

October 6, 2016

ICEF 2016 Statement from the Steering Committee
-- Toward achieving net zero anthropogenic CO₂ emissions --

(Preamble)

ICEF (Innovation for Cool Earth Forum) was established in 2014, by the initiative of Shinzo Abe, the Prime Minister of Japan, and the ICEF's Third Annual Conference was held on October 5-6, 2016 in Tokyo. More than 1,000 experts from governments, businesses and academia representing about 80 countries and regions attended and discussed a variety of topics in plenary and concurrent sessions.

The Steering Committee of the ICEF welcomes the historic Paris Agreement reached at COP21 in December 2015. Taking into account the Agreement as well as active discussions at ICEF, the Steering Committee is pleased to announce the following statement.

(Our basic understandings)

1. The climate is changing and global emissions continue to rise despite global effort since 1997 when The Kyoto Protocol was agreed. As a result, the global temperature is on the rise, posing a great threat to humanity. Since the recent rise is caused mainly by human activities, we must ultimately stabilize the global temperature at levels that are not dangerous.

(Our goal)

2. The Fifth Assessment Report by the IPCC states that "cumulative total emissions of CO₂ and global mean surface temperature response are approximately linearly related". This means we must adopt as a goal to achieve at least NET ZERO ANTHROPOGENIC CO₂ EMISSIONS in the long run in order to stabilize global temperature levels. This is the principle applicable to any level of temperature stabilization including the 2-degree target.

We should pursue this goal together with other Sustainable Development Goals (SDGs), such as poverty alleviation, economic growth and energy access as articulated in the UN 2030 Agenda for Sustainable Development.

This is not an easy task; rather, it is very challenging. Achieving net zero CO₂

emissions requires, for example, 100% carbon-free power generation (renewables, nuclear and fossil fuel with CCS) and all energy sources of automobiles must be converted to bio-fuels, electricity and hydrogen that are produced in carbon-free processes. In doing so, technological innovation and policies to transform global energy and socio-economic systems are essential.

(Role of ICEF)

3. ICEF is an international forum to promote innovation in addressing climate change. Therefore ICEF is one of the best-suited platforms to discuss the long-term innovations needed to achieve our goal.

Innovation is crucial not only to achieve our goal but also to enhance our ambition for deep emission cuts without causing additional burden to our economy.

(Role of public and private sectors in promoting technology innovation)

4. Technological innovation in both supply and demand sides should be promoted through free competition among actors in the private sectors. At the same time, the role of the public sector is essential especially for the long-term research and early deployment of new technology through institutional arrangements and financial supports. It is rather hard for actors in the private sectors to bear the full cost to develop innovative but uncertain technologies while the fruits will be shared with competitors. To mobilize massive amount of financial resources for investing in innovation, it is essential for governments to show the private sector the clear direction of our future. The best combination of private and public roles in innovation should be pursued.

(Need for international cooperation)

5. To cope with global climate change, international cooperation is imperative in every aspect from policy to technology innovation. In this sense, we welcome “Mission Innovation” launched in November 2015 by 20 Major Economies, and other international initiatives in this area being promoted.

In view of enormous demand for infrastructure in developing countries, developed countries should cooperate with developing countries to promote diffusion of technologies to avoid “lock-in” effects. Such efforts should be accompanied by financial and other means of assistance.