



経済産業省
Ministry of Economy, Trade and Industry

Procedure of Baseline making process in Japan

July 2018
Fluoride Gases Management Office
METI, Japan

1. Reduction status of fluorocarbons

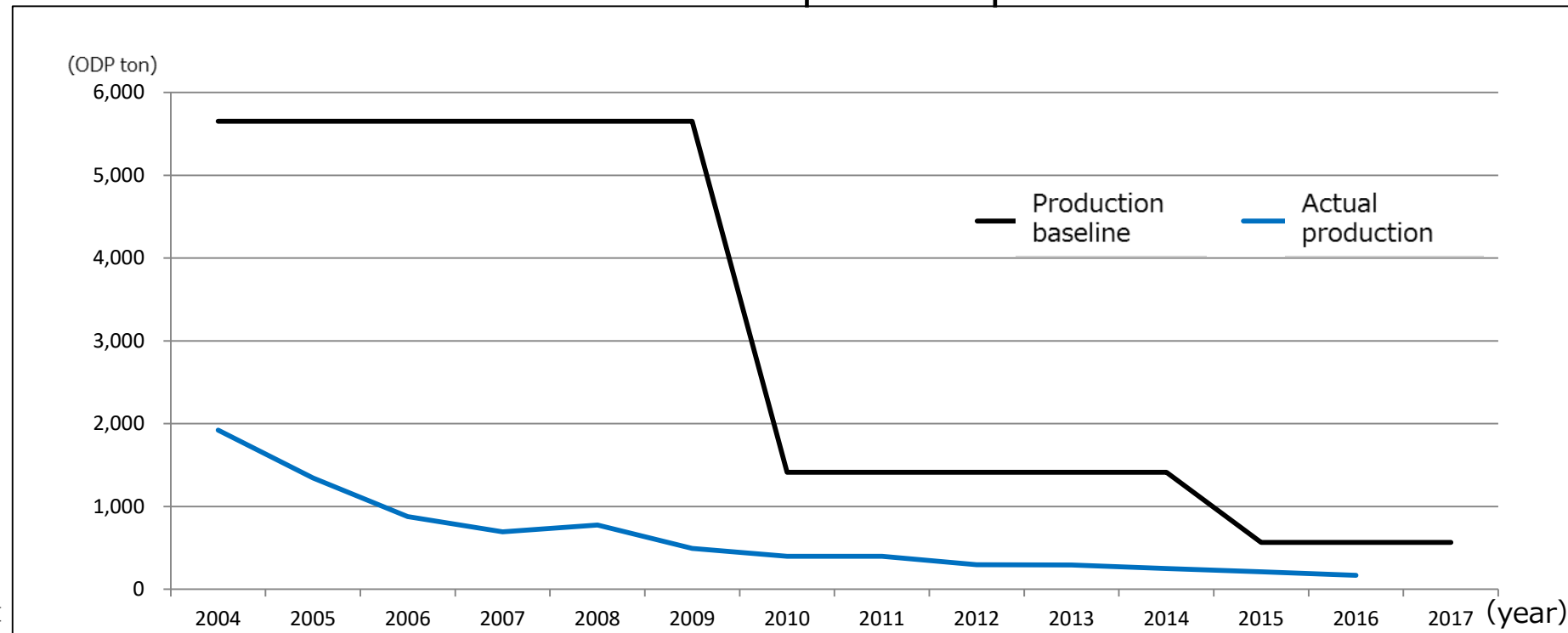
2. The detail of procedure of baseline making process

3. R&D Promotion

1 – 1. Control of fluorocarbons

- Measures for production, consumption and import of CFCs and HCFCs have been taken for protecting Ozone layer and proper implementation of the Montreal Protocol by the Ozone Layer Protection law since 1988.
- Production and consumption of ODSs other than HCFCs have been phased-out by 2005. HCFCs such as R22 will be phased-out by 2020.
- However, the Montreal Protocol does not require prohibition use of those equipment using HCFCs, and they will be used even after 2020.

