

# Global Warming Countermeasures in Nagano Prefecture

## Development of Nagano Sustainable Energy and Climate Change Policy Plan

In order to realize a society that promotes the reduction of greenhouse gas emissions and energy consumption while maintaining economic growth, the Nagano Sustainable Energy and Climate Change Policy Plan was established (February 2013) to comprehensively promote global warming countermeasures and environmental energy policies such as energy-saving countermeasures at households, companies and buildings as well as to support the promotion of natural energy businesses driven by local communities.

### ○ Plans and Reports of Climate Change Policy in Business

- Newly established to promote energy savings in business activities. Revised the ordinance for Nagano Prefecture Global Warming Countermeasures (March 2013).
- A company establishes a global warming countermeasures plan and the prefecture provides advice and instructions (in 2016, 287 companies were excluded).

### ○ Sustainable Energy Performance of Building; Introduction of Natural Energy to Building

- Mandate that owners of buildings including detached residences examine the introduction of energy-saving performance and natural energy equipment when they build new buildings (**first measure in Japan for detached residences**).

### ○ Support creation of natural energy driven by local communities

- 1 Natural Energy per Community project - **203** actions have been registered (as of March 27, 2017).  
Promote the creation of natural energy industries by registering and introducing local actions related to natural energy.



Firewood boiler business  
(in Komoro City)



Photovoltaic power generation  
business (in Iida City)



Small hydropower generation  
business (in Kiso Town)



Snow and ice heat usage  
business (in Iizuna Town)

### • Consultation meetings by Small Scale Hydro Caravan

In order to support the industrialization of small hydropower generation, related prefectural government departments and the Nagano Prefectural Federation of Land Improvement Association organized a cross-functional caravan, and held regional visiting consultation services and workshops for the selection of suitable locations.

# The reinforcement of climate change countermeasures



しあわせ信州

## Target of total emissions reduction of greenhouse gases by Plans and Reports of Climate Change Policy in Business (KtCO<sub>2</sub>)

**Short term (FY2020):**

**Reduction by 10%**

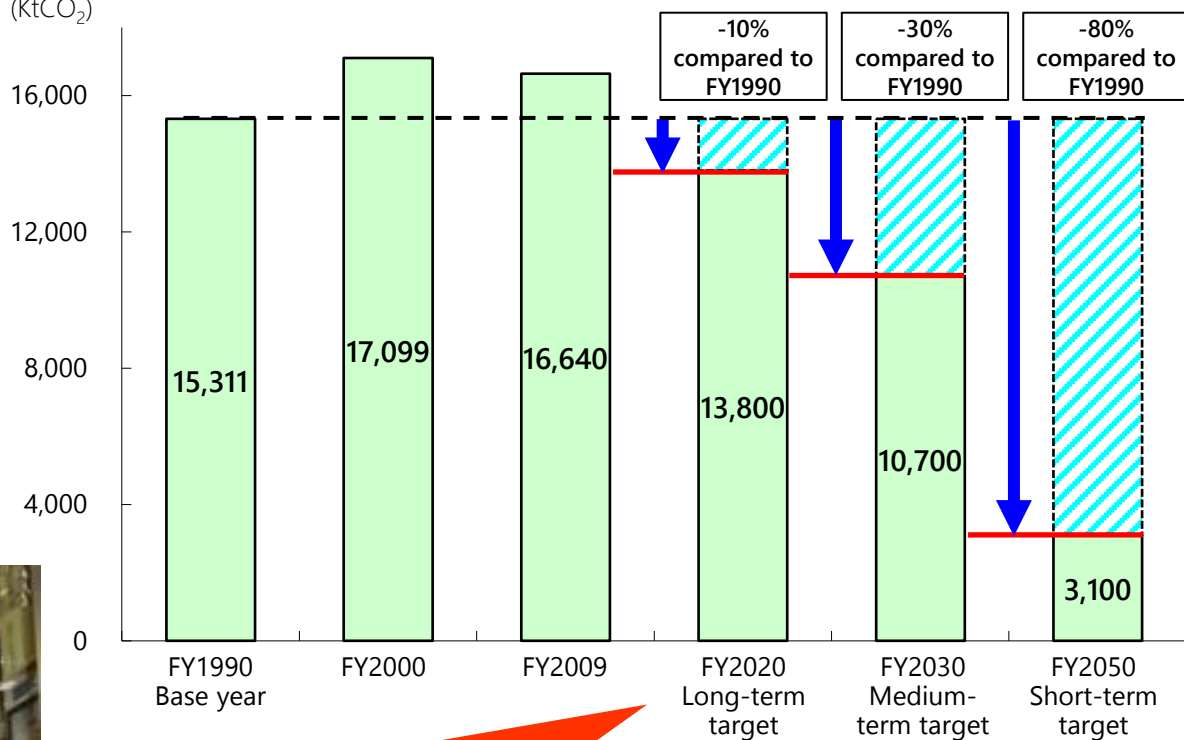
**Medium term (FY2030):**

**Reduction by 30%**

**Long term (FY2050):**

**Reduction by 80%**

In addition to countermeasures by large companies, it is vital to promote countermeasures by small/medium-sized companies to further reduce greenhouse gases.



