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Special Bulletin

A Japanese Perspective on the International Energy Landscape (250)

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COP21 Adopts Paris Agreement Making Progress in Global Climate Change Measures

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On December 12, the 21st Conference of Parties to the United Nations Framework Convention on Climate Change (COP21) adopted an agreement on new climate change measures beyond 2020 after two weeks of negotiations in Paris. The Paris agreement is the first accord on an international framework on climate change measures since the Kyoto Protocol adopted at COP3 in Kyoto in 1997 to provide for greenhouse gas emission reduction targets. The Paris agreement calls for restricting the global average temperature increase from the pre-industrial revolution level to well below 2 C and states that it would be important to limit the temperature rise to less than 1.5 C. To this end, the pact urges that global GHG emissions be peaked as early as possible and reduced rapidly thereafter to effectively achieve zero emission with GHG absorption taken into account, in the second half of the current century.

A total of 196 countries and regions are participating in the Paris agreement and will submit voluntary GHG emission reduction targets to the United Nations and implement plans to achieve these gargets. A major factor behind the agreement was that the UNFCCC parties adopted the so-called bottom-up approach of accumulating their voluntary targets to reduce GHG emissions, instead of a top-down approach of requiring or mandating each country to achieve a certain emission reduction target. In order to revise voluntary emission reduction targets to effectively cut emissions, the Paris agreement provides that each party should submit an improved target every five years and accept experts' verification of actual emission cuts.

An analysis of the targets, or Intended Nationally Determined Contributions (INDC), submitted before the COP21 meeting, indicates that these INDCs may fall far short of cutting GHG emissions to achieve the target of limiting the global average temperature increase from the pre-industrial revolution level to 2 C. In this sense, the Paris agreement cannot be taken as "sufficient enough" as far as the present INDCs alone are concerned. Nevertheless, the Paris agreement can be viewed as an important step for global climate change measures based on the following points:

First, the accord enables climate change measures to be implemented as a global framework for the first time ever. The Kyoto Protocol imposed GHG emission reduction requirements only on some industrial countries including Japan and the EU members and others. The United States, China, India and other major GHG emitters that account for about 50% of global CO_2

emissions failed to join the Kyoto Protocol framework, causing great doubts about the effectiveness of the protocol to address climate change. In contrast, 196 countries and regions are taking part in the Paris agreement. It is significant that almost all countries in the world are voluntarily participating in a framework to address the global problem of climate change, irrespective of whether emission reduction targets are ambitious or strong enough.

Second, it is important that the Paris agreement calls for submitting improved GHG emission reduction targets every five years while implementing emission reduction measures, as explained above. Behind the Paris agreement, the UNFCCC parties learned lessons from their failure to reach agreement at their COP15 in Copenhagen, adopted the bottom-up approach to agree on a framework covering the whole of the world and gave priority to the feasibility of GHG emission cuts by making and revising voluntary commitments. But it is important to build into the agreement a mechanism to guide the UNFCCC parties into improving targets regularly, instead of leaving them to voluntarily implement GHG emission reduction measures. This time, they agreed on the nonbinding GHG emission reduction targets due to opposition to binding targets from some countries including the United States. Therefore, the regular revision of voluntary targets is significant.

The UNFCCC parties negotiated for two weeks to form the Paris agreement as they navigated the maze of intricate national interests of industrial and developing countries with their various domestic conditions. The most attention-attracting problem in the negotiations was industrial countries' financial assistance to developing countries for implementing climate change measures. While developing countries demanded an increase from \$100 billion in annual assistance, industrial countries refused to specify any amount of assistance. Industrial countries also urged China and other emerging countries with substantial economic power to provide financial assistance. Various other proposals were also presented for negotiations. Eventually, the UNFCCC parties gave priority to reaching consensus and adopted a nonbinding document indicating that industrial countries will provide \$100 billion in annual assistance until 2020 and increase the annual amount later. Generally, the parties gave priority to their realistic decisions to adopt the Paris agreement and form consensus on this and other issues.

There may be various views about future prospects and challenges. One view is that it is important for the UNFCCC parties to steadily implement their GHG emission reduction targets in line with the Paris agreement. Their targets cover long terms. A long-term viewpoint is required for considering an energy supply and demand mix that has close impacts on GHG emission cuts. Various energy measures, strategies and choices from next year will influence the medium to long-term energy supply and demand mix and the future picture of CO₂ or GHG emissions.

Japan has submitted its INDC to the United Nations, offering to reduce GHG emissions in FY2030 by 26% from FY2013 based on its energy mix decided July this year. As the Japanese target has been included into the Paris agreement, the international position of the Japanese target has been clarified, irrespective of whether the target is legally binding or not. In this sense, an important challenge for Japan is to realize the energy mix to achieve the target. The Paris agreement calls for revising emission reduction targets to improve them every five years. The Japanese target is

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sufficiently ambitious. As far as the Paris agreement provides for the regular revision, however, Japan will have to take measures in line with the agreement. Since the basic energy plan is set to undergo a revision every three years, the next revision may come in 2017. Therefore, a comprehensive energy policy consideration process may start next year. Japan will have to consider policies and the timetable from an objective, scientific viewpoint based on the present and future pictures of its energy conditions and GHG emissions.

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