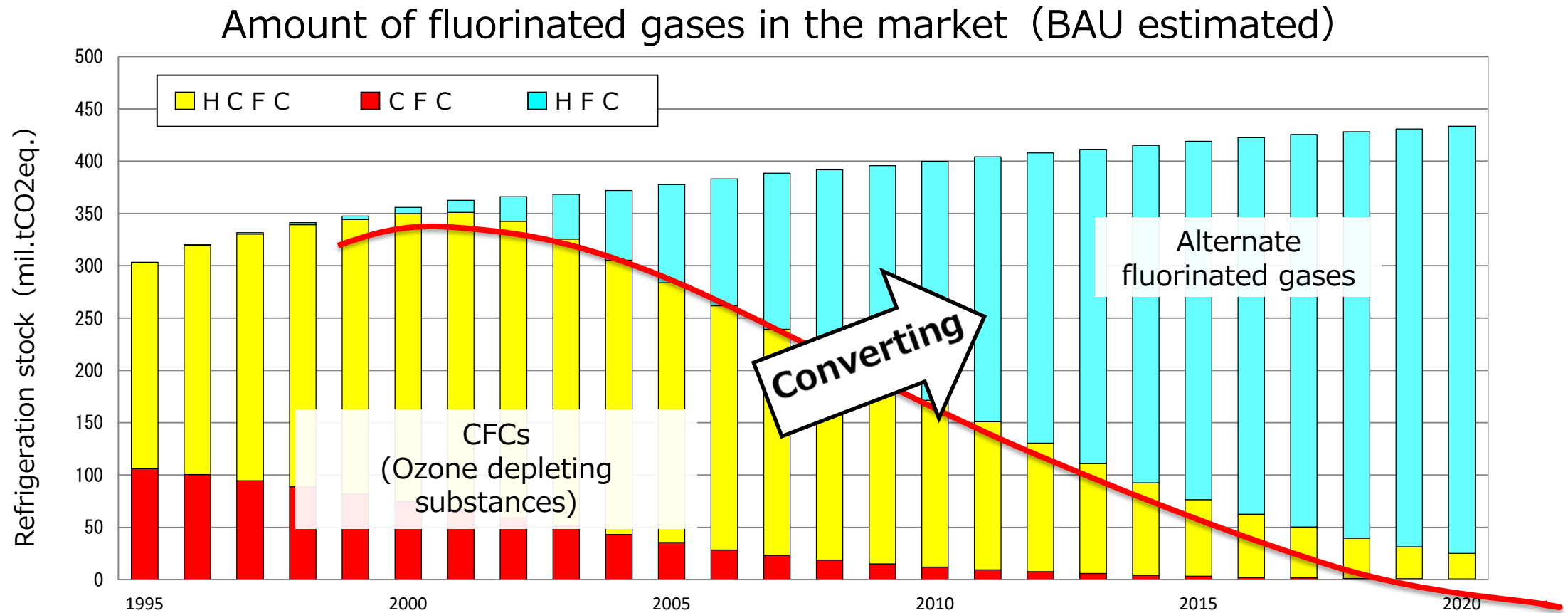
HCFC reduction steps for Japan



Source: METI

1 – 2. Stock increase of HFCs

- Stocked fluorinated gases have been increased in the market as CFCs converted to the alternatives since 2000 and which is a main cause of emission increase of HFCs.
- Immediate action on reduction of the stocked fluorinated gases in the market will be needed by converting to low-GWP and/or non-HFCs.