**Earned the Highest Award 2016 of Local Climate Policy in Japan**  
(Low-Carbon Cup 2016)



**Shinshu Energy-saving Patrol Team**  
Energy-saving diagnoses of equipment and facilities conducted by volunteers.

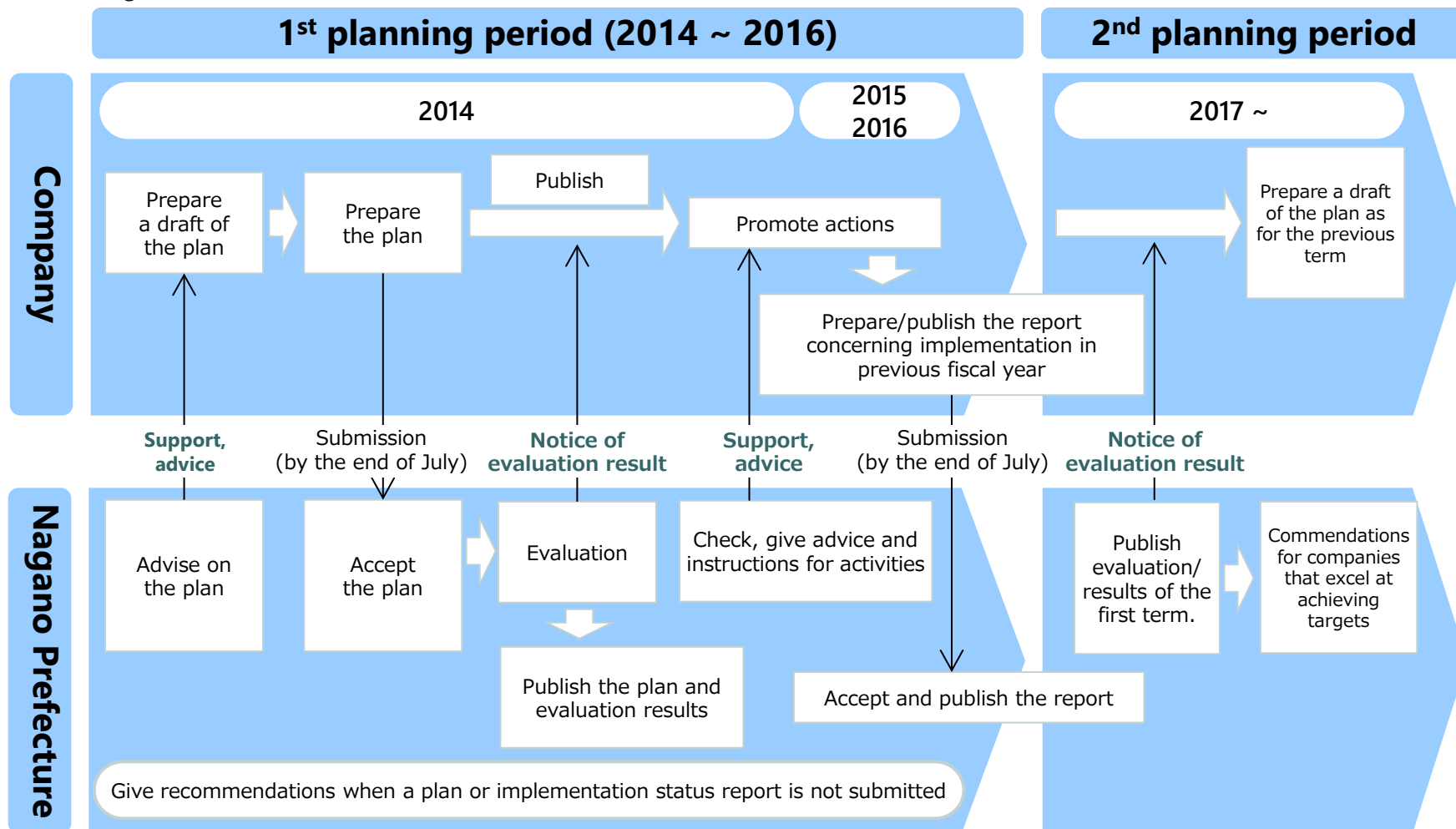
### ● Global warming countermeasures by small/medium-sized companies

