Advisory Panel to the Foreign Minister on Climate Change: Recommendations on Climate Change

# Climate Change as the Main Mission of Japan's Diplomacy to Transform Japan into a Decarbonized Nation

The Advisory Panel to the Foreign Minister on Climate Change has compiled the following recommendation based on an analysis of international situations and discussions regarding the direction of Japan's new energy and climate diplomacy. This proposal follows our recommendation on energy, which was released on 19 February 2018.

#### Introduction

In December 2015, the global community adopted the Paris Agreement and called for a transition into a decarbonized society as a universal goal for the 21st century. Climate change has emerged as the single biggest global risk that not only causes extreme weather events and natural disasters but also affects the world's economic system, the stability of local communities and societies, national security, and even the rise and fall of nation states and their very existence. Japan, a trustworthy member of the international community, shares a heavy responsibility with the rest of the world to achieve a decarbonized society.

Decarbonization constitutes a fundamental principle that determines how a future society should function. Countries can achieve progress only when their policies and economic activities are in accord with this principle. Societies that depend heavily on fossil fuels are already being forced to make a change. Time is running short for each nation to make a smooth transition into a decarbonized society, and there are a number of challenges to overcome while minimizing the creation of massive stranded assets.

The realization of a decarbonized society goes beyond considerations of energy issues. It also necessitates policy and institutional innovations to transform society as a whole including industry, the economy, and the financial sector. The rules, regulations and institutions to be introduced in this process must be coordinated with broader international decarbonization efforts, rather than designed only within a certain country's context in isolation with the rest of the world.

Japan can enhance its reputation in the international community especially when the nation makes genuine efforts at home toward decarbonization and makes sincere contributions to the outside world. The climate diplomacy proposed here is a new initiative that Japan should undertake to achieve decarbonization of the world at an early date. It should constitute the main axis of Japan's foreign diplomacy. Such a diplomatic policy can gain international credibility especially when it is backed by pioneering efforts on the domestic front.

Specific examples of climate diplomacy include the following;

- Exercise leadership toward decarbonization in the negotiations at the Conference of Parties to the UN Framework Convention on Climate Change and other multilateral talks that include both developed and developing nations,
- · Promote climate change as a priority item in other fora of diplomacy,
- Take the lead in providing assistance to developing countries for decarbonization efforts,
- Strengthen cooperation with non-state actors, including civil society, to support their efforts abroad.

Japan has deep involvement with the rest of the world in trade, investments, energy, and national security. The nation will not be able to exist or grow unless the global community achieves decarbonization. What is urgently required for a sustainable future for Japan and the rest of the world is a diplomacy with climate policies as its heart.

#### I. Confronting climate changes in the world, Asia, and Japan

The average temperature on Earth has risen by about 0.85°C since 1880. It rose by about 0.74°C within a short duration of 100 years of the 20th century. It is projected that the temperature may rise by a maximum of 4°C by the end of this century if the current trend continues. With the rapid rise of temperature, extreme weather events and serious natural disasters such as hurricane that may have been strengthened by climate change are now frequently observed in various parts of the world.

In 2017, the economic losses due to the climate-related extremes disasters were estimated to reach around 330 billion USD (34 trillion JPY). A massive number of environmental refugees may emerge because of rising sea levels, cyclone and hurricane damage, and escalating heat waves. While the world population is growing, extreme weather events will cause a decline in global food production and triggering a surge in food prices. A natural disaster caused by extreme weather events could disrupt a global supply chain and hurt Japan's manufacturing industry. Factories operated by 450 or so Japanese-owned companies in Thailand were affected by a widespread flooding that occurred there in 2011.

The Asian Development Bank projected that temperatures may increase by 6°C in the Asia-Pacific region, and by as much as 8°C in some parts of the region, by the end of this century if the trend continues. Such a temperature increase will drastically alter the region's weather patterns, seriously affecting agriculture, fishery, land and marine biodiversity, domestic stability and international security, trade, urban development, immigration, and health.

Japan is not immune from the direct impact of climate change. The torrential rains that hit northern Kyushu and the heavy snowfalls in Hokuriku are still fresh in our memories. Temperatures are rising at a faster pace in Japan than the global average. The nation's temperatures, in a long span, are rising by about 1.19°C every 100 years (the Ministry of the Environment, 2017). Ten of the 20 cities that are expected to suffer the greatest losses by flood damages in 2050 are in Asia and the list includes cities in Japan, Nagoya, Osaka-Kobe and Fukuoka-Kitakyushu. Also, Sapporo City ranks No. 4 in terms of the rate of increase in the level of expected damage.

The Asia-Pacific region is home to 60% of the global population. For the world to maintain sustainable growth, it is essential that this region including Japan also develops in a sustainable manner. Thus, curbing climate change in Asia and the rest of the world is one of the most important strategies that Japan should pursue.

