

24 November 2020

JGA Chair Michiaki Hirose Press conference on 24 November 2020 Summary of remarks

Regarding Prime Minister Suga's declaration "Aiming for a carbon-neutral, decarbonization society in 2050"

<Introduction>

Prime Minister Suga's declaration of "Aiming for a carbon-neutral, decarbonization society in 2050" is very epoch-making and historic. The gas industry has implemented various efforts to reduce environmental impact, but we would like to take this declaration as an opportunity to further accelerate our efforts. Since it has not been long since the Prime Minister Suga's declaration, the Japan Gas Association is still in the process of systematic discussions and consensus building, but I would state my thoughts on the declaration.

Since the city gas business started from gas light at Yokohama in 1872, we have supported people's lives and industry with our business model of "manufacturing gas, supplying it through pipeline, and providing services according to the needs of consumers". It can be said that the history of city gas business is the history of various environmental changes, disasters, and competition with other energies. This is, so to speak, a history of facing trials head-on and changing ourselves as the times change, and that is our DNA.

On the other hand, looking to the future, there are major changes such as decarbonization, response to frequent natural disasters, and digitization, and there is an urgent need to reform the social and industrial structures toward

the realization of a sustainable society..

Energy is indispensable regardless of the times, and the sophistication of S + 3E is an important issue. Especially in light of environmental compatibility, Prime Minister Suga's policy of "carbon neutralization in 2050" is an extremely challenging goal. Even in the industrial world, discontinuous efforts that are not an extension of conventional global warming countermeasures are required.

Energy is used not only in "electric power" but also in various forms such as "heat", which accounts for about 60 % of energy consumption in the consumer and industrial fields, and "transportation". For those reasons, it is important to properly use energy in the right place according to the usage pattern and optimize the energy as a whole. Furthermore, from the perspective of strengthening resilience, multiplexing energy networks is extremely important. In addition, since energy is the blood that supports life and industry, it is necessary to smoothly transition to a decarbonized society without stopping supply. We, the gas industry, will actively contribute to the realization of a carbon-neutral and decarbonized society in the future in order to realize such energy diversification, multiplexing and smooth transitions.

- 1. Toward the realization of a carbon-neutral, decarbonized society
- (1) Basic concept

Positioning the 30 years up to 2050 as the transition stage, we will promote the following initiatives.

a) Advanced innovation of gas energy

We will take on the challenge of advanced innovations in gas energy such as hydrogen, metanation, biogas, and CCUS. We will gradually introduce these innovations while developing infrastructure, and for the time being, we will also utilize carbon-neutral LNG and aim to realize carbon-neutral in 2050. There are still many fluid factors, and it cannot be said that it is definite. However, as the current target image, we would like to aim for

introduction of 5 to 20% by 2030, 30 to 50% by 2040, and 95 to 100% by 2050.

b) Natural gas shift and advanced utilization of natural gas

In order to reduce cumulative CO 2, we will promote a thorough shift to natural gas and advanced use of natural gas as an initiative on the demand side .

c) International contribution

In view of the expansion of global use of gas energy such as hydrogen, we will transfer Japan's excellent gas-related technologies overseas to contribute to international contribution and improvement of Japan's presence..

(2) Advanced innovation of gas energy

Through innovative innovation, we will promote "decarbonization of the gas flowing in the pipe itself". Utilization of metanation technology, which is a typical example, can contribute to the reduction of social costs because existing facilities such as pipelines and gas appliances can be used. In addition, there is a lot of room for development, and we will work on the direct use of hydrogen, which is a field that will lead to the growth of Japan. In addition, biogas will be utilized to promote decarbonization of the gas itself.

(3) CO 2 reduction by natural gas shift and advanced utilization

In addition to fuel conversion, we are promoting a shift to natural gas by expanding demand for new applications such as LNG bunkering. The adjustability of the renewable energy is expected to be, and also contribute to resiliency enhanced co - expanding the introduction of generator or a fuel

cell or the like distributed energy system, achieving further promotion of efficiency and Smart Energy System Gas System Therefore, it contributes to steady CO 2 reduction.

2. Picture of future gas supply

Considering the picture of future gas supply that combines innovation technology and gas infrastructure, it is assumed as follows.

- (1) Coastal area: Constructed a hydrogen grid starting from A hydrogen grid will be constructed starting from overseas imported hydrogen, and carbon-neutral methane will be manufactured and accepted in Japan.
- (2) Urban areas: Carbon-neutral methane is decarbonized at low cost by utilizing existing gas facilities.
- (3) Region: Carbon-neutral methane and hydrogen are used properly, and local production and local consumption are carried out in each conduit network to revitalize the region.
- 3 . Challenge to realize a carbon-neutral, carbon-free society

Our challenge for carbon neutralization will also contribute to the decarbonization of electric power, such as the decarbonization of raw materials for gas-fired power generation.

To realize such a carbon-free society, "improvement of gas infrastructure such as expansion of gas pipeline network", "cost reduction of hydrogen, etc.", "promotion of cooperation with the national and local governments and other industries"

<Conclusion>

The gas system can realize not only carbon-free society, but also solve social issues such as strengthening resilience and contributing to regional revitalization and can achieve both sustainability and economic development.