- Voluntarily submit plans and reports of climate change policy in business.
- Energy-saving diagnoses utilizing the Shinshu Energy-saving Patrol Team
- Support for construction of regional platform in energy-saving consultation



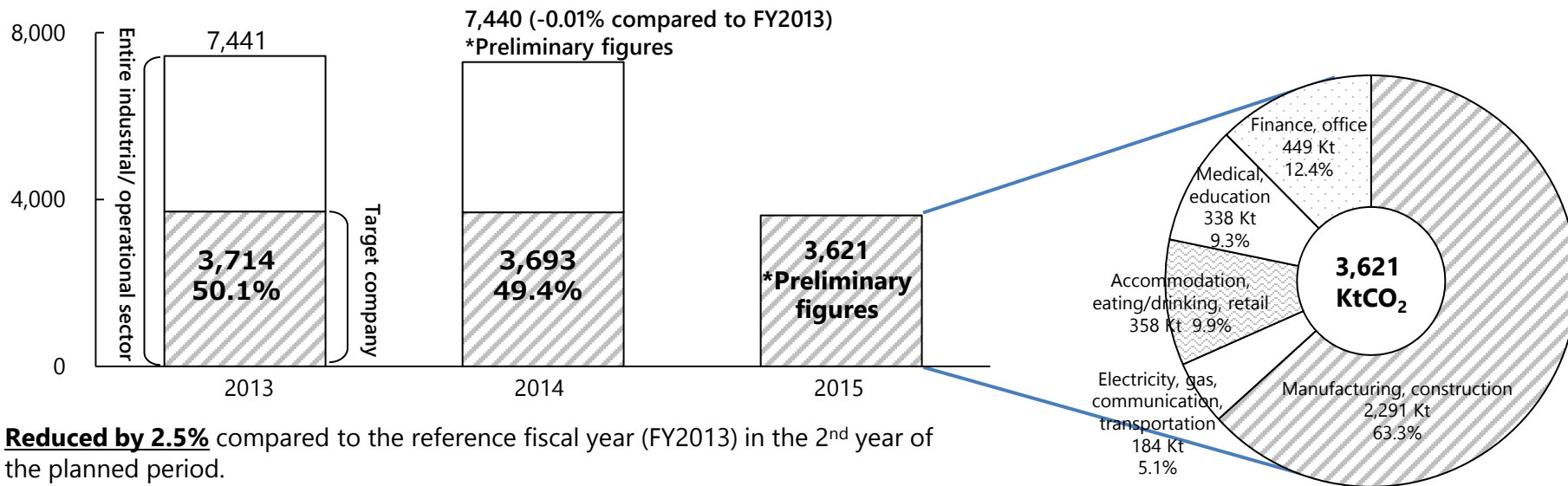
## ● Target companies

1. Total energy consumption in crude oil equivalent at plants in Nagano Prefecture etc. is 1,500 kL or more.  
(Energy consumption in crude oil equivalent at all operation bases that the company has in Nagano Prefecture)
2. 200 or more vehicles are used for business activities in Nagano Prefecture.
3. Total greenhouse gas emissions other than energy-related CO<sub>2</sub> emissions in plants etc. in Nagano Prefecture is 3,000t-CO<sub>2</sub> or more.  
(Greenhouse gas emissions other than energy-related CO<sub>2</sub> emissions in all operation bases that the company has in Nagano Prefecture)