#### II. Global initiatives to stay "well below 2 °C" and Japan

As has been pointed out in the Recommendations on Energy (Foreign Minister's Advisory Panel on Climate Change, February 2018), there exists a huge gigaton gap between emission reduction levels required for the achievement of the Paris Agreement, which calls for holding a temperature increase to well below 2 °C and the current world efforts, even though "decoupling" has been observed on a global scale.

India launched the International Solar Alliance at COP21, where Parties agreed on the Paris Agreement in December 2015, and called for global efforts to deploy solar power. UK and Canada announced the Powering Past Coal Alliance at COP23 in November 2017. Shortly after the COP, France held One Planet Summit in December, celebrating the second anniversary of the adoption of the Paris Agreement and leading the efforts for transformation into a decarbonized society. In the United States, those US companies, states and cities which are members of "We Are Still In" are going to organize the Global Climate Action Summit in California in September 2018 to counter the federal-level policy to withdraw from the Paris Agreement. There are increasing activities among non-state actors pushing for decarbonization.

In contrast, Japan's 2030 emission reduction target is regarded as "highly insufficient" in the international community. Japan has not submitted its long-term emission reduction strategy towards 2050 while the country proposed to do so with other members at the G7 Ise-Shima Summit in 2016. Carbon pricing, a rule for decarbonized society, is spreading on a global scale from Europe to North America (Canada and U.S. states) to Asia, with South Korea and China now adopting the mechanism. However, Japan is still unable to put the system to effective use. Japan's current carbon tax rate is "289 yen/tCO2," far below that of many other nations and its effectiveness is doubtful. As for the emissions trading system, the discussion began at least 10 years ago, however, the system has not yet been implemented at the national level. Therefore, Japanese companies may not be able to fully benefit from their superior decarbonization technology and products in the domestic market and could even lose an opportunity to expand business globally.

Still, new developments have been gradually emerging in Japan. For example, although an institution is not fully in place to utilize renewable energy, companies are expressing their intention to participate in RE100, an initiative to switch all sources of electricity to renewable energy. Japanese companies started to awaken the importance of decarbonization. In addition, there are emerging local movements as have been seen in some local governments' declaration of "zero-emission" policies.

Japan must strengthen this momentum and revive its international initiatives towards decarbonization.

#### III. Proposal: Seeking to create a decarbonized nation

## 1. The Ministry of Foreign Affairs should adopt climate diplomacy as a main mission of the ministry policy

Climate change is the biggest challenges of the century facing mankind. Based on this recognition, the Ministry of Foreign Affairs, which is responsible for Japan's diplomatic affairs, should establish a principle of pursuing "climate diplomacy" across all departments as a main mission of the ministry policy to demonstrate within Japan and outside of the country the nation's eagerness to tackle this crisis.

Specifically, the ministry should more frequently raise the issue of climate change and attach more importance to it during bilateral and multilateral forums. The nation should also proactively emphasize this issue and promote the use of renewable energy at G7 and G20 meetings. Japanese diplomatic offices overseas, in addition to *collecting* information from the standpoint of energy-resource diplomacy as is currently the case, should also strengthen their expertise in climate change, energy and environmental issues in Japan and overseas to establish a mechanism that allows them to communicate, disseminate, and deploy matters that are of strategic importance to Japan with respect to climate change measures.

Under such a principle, the ministry should launch an effort to draft and legislate a comprehensive strategy for decarbonization with other ministries and agencies. The ministry should explicitly link the UN 2030 Agenda for Sustainable Development with a goal of achieving the Paris Agreement's purpose towards 2050 and strengthen the connection between the two. The ministry should also compile and publish an annual white paper on climate diplomacy as a road map.

In addition, the ministry should lead discussions within the government for the realization of the plans in the Recommendations of Energy released by this panel in February 2018 while establishing a structure to steadily implement a new energy diplomacy strategy. In so doing, the ministry should proactively cooperate with civil societies and deploy a diplomatic policy that is democratic and open.

#### 2. Japan should lead the creation of the framework for a decarbonization society

International rule-making arenas became diversified and stratified as the seriousness of climate change becomes more widely recognized. As a starter, Japan should make constructive contributions to the creation of rules within the framework of inter-governmental negotiations centering around the UN Framework Convention on Climate Change. The ministry should not only advocate rules that are beneficial to Japan but also should actively propose rules that are internationally acceptable, bearing in mind national interests. The ministry should present a new vision that will serve as a norm for negotiations. It should seek to increase the number of like-minded nations and cooperate with diverse groups such as civil society and business organizations more aggressively than ever before.

In negotiations such involving finance and commerce, it has become more common globally for companies to adopt the ISO standards and the Sustainability Accounting Standards Board as their standardized green businesses tools, and disclosure of climate risks in line with the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD). The ministry should actively participate in the creation of evaluation criteria for businesses based on carbon dioxide emissions such as those cases. It is also imperative that carbon pricing, a mechanism for imposing costs in accordance with the amount of greenhouse gases emitted, be implemented at an early date with effective rates.

