

**Speech by Foreign Minister Taro Kono at the 9th Assembly of the International Renewable Energy Agency (IRENA)
(Delivered by Parliamentary Vice-Minister Kiyoto Tsuji)**

Introduction

Call for the increased expansion of renewables has never been greater.

We are witnessing a growing momentum of efforts by the international community to address climate change. The implementation guidelines of the Paris Agreement were adopted at the COP24 last month. The whole world needs to take more robust actions in order to achieve the 2-degree goal and pursue efforts toward the 1.5-degree goal. We are now reaching a crucial juncture where concrete actions by each country are required more than ever.

The worldwide energy-related CO₂ emissions are currently on the increase. We should take all available means to reverse this trend, in which renewable energy plays a highly important role.

The recent dramatic decrease in price is providing a critical boost to further expansion of renewables. Renewable energy is now becoming a viable option not just environmentally but economically.

Today, let me talk about the challenges Japan is facing, the solutions Japan is finding, and the way Japan will contribute to the world, against the backdrop of such a sweeping trend.

Japan: a developed country facing emerging challenges concerning renewables

Last year, for the first time Japan set the policy on the utilization of renewables “as the major power source” in its Strategic Energy Plan. We are presently working hard to address various challenges in implementing this policy.

A departure from the feed-in tariff system in a self-sustained manner is of a pressing issue in particular. This would be done, for example, by means of the cost reduction of renewables to the level that it is cost-competitive against the other power sources.

Japan’s experience with disasters also highlighted important challenges. When a powerful

earthquake struck on Japan's island of Hokkaido last September, it took about a week to completely restore solar and wind power plants.

Renewable energy is in itself resilient to disasters since it is a locally available energy source which does not create dependence on areas outside the region. One of the lessons of Hokkaido earthquake is the importance of developing a model where renewables will be utilized on a regional basis in case a large-scale blackout occurs.

Japan's solutions – towards the development of technology and innovation –

Japan would like to overcome these challenges by learning from other countries' experiences and IRENA's expertise. At the same time, leveraging its own experiences, Japan would like to play a leading role in the world as a country with advanced solutions to address challenges faced by other IRENA member countries.

The key to bringing about such solutions is, for one thing, the development of technology and innovation, and for another, policies to encourage them.

[Technology and innovation]

Japan is leading innovation in renewables itself as well as in the advancement of renewables utilization.

For example, the development of electric storage technology is indispensable in aiming to achieve 100% use of renewables. A rechargeable battery is one of the major storage technologies, and in this light, an "all-solid-state battery" which has been jointly developed by Japanese enterprises and universities is an epoch-making example. This battery, which is compact, large in capacity, and highly secure, is expected to ease restrictions of existing storage technology. This will significantly improve mileage and security when used in electric vehicles as compared to the lithium-ion batteries used today. Actually I talked about this story at the last Assembly. Since then, Japan's development team has furthered innovation over the past year and discovered the mechanism which makes possible quick charging. They are currently making efforts toward the practical use of this technology.

Japan is also a pioneer in broadening utilization of hydrogen, another promising way of electricity storage. Hydrogen is referred to as an "ultimate clean energy" which discharges water only. It, however, requires high technological skills in order to utilise it safely. Japan has established technologies to safely extract electricity from hydrogen through both systems of fuel cell and direct combustion.

[Policies]

We are also actively promoting policies to encourage the development of technology and innovation. Let me share the two recent examples.

Firstly, Japan, as a country surrounded by the sea, is promoting the utilization of marine renewable energy such as floating wind turbines. Last December, Japan promulgated “the Act of Promoting Utilization of Sea Areas in Development of Power Generation Facilities Using Maritime Renewable Energy Resources.” Japan as a nation is determined to work on a technology development of renewables including marine renewable energy as represented by floating wind turbines.

Secondly, Japan is developing a hub of technology and innovation. Prime Minister Abe is pursuing “The Fukushima Plan for a New Energy Society.” Once heavily damaged by a nuclear accident, Fukushima has become a model place for the future energy society. Under this plan, the construction of the world’s largest CO₂-free hydrogen production plant commenced last year.

Future prospects – towards the realisation of “virtuous circle of environmental protection and economic growth” both in Japan and the world –

Through the substantive technologies and innovation as I mentioned, a new change referred to as a “virtuous circle of environmental protection and economic growth” is emerging while environmental protection and economic growth were once conceived mutually exclusive. We believe that this favourable trend should be strengthened and that renewable energy is one of the critically important driving forces to realize this virtuous circle.

In Japan, in-depth discussions toward formulating mid-century long-term strategies as growth strategies based on the Paris Agreement is being advanced in order to achieve the “virtuous circle of environmental protection and economic growth”.

This “virtuous circle” is also one of the important themes of the G20 this year hosted by Japan for the first time ever. Japan asked IRENA to bring its expertise into G20’s discussion of energy and climate change. Harnessing these opportunities, Japan will contribute to the promotion of global efforts to expand renewables and combat climate change.

Japan is also planning to promote the private-sector-driven deployment of renewables to improve energy access in developing countries. We would like to discuss this matter in platforms such as the 7th Tokyo International Conference on African Development (TICAD7)

held in Yokohama this August.

Conclusion

Last but certainly not least, let me pay my heartfelt respects and gratitude to Director-General Amin's tremendous contribution to IRENA. With renewables becoming increasingly important, we expect that IRENA will continue to follow the path paved by Director-General Amin, and develop further as the organisation which makes a credible intellectual contribution to the field of renewables.

Thank you for your kind attention.