## MEIJI INSTITUTE FOR GLOBAL AFFAIRS

## MIGA Column "Global Diagnosis"

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Short Curriculum Vitae) Yoriko Kawaguchi

University of Tokyo and Yale Graduate School graduate. After joining the Ministry of International Trade and Industry, served as a World Bank economist and a minister at the Embassy of Japan in the United States. Retired from office in 1993. After working as a corporate executive, appointed in 2000 as Director General of Environment Agency in the Mori Cabinet. Also held posts as Minister of the Environment and Minister for Foreign Affairs in the Koizumi Cabinet, and after leaving office took up the appointment of Special Advisor to the Prime Minister (in charge of Foreign Affairs). Elected for the first time to the House of Councilors for Kanagawa Prefecture in 2005 in a by-election (endorsed by the Liberal Democratic Party). Did not run in the July 2013 Upper House election, and retired from politics.

## **Implications of the Paris Agreement**

In December of last year, the Paris Agreement was adopted, an accord relating to a global framework concerning post-2020 climate change. In 1992, the United Nations Framework Convention on Climate Change was agreed upon, and this marks the first genuine landmark global level agreement since the Kyoto Protocol was adopted in 1997.

What, then, makes it groundbreaking?

Firstly, that long-term objectives have been agreed upon. More specifically, it is the citation to hold the increase in global average temperature to below 2 °C above

pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C. Furthermore, it was agreed upon to reach a peaking of greenhouse gas emissions as soon as possible, and bring down anthropogenically-derived greenhouse gases to a level which can be naturally absorbed in the latter half of this century, in other words, to achieve zero net emissions.

Secondly, developing countries also assumed a reduction obligation. Under the Kyoto Protocol, developed countries alone were obligated to reduce emissions, whereas under the Paris Agreement all participating nations, including developing countries, committed to reductions under the principle of "common but differentiated responsibilities," which allows for differences in content by country.

There is something remarkable about the economic growth of developing countries in recent years. In the ten years between 2000 and 2010 global greenhouse gas emissions rose by an average of 2.2%, but this is due to the emissions of developing countries. Incidentally, the share of emission amounts of the Annex I countries (developed countries and economies in transition) with emission obligations under the United Nations Framework Convention on Climate Change, was 37% in 2010. The share of Japan was 2.8%, and there were four developing countries with greater emissions than Japan, namely China, India, Indonesia and Brazil. The emissions of developing countries will increase further going forward. Therefore, the creation of an agreement which sees developing countries committing to reductions is very important from a perspective of creating an effective framework to combat global warming. In that sense, the Paris Agreement has become a far more effective international arrangement than the Kyoto Protocol.

Thirdly, a transition has been made from a regulatory structure (top-down method) which ties each country to numerical targets as in the Kyoto Protocol, to a self-imposed regulation structure (bottom-up method) reduction scheme. That is, a method by which each country creates its objectives voluntarily and objectives are assured by a third party monitoring their progress. It is the same format as that by which the world of industry has reduced greenhouse gases through voluntary efforts in Japan.

The problem area with a self-imposed regulation structure is whether it will really work, and whether reductions will in reality take place. According to a presentation by the Secretariat of the United Nations Framework Convention on Climate Change, even if the draft agreements or INDCs (Intended Nationally Determined Contributions) are added together, it is clear that the 2°C target will not be reached. In other words, even though the achievement of a fixed emission reduction and a slowdown effect in the growth of emissions can be expected in the next 10 years due to the INDCs each country has committed to, it is not sufficient to achieve a peaking of global greenhouse gas emissions by 2025 or 2030.

In this regard, it has been agreed for each country to resubmit its INDC in 2020 and update them every 5 years thereafter, each time presenting a more progressive figure than the one which directly preceded it. There is also a review process, and it is hoped that the 2 °C target will be achieved via this process.

Various other items were also agreed in the Paris Agreement, such as providing aid to developing countries and the establishment of targets for their adaptation.

Among the important points of agreement on this occasion, the "Bringing down net emissions to zero in the latter half of this century" item is of particular note in my view.

This means that there are only three energy alternatives for humanity in order to achieve the target. That is to say with regard firstly to renewable energy, secondly to nuclear power and thirdly to fossil fuels, these can be used to the extent that the greenhouse gases thereby emitted can be absorbed by the oceans, forests and CCS.

Following the Industrial Revolution, humanity has achieved development via copious burning of fossil fuels. Historically, a country's rise and fall and international politics turned on whether or not coal and oil resources could be controlled, and this was frequently a cause of major conflicts. This agreement is a fundamental paradigm shift hanging over the state of a human society which was built on the use of enormous amounts of fossil fuels. I think it is necessary to thoroughly consider the implications of this and come to terms with it at a societal level. The challenges confronting us in how

we can transition to a low-carbon society are large.

Needless to say, in this transition, the practical application of various technological innovations not currently in practical use, the societal and policy reforms to make that possible, and support for developing countries are indispensable. It is scarcely imaginable how large a revolution the transition to a low-carbon society is, and joint international efforts are required. With respect to international cooperation relating to technological innovation, on the occasion of the Paris conference there was also agreement regarding increasing the R&D budget of each country as well as investment promotion in the private enterprises aiming to practically use and market the technologies thereby brought into being. It is a promising movement.

Nevertheless, without the ratification procedure of each country, this important Paris Agreement will not come into effect. In the case of the Kyoto Protocol, it took four years following its agreement for the rules for administering it to be agreed upon, and a further four years passed until it became effective, resulting in a total of eight years. Such a long period of time cannot be allowed to elapse until the Paris Agreement comes into effect. This is because no time can be lost in addressing climate change.

In the case of the Paris Agreement, it will not come into force unless 55 countries that produce 55% of emissions ratify it. Thus, the participation of countries which are large emitters, such as China (22.2% \*), the US (13.8%), the EU (10.2%), India (5.8%), Russia (5.1%) and Indonesia (3.9%) is essential, both in terms of the treaty and from an effectiveness perspective. Causes for concern remain, such as the outcome of the US Presidential Election, but it is desirable to aim for the long-term objective of less than 2°C as well as net greenhouse gas emissions of zero in the latter half of this century, and create a sustainable world for the next generation.

<sup>\*</sup> Global share of emissions. As of 2010. IEA data. The same applies to the following.