

Total incentive of **up to 1.95 million yen** upon the introduction of charging stations

※3

- ※3 Subsidizing 1/2 of charging station + installation costs (limited), totaling 1.15 million yen, details under consideration

# Budget plan for the path to decarbonization especially to support local governments committing to zero carbon emissions



## ■ Information on infrastructure development

Mapping local governments' current situation, planning tools (regional climate change countermeasures applied toward the realization of Zero carbon cities) **0.8 billion yen (new)**

→Assessing the situation toward the realization of zero carbon cities, mapping, developing scenarios, and building consensus

## ■ Supporting project development

Mainstream the introduction of renewable energy in project planning, capacity building toward the realization of sustainable and resilient communities. **1.2 billion yen (new) [Amended in March 2020]2.5 billion yen**

→Support the formulation of targets for the introduction of renewable energy, build support for renewable energy zoning, and the formulation of schemes and systems to introduce renewable energy, toward achieving zero emissions by 2050.

## ■ Supporting the introduction of equipment

Support the joint introduction of resilient and decarbonized equipment for self-reliant and decentralized energy in evacuation facilities **[Energy Special Account]5 billion yen (new)[Amended in March 2020]5.5 billion yen**

→This is "hard" incentive to provide renewable energy equipment to evacuation centers.

# Overview of the proposed partial amendments to the Act on Promotion of Global Warming Countermeasures



## ■ Major revisions

- 1. Establishment of the fundamental principles in light of the Paris Agreement and the declaration to realize carbon neutrality by 2050**
  - In light of the goals set in the Paris Agreement, incorporate realization of a decarbonized society by 2050, comprehensive improvement of the environment, economy and society, and close cooperation of stakeholders including citizens into the law as the fundamental principles for promoting global warming countermeasures
  - Clarifying the direction and assuring continuation of policy measures in this way will foster predictability among all players (citizens, local government, business operators, etc.) and thus **promote initiatives and innovation**.
- 2. Establish a plan/accreditation system to promote businesses that contribute to decarbonization utilizing regional renewable resources**
  - The revised act requires municipalities to include **targets for the implementation of initiatives** in the action plan for global warming countermeasures prescribed by each local government. Municipalities will also work to establish a promotion zone for businesses to achieve decarbonization utilizing regional renewable resources (regional decarbonization promotion business), as well as policies on environmental friendliness and regional contribution.
  - Businesses stated in a regional decarbonization promotion business plan certified by the municipality as meeting the action plan will be eligible for the **one-stop special exemption system\*** with regard to procedures of related laws and regulations.
    - \* One-stop service for procedures under the Natural Parks Act, Hot Springs Act, Waste Management and Public Cleansing Act, Cropland Act, Forest Act and River Act
    - \* Omission of a procedure under the Environmental Impact Assessment Act (Document on Primary Environmental Impact Consideration) in the drafting phase of a business plan
  - This will facilitate the smooth conclusion of a regional agreement and **promote decarbonization initiatives that utilize regional renewable resources**, which will also contribute to resolving regional issues.
- 3. Encourage digitization and open data regarding companies' GHG emissions information to promote decarbonization in corporate management**
  - Concerning the calculation/reporting/announcement system regarding companies' GHG emissions disclosure, electronic reporting will be made compulsory in principle, and the information will be made public without a disclosure request.
    - \* Development of a user-friendly system both for reporter and information user will be promoted together with the law revision.
  - Awareness campaigns and public relations activities for business operators will be added as tasks to be performed by the Japan Center for Climate Change Action.
  - Through this, information on companies' GHG emissions will be visualized promptly with greater transparency. It will also help to support regional businesses and **further promote efforts by Japanese companies**.