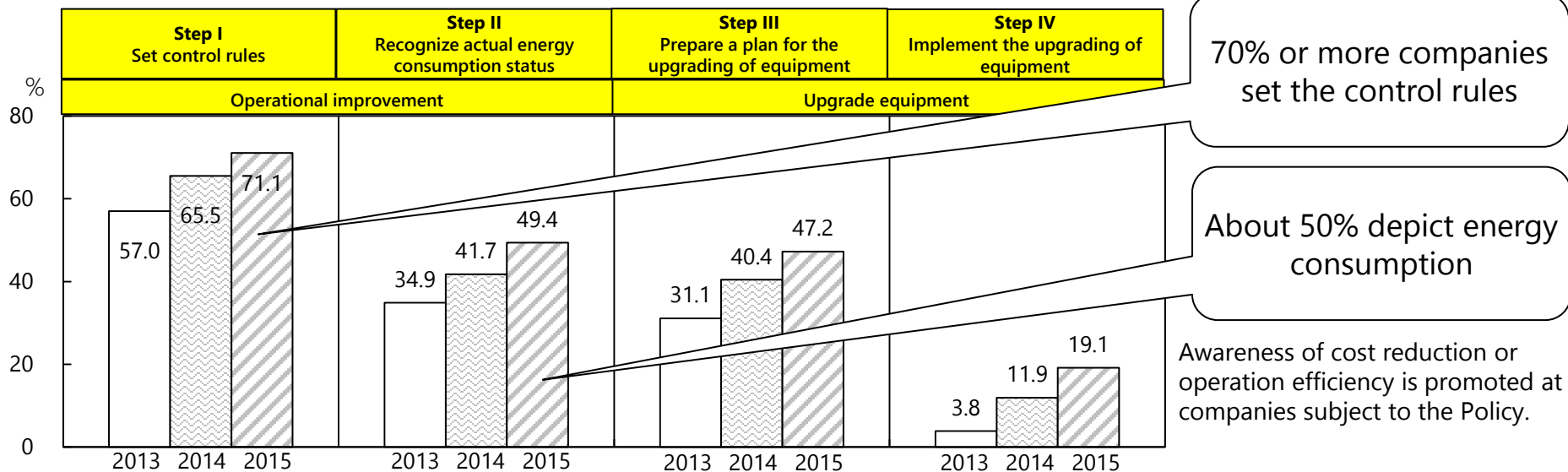


## Greenhouse gas emissions of industrial/operational sector



**Reduced by 2.5%** compared to the reference fiscal year (FY2013) in the 2<sup>nd</sup> year of the planned period.

## Energy-saving activities at large-sized operation bases



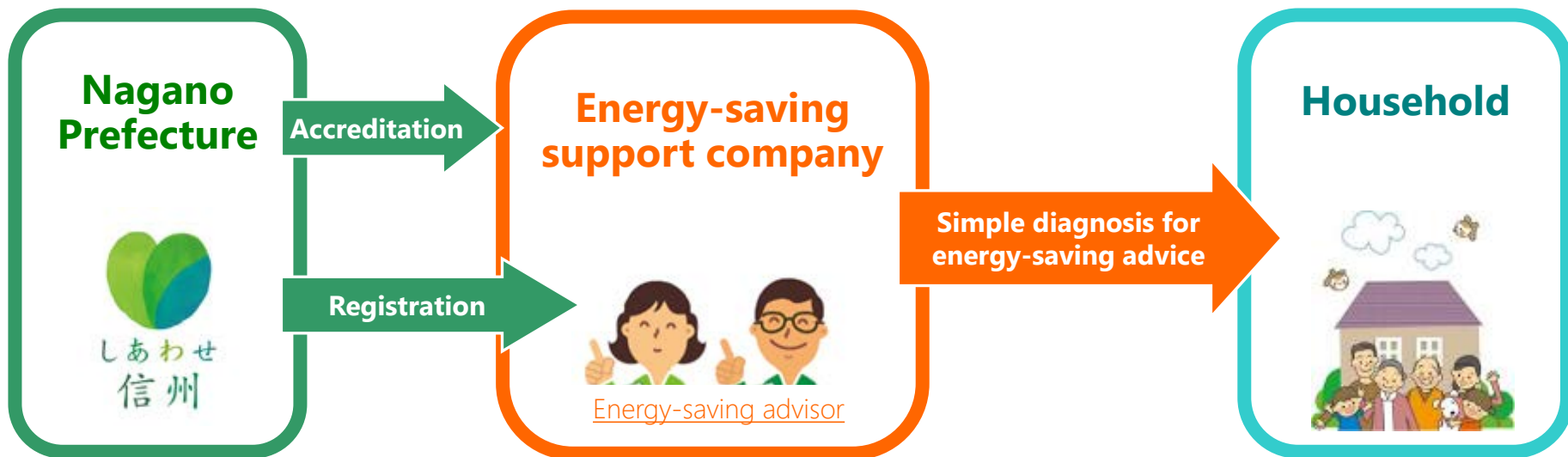


## ● Energy saving support program for households

In order to directly support actions for energy saving at households, employees registered in Nagano Prefecture (energy-saving advisors) of companies accredited by Nagano Prefecture (energy-saving support companies) use opportunities to visit household, and provide advice on energy saving and energy-saving diagnoses.

39 companies such as the gas company, Agricultural Association, etc. are registered as energy-saving support companies. 408 persons are registered as energy-saving advisors.

Since FY2013 when this program started, advisors have visited about 98,000 houses in total and provided advice on energy saving measures.



## ● Climate change adaptation measure

### ● Shinshu climate change monitoring network

Established in November 2014 in order to recognize the current climate change in Nagano Prefecture and predict future scenarios.

Consisting of 51 public organizations located in Nagano that gather weather information, the Nagano Environmental Conservation Research Institute centrally collects and analyzes weather information gathered by participant organizations.

### ● Shinshu climate change adaptation platform

Established in 2016 in order to promote actions to create products, technologies and services or to plan policies adapting to climate change through cooperation with industry, university and government. Currently composed of 49 organizations including government, companies, research institutes, etc. Concrete study has been started in the fields of agriculture, disaster prevention and ecological systems.