It is essential that Japan contributes to rule-making for decarbonization in order for the nation's companies to establish a solid position in the global value chain. Japanese industry, as well as Japan as a nation, should demonstrate their efforts in a visible way to gain recognition from the international community and attract more investments from around the world.

A G20 summit in June 2019 to be chaired by Japan is a great opportunity for the nation to play catch-up. The nation should strengthen its efforts both to create a framework for a decarbonized society and to implement specific measures to reduce emissions by then. Japan should articulate a clear leadership and expand a place for Japanese companies in the global business scene.

#### 3. Japan should make efforts to achieve the "well below 2 °C" target

The Paris Agreement requires that each nation revise its emissions target every five years and that a new target represent a progression beyond nation's current target. Japan should maintain its "progression/no-backsliding" rule and take the lead by drastically raising its 2030 reduction target so that it can set an example for the rest of the world.

The government should enforce measures on energy efficiency and lay out a clear road map for expanding renewable energy so that the long-term low greenhouse gas emission development strategies, which the government will start compiling this year, will play a leading role in global decarbonization efforts. Japan should also actively engage in the Talanoa Dialogue, an international initiative to enhance mitigation action proactively.

#### 4. Initiatives to play to its strength

Japan already has a variety of advanced energy and environmental technologies. The nation should accelerate its movements toward decarbonization based on these technologies.

#### 1) Establishment of a climate change platform

The creation of a decarbonized society requires an all-inclusive collaboration of technology, products, finance, knowledge, and policies. First, Japan should organize and consolidate individual cases and measures found throughout the country and build a "Climate Change Platform" lead by the government that comprehensively covers various services that the nation can provide. The platform should be open internationally, allow citizens and companies of various sizes to participate and strengthen their cooperation with one another, as well as it should provide venue for matching and collaboration among various needs and projects.

#### 2) Development of the Asia Offshore Wind Power Initiative

Offshore wind power generation has attracted a great deal of attention as a method to utilize inexhaustible energy that exists on the ocean surface since the cost has plummeted over the past few years thanks to technical innovations and a policy improvement. Even into 2018, there are multiple cases where Japanese companies made large-scale investments in overseas offshore wind power generation projects. It is estimated that East Asia and Southeast Asia have abundant offshore wind resources and the world is turning to this region. In order to install offshore wind power, it requires that various knowledge and know-hows be utilized in an integrated fashion. This includes how to use port facilities efficiently, how to secure ships to construct power generation installations and transport equipment, and how to procure and lay undersea cables. Thus, this panel calls for launching the Asia Offshore Wind Power Initiative, under which Japanese companies and foreign companies that have unique and outstanding technologies in relevant areas collaborate to make the best use of the region's vast potentials. Through communicating the new renewable energy initiative, Japan should lead the efforts to develop offshore wind in Asia and the rest of the world.

#### 3) Cooperation with developing countries to achieve nationally determined contributions (NDCs)

Under the Paris Agreement, many developing countries are proposing "conditional NDCs," under which they would receive finance, technologies, and capacity building. Japan should lead efforts to fulfil such conditions and should help to realize emission reduction assumed by developing countries. Specifically, Japan should work with developing countries to jointly build a decarbonized society by helping them create road maps and providing them with technological and financial support. Such support should include partnerships that will help them establish and achieve certain goals. Countries that provide overseas support, such as Japan, should establish a reduction goal to be achieved through their assistance, in addition to their domestic reduction goals. Such assistance should focus on renewable energy, energy savings, and energy efficiency from the standpoint of economic viability as well as SDGs and social acceptability.

### 4) Support for developing countries specific to the location and region:

Japan has been making international contributions through technical innovations, climate finance, and adaptation measures. However, individual support measures that are short-sighted and not supported by comprehensive strategies and policies would provide only temporary fixes. Japan, therefore, should compile a policy package of energy savings and renewable energy measures in addition to individual technology programs and combined them with financial assistance. Meanwhile, Japan has seen an emergence of local economic models involving decentralized renewable energy produced and consumed in the same region. The nation will use these models to support developing countries as they seek policies to stimulate their own local economies. Japan should pursue these activities to support developing countries, using the aforementioned Platform, by drawing on technologies, capital, human resources, and knowledge that belong to various non-state actors, companies of all sizes, and civil society.

#### 5) Strategic reconstruction of financial support institutions

The transformation into decarbonized societies require tremendous amount of financial investments, especially in developing countries. A system to incentivize massive private finance investment is necessary. For that purpose, it is imperative to pursue; 1. Promotion and expansion of the blended finance with international development finance institutions such as the Green Climate Fund (GCF), the World Bank and the Asian Development Bank; 2. Development and deployment of new green finance products such as green bonds in line with ESG investments which look at companies' performance in environment, society and governance; 3. Strengthening of collaboration with local financial institutions in developing countries; and 4. Creation of new investment opportunities and environment through strengthening collaboration among existing national policies and institutions.