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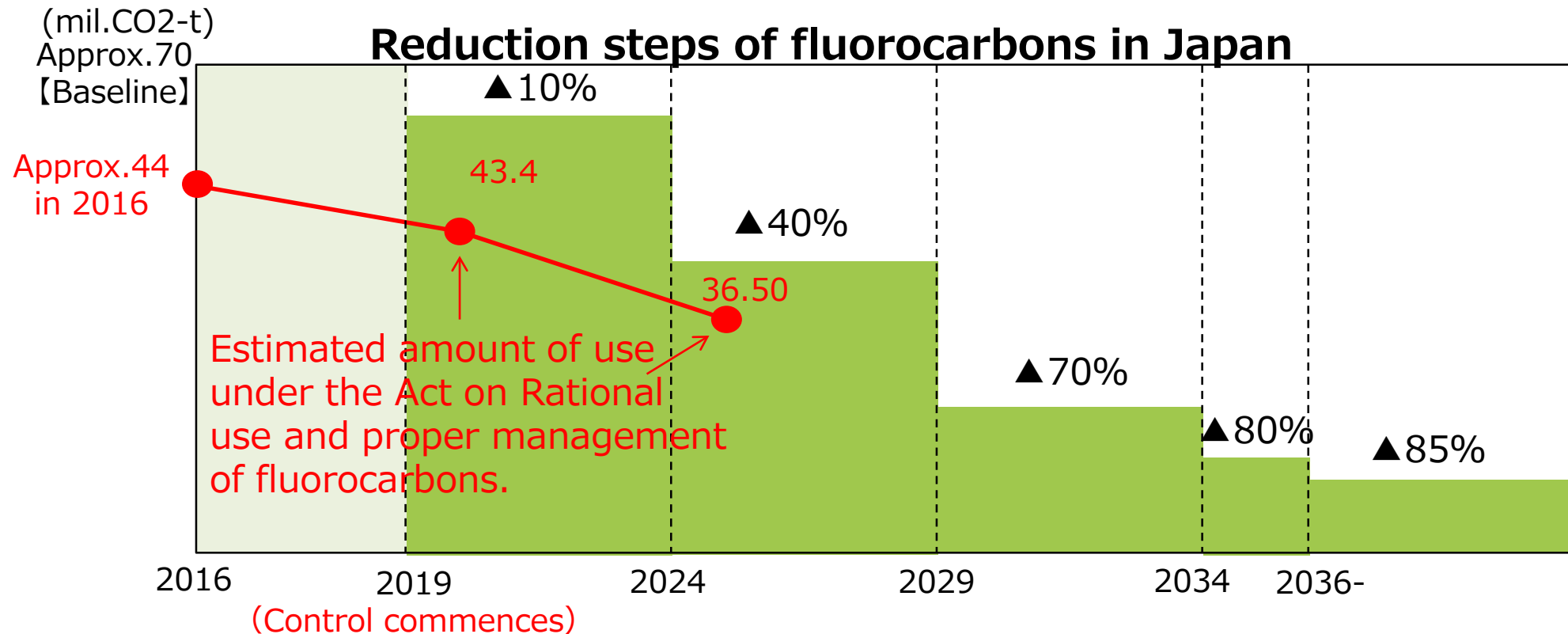
3 . R&D Promotion

2-1 Overview

- The ozone layer protection law was revised on July 4, 2018, and announcement (Promulgation) was done.
- This legal revision might fit in with Kigali amendment.
- Revised ozone layer protection law is going to enforce from the day when Kigali amendment in Montreal Protocol comes into the force.
- A ratification country of Kigali amendment were up beyond 39, and it will be carried out from January 1, 2019.

2 – 3. Reduction obligation under the amendment

- The amendment to the Montreal Protocol imposes mainly reduction on its calculated level of production and consumption (production + import – export) HFCs under certain amount.
- For the developed countries including Japan, reduction from the baseline (average 2011-2013) will commence in 2019 and phase down to more than 70% after 2029 and beyond.
- Japan will be in compliance with the reduction steps by 2025 according to the estimated amount of use indicated below.



2 – 4. Procedure (expected)

Japanese Baseline setting process

Baseline has to be calculate from Production, Import and Export of average amount of 2011-2013

1. July-August

Ministry of Economy Trade and Industry (METI) issued an order to data collecting from HFC's Producers, Importers and Exporters report of their handled HFC's from 2011 to 2013. They have to report to METI until 1 of August.

2. August-September

METI will calculate the baseline from these collecting reports, and refer to the Industrial Structure Council and the Central Environment Council.

Japan will decide the Baseline by GWPTon and reducing rate of HFC's.

2 – 4 . Procedure (expected)

