



Ministry of the Environment Government of Japan

# Latest Climate Change Policies & Long-term Low Carbon Vision in Japan

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13<sup>th</sup> Sep, 2017 9th LCS-RNet Annual Meeting in UK

# Contents

- Climate change policy development Overview
- 2. National Plan for Global Warming Countermeasures
- 3. Long-term low-carbon vision
  - (1) Background
  - (2) Current Situation
  - (3) Basic Concept
  - (4) Policy Direction

### **1. Climate change policy development Overview**

- Intended nationally determined contribution (INDC) submitted to UNFCCC (July 2015)
- National Adaptation Plan, Cabinet decision (November 2015)
- Paris Agreement, adopted at COP21 (December 2015)
- National Plan for Global Warming Countermeasures, Cabinet decision (13 May 2016)
- Revision of Law to Promote Global Warming Countermeasures, (20 May 2016)
- G7 Ise-Shima Summit (26-27 May 2016 )
- Long-term Low-carbon Vision, published by Central Environment Council under MOEJ (March 2017)



### 2. National Plan for Global Warming Countermeasures (May 2016)

### 2. National Plan for Global Warming Countermeasures (May 2016)

### 1. Outline

Promote Japan's global warming countermeasures in a comprehensive and a well-planned manner

### **2. Basic Direction**

- Mid-term target: 26% reduction by 2030 compared to 2013
- Long-term goal: aim for 80 % reduction by 2050
- Global GHG reduction
- **3. Progress Management of the Plan**
- Progress review: every year
- Revision consideration: every 3 years

# 2. National Plan for Global Warming Countermeasures (May 2016)

### **Examples of policies & measures listed in the Plan**

#### Presents policies & measures by gas, and clarifies the pathway to achieve 26% reduction



### (1) Background

 At the Ise-Shima Summit, the G7 committed to developing and submitting long-term low GHG emission development strategies as soon as possible or at the latest by 2020.

Aspects in Japan;
A massive reduction of GHG would have unforeseen changes to our society.
It is necessary therefore, to form a national vision.
Sharing the Vision of society and encouraging actions from citizens and entities is needed. It will also attract inward investment

Discussed in the Subcommittee on long-term low-carbon vision in Central Environment Council under MOEJ

 $\rightarrow$  The Vision published in Mar, 2017

### (2) Current Situation

Climate Change (Scientific fact)

Agreements were made in Paris Agreement to achieve a balance between anthropogenic emissions by sources, and removals by sinks of GHG, in the second half of this century

### Economic and social challenges in Japan

Respond to various problems including **depopulation**, **aging**, requirement for **economic revival**, **local/global problems** 

### Economic and social challenges in Japan

### **Population by Generation**

- Aging of the population and declining birthrates will progress, and the population of Japan has already peaked in 2008.
- It is estimated that the overall population will be 97 million by 2050 (-20%) and the production-age (15-64) population will be 50 million by 2050 (-29%).



(Resource) By 2016 FY Annual Report on the Aging Society

#### Economic and social challenges in Japan

#### **Transitive Graph for Aging (2015)**



#### Economic and social challenges in Japan

### per capita "GHG Emission/GDP" - Rank in OECD countries -

#### Japan's ranking has been decreasing since 2000



(Resource)

Created from GHG Data (UNFCCC), World Economic Outlook Database(IMF), GDP is based on Nominal value, 2015FY National economy calculating annual estimates (Revised on the basis of 2011FY ver.) (Cabinet Office)

### (3) Basic Concept

#### Japan's future vision

Forerunner of finding answers for emerging Issues to achieve both massive GHG reduction & prosperity, finding a **simultaneous solution for climate change and economic & social challenges** 

"Simultaneous solution" of economic and social problems, driven by climate change

Contribution to global reduction as well as domestic reduction

Innovation (on technology, socioeconomic system and lifestyle) is the key

"Now" is the time to act

### "Now" is the time to act

#### **Carbon budget**

- The "Carbon budget" is one of the most important concepts in climate change action.
- For significant reduction of cumulative emissions, continuous and serious actions, with a sense of crisis, are necessary.





#### Avoidance of "lock-in"

- Once city structure and large-scale facilities are introduced, CO2 emissions could remain high (lock-in effect) over time.
- •A Need for response considering long-term environmental impact.
- •A Need for perspective of what to do going forward.



#### **Principle of environmental policy**

- Prevention approaches, precautionary principle and a polluter pays principle are principles of environmental policy, established in the development of several international laws and in history, to overcome environmental pollution.
- Now is the time to act to avoid/mitigate damage caused by climate change, though the damage is already visible.

#### **Technology diffusion**

• Together with R&D and demos of new technologies, gradual diffusion should be promoted as it takes time.



- **Global trend**
- Actions of countries around the world, local governments and various actors such as businesses, the finance industry, civil society are accelerated.
- Failure of following this trend will possibly harm Japan's interests.



# Key to long-term massive reduction is innovation

Great social transformation is essential to achieve massive GHG reduction in the long term. Innovation beyond the scope of existing measures thus far, is necessary.

#### **Images of massive reduction in various sectors**



#### Images of massive reduction in various sectors



(出所)環境省「NCVプロジェクト」(平成28年12月

(出所)津山市資料より環境省作成

NPO法人

エコネットワーク津山

売上に基づくクレジット代金

商品代金

(クレジット代金)

ふのり

地域

東松島地域新電力

PPS

地産地消電力

生ごみ資源化事業と

農業との連携

お金

バイオマスツアーや

CLTチョコレートの

(出所) 直庭市資料より環境省作成

バイオマスツアーの様子

環境に優しいなら

ペレットクッキー

製诰販売

雷気

### Future Image of Region & City in Japan



### (4) Policy Direction

### **Policy Direction**

(a) Full usage of existing technologies, know-how and findings(b) Development and deployment of new innovation(c) Full mobilization of all effective policies and measures (PaMs)

#### **Carbon pricing**

Make the best use of market dynamism. Enhance market competitiveness of low-carbon technologies, products and services. Improve environment for innovation.

Disclose environmental information, promote and diffuse innovative technology, land use, contribute to the global GHG reduction.

Making progress for long-	Review progress incl.
term massive reduction	cumulative GHG emission.

\*Different opinion exist on several policy directions, incl. carbon pricing.