



**METI**  
Ministry of Economy,  
Trade and Industry

# **Overview of Japanese CCUS Policy**

**-Saving our beautiful planet with CCS-**

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# The Long-term Strategy under the Paris Agreement

## ■ Basic Concept

- ✓ Accomplish “decarbonized society” as early as possible in the second half of this century
- ✓ Take measures towards the reduction of GHGs emissions by 80% by 2050
- ✓ Realize “a virtuous cycle of environment and growth”

The Long-term Strategy  
under the Paris Agreement



June 2019  
(Cabinet decision, June 11, 2019)  
The Government of Japan



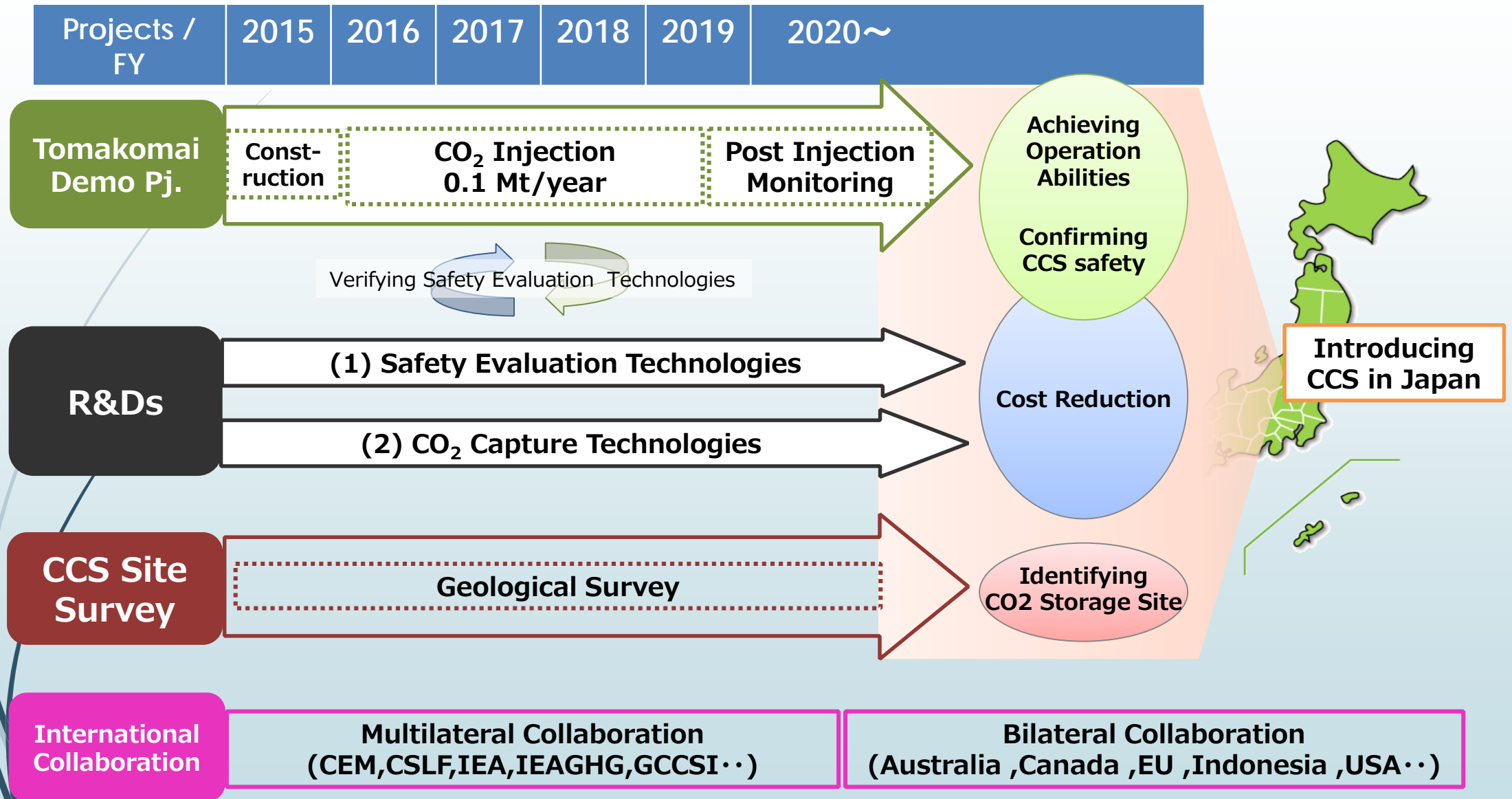
**The Long-term Strategy specifies CCS as one of the key technologies for accomplishing “decarbonized society”**

# CCS on “The Long-term Strategy under the Paris Agreement” (Cabinet decision, June 11, 2019)

## Chapter 2 : Long-term Vision of Each Sector and Direction of Policies and Measures Section 1. Policies and Measures for Emissions Reductions, 1 Energy

- ✓ Being necessary to achieve the storage of CO<sub>2</sub>, study on suitable sites for storage will be conducted.
- ✓ Public-private cooperation will be sought in this area to achieve optimal CO<sub>2</sub> transportation, and will be sought early adoption of the CCS and CCU in the society.
- ✓ Introduction of the CCS by 2030 in the coal-fired power generation will be considered, with a view to commercialization.

# Overview of Domestic CCS Policy in Japan



# Japan's worldwide action for CCUS development & deployment

## EU:

- ✓ Agreed Press Statement including sharing information on CCUS at G20 ministerial meeting in Karuizawa

## Canada:

- ✓ Signed MOC including CCUS at G20 Karuizawa
- ✓ Signed MOC between the International CCS Knowledge Centre and Japan CCS. Co., Ltd.