Set Baseline for individual companies

October - November

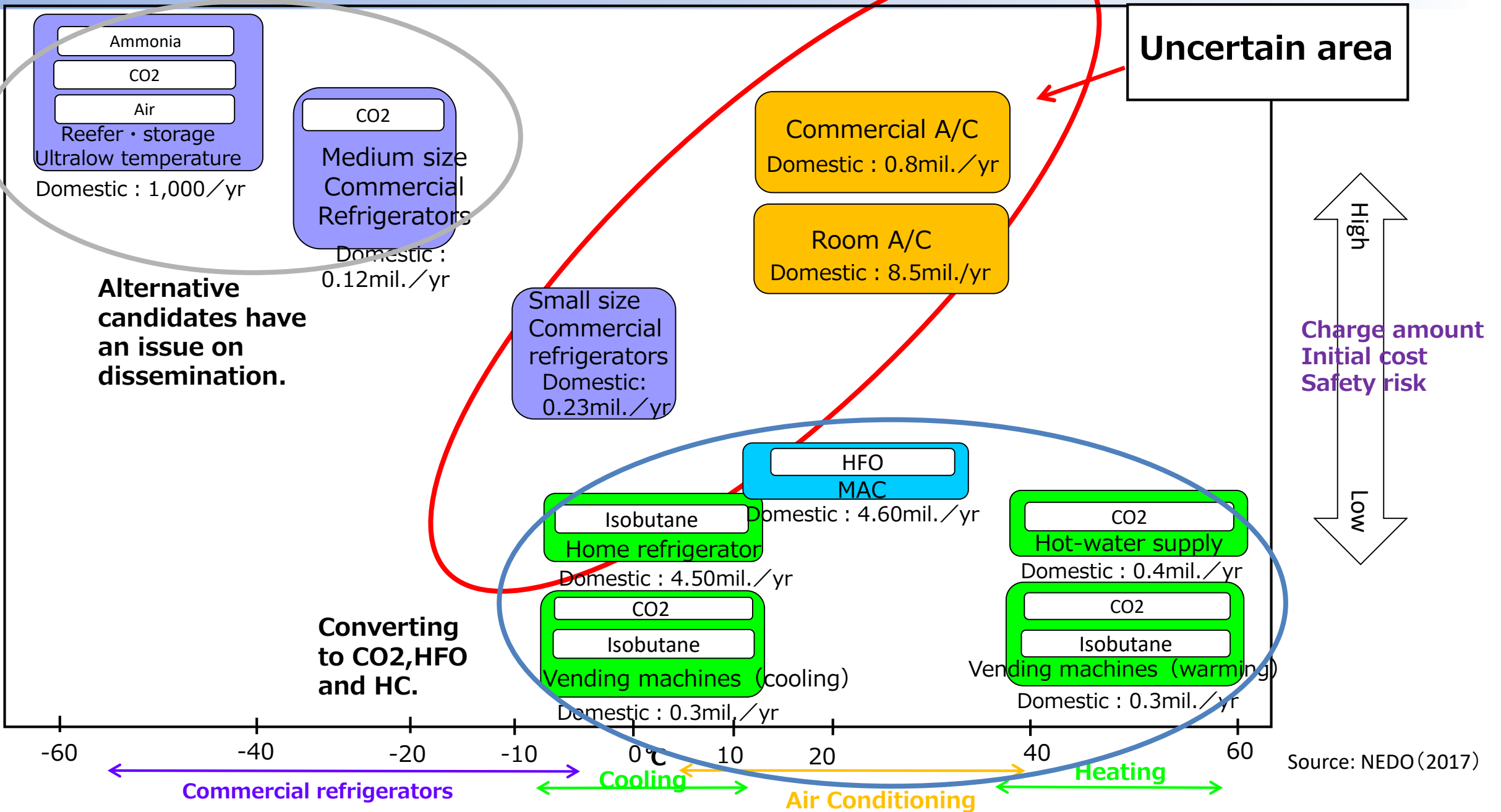
METI will consult with the every HFC's manufactures, importers and exporters. And they will report of handled HFC's quantities from 2011 to 2018. And also they will declare of GWP amount that is average of selected arbitrary consecutive 3 years from 2011 to 2018 and apply to make it the baseline of the company. METI should calculate all companies declared amount.

December

METI will set the baseline and notice to each company. After that METI gives permission of manufacturing and import.

- 1 . Reduction status of fluorocarbons**
- 2 . The detail of procedure of baseline making process**
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3 – 1. Alternate refrigerants mapping



Development of optimization technologies and evaluation method for the next generation refrigerant/refrigeration and air conditioning equipment

2018 budget **2.2 million US\$**

Project Purpose / Overview

At the meeting of the Montreal Protocol in October of 2016, Kigali amendment had decided, which had the obligation to step-by-step reduction of production and consumption of HFC, which does not destroy the ozone layer but has a high greenhouse effect, was resolved. In this amendment, developed countries agreed to reduce HFC by 85% by 2036.

It is difficult to achieve this goal with refrigerant substances (used with air conditioners etc.) using existing CFC substitutes, and it is inevitable to switch to alternative substances. For next-generation refrigerant substances that compatible with energy efficiency and low temperature chamber effect, there are issues such as having combustibility, and risk assessment for practical use is indispensable.

For this reason, we will arrange for a development base for energy-saving refrigeration air conditioning equipment and the like corresponding to new refrigerant. By establishing a risk assessment method for next-generation refrigerant substances, and conducting air-conditioning equipment evaluation under the practical circumstances.

Achievement goal

By establishing a risk assessment method for the next generation refrigerant and aiming at international standardization in the 5 years from FY2018 to FY2022, the next generation refrigerant / refrigeration air conditioning equipment etc. that can achieve energy saving / low temperature chamber effect etc. We will accelerate development. (In FY2029, we aim to reduce CO2 equivalent to about 1.49 million tons / year by refrigerant conversion.)