## Saudi Arabia :

- ✓ Saudi-Japan vision 2030 2.0 (2019)
- ✓ FS for CO2 free-ammonia supply



## USA:

- ✓ MOC on the CCS collaboration
- ✓ R&D and FS for CCS deployment
- ✓ Petra Nova CO2EOR project



## Indonesia :

- ✓ Signed MOC including the CCUS technologies at G20 Karuizawa
- ✓ FS for applying CCUS to JCM

**Multilateral Collaboration**  
(CEM,CSLF,IEA,IEAGHG,GCCSI・・・)

## Australia:

- ✓ Signed MOC including the CCUS technologies at G20 Karuizawa
- ✓ Hydrogen Energy Supply Chain (HESC) Project: Australian brown coal will be converted into liquid hydrogen with CCS for export to Japan.



# G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth in Karuizawa (June 15 & 16, 2019)

Ministers shared awareness concerning the significance of **innovation** as a driving force for energy transitions and the significance of promoting innovation in diverse areas, such as hydrogen, **CCUS**, and **Carbon Recycling**.

## Communique

- The G20 Energy Ministers, depending on national circumstances, recognize the potential of developing and deploying **CCUS technologies, including through international cooperation and multilateral innovation initiatives**, taking note of work on "Carbon Recycling" and "Emissions to Value".





# Carbon Utilization & Recycling

Japanese Prime Minister Abe's Keynote Speech at the World Economic Forum Annual Meeting (January 23, 2019)



*“ We must invite more and still more disruptive innovations before it's too late. **CO<sub>2</sub>**, ladies and gentlemen, **could well be the best and most affordable resource for multiple uses.** There is **artificial photosynthesis**, for which a key discovery, one for photocatalysis, was made by Akira Fujishima, a Japanese scientist. An old technology of **methanation** is getting attention anew to remove CO<sub>2</sub>. **It's time now to think about CCU, Carbon Capture AND Utilization.** “*

# First International Conference on Carbon Recycling

- **Date and Time** : September 25, 2019 13:00-17:00
- **Organizers** : METI and NEDO
- **Participating countries, regions and organizations**: 20
- **Number of participants**: Approximately 450

METI announced “the Carbon Recycling 3C Initiative”

- 1) **“C”aravan**: Promotion of mutual exchange
- 2) **“C”enter of Research**: Establishment of R&D and demonstration base
- 3) **“C”ollaboration**: Promotion of international joint research



International Conference on Carbon Recycling 2019



Former METI Minister Sugawara's announcement

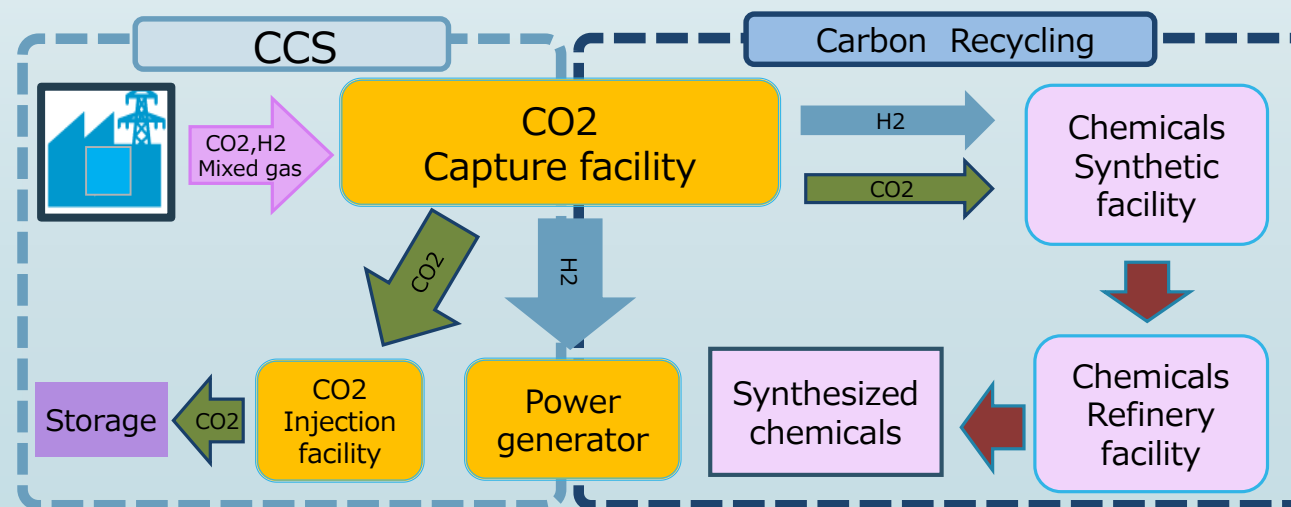


# Japanese CCUS policy for the future

The injection of CO<sub>2</sub> at Tomakomai reached our initial target of 300,000 tons in total in November.

## As a next step;

- ① Review the Tomakomai CCS Demonstration Project
- ② Consider the process and business environment for introducing CCS in Japan. Such as,
  - ✓ Analyze the contribution of CCS toward the reduction of GHGs emissions by 80% by 2050
  - ✓ Consider the suitable division of roles between the public and private sectors
- ③ Utilize the Tomakomai CCS facility effectively and promote the development of carbon recycling



<The image of Carbon recycling demonstration at Tomakomai>



**Thank you for your attention**