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The Requirements for Enhancing the Effectiveness of the Paris Agreement

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Introduction

The Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC), whose adoption was reported as a historic event, took effect just one year later in 2016, earlier than expected by anyone, and its rulebook is scheduled to be agreed as an operational guideline at COP24 at the end of 2018 and enter into full force in 2020. The Paris Agreement was established after lengthy international negotiations lasting over 20 years since the UNFCCC was adopted in 1992 and is expected to boost long-term climate actions. To fulfill such expectations, various efforts have been made both in and outside Japan after the Paris Agreement was adopted and put into effect. However, the Paris Agreement is yet to be fully implemented and its success or failure will depend on its future achievements and adjustments, and evaluation by experts.

This report discusses the requirements that must be considered for effective implementation of the Paris Agreement in light of its key features.

Key Features of the Paris Agreement

One key feature of the Paris Agreement is that it sets clear numerical targets for international climate actions. The Paris Agreement explicitly requires “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels,” and the parties to the Paris Agreement have agreed to act to achieve global GHG pathways that will ensure that the target temperatures stipulated in the Paris Agreement are met, drawing on the scientific knowledge of the IPCC and others.

The second key feature is that the framework promotes climate actions on a permanent basis with a greater number of participating countries. Learning from the experience of the Kyoto Protocol that set greenhouse gas (GHG) reduction targets for just developed countries and thus had a limited effect, the Paris Agreement sets a framework that enables a large number of parties, including developed, emerging, and developing countries, to set their own activity targets and promote efforts. The key to accommodating such a wide range of countries was shifting from the Kyoto Protocol scheme, which penalized parties that did not meet their targets to encourage compliance, to a new scheme to promote climate actions in which parties set their own targets, and

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report progress, and undertake reviews prescribed by the Paris Agreement.

This report discusses the key requirements for making the Paris Agreement more effective based on the features described above.

Importance of Deepening and Sharing Scientific Knowledge

The establishment of a target post-industrial global average temperature indicates that studies will be carried out to determine permissible GHG emission pathways and concrete sets of activity targets regarding the impact of climate change and measures to respond (adapt) to them. While the UNFCCC and the Kyoto Protocol defined the “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” as their ultimate objective, a numerical target temperature was set under the Paris Agreement. This will promote studies to determine, based on the latest scientific knowledge, specific amounts by which GHGs must be reduced to achieve the targets, and each party will be required to set its actions based on those results. For instance, the current discussion on reducing global GHG emissions from current levels by half by 2050 is an estimate which assumes that the target temperature will be met.

However, the results of scientific assessments have some uncertainty, and views vary over allowable GHG emission pathways for achieving the 2°C target and different assessments of the impact associated with a temperature increase, affecting the efforts of each country to establish and enhance its GHG emission target. Thus, the setting of a specific target temperature under the Paris Agreement means that a somewhat higher level of certainty of scientific assessments is required and that the entire international community must understand and share the results of the assessments and form a consensus on measures for enhancing climate actions. In forming a consensus, the Paris Agreement will require a process for adjusting activity targets flexibly based on the latest scientific knowledge.

Conducting a Permanent Cycle

The Paris Agreement is implemented on a permanent cycle in which each country regularly reports its target and policy measures and their effects, undertakes reviews in line with a process specified under the Paris Agreement, and reviews its target and measures to eliminate the gap between the long-term global target and the aggregate total reduction of all parties determined through a global stocktake. To conduct this cycle, it will be essential to accumulate GHG emissions data for evaluating actual emissions and policy effects. Improving each party’s data capabilities, including how the parties, particularly developing countries with little data, can accumulate data and assess their policies accordingly, will be essential for each party to establish an effective review process. Parties to the Paris Agreement will be required to improve the quality of the platform for their review processes, which includes data collection and techniques for reviewing and verifying policy measures, by cooperating and coordinating with countries having advanced scientific

experience, such as Japan which has experience in implementing the Action Plan for Achieving a Low Carbon Society.

Need to Consider Differences in Situations among Countries in Reviews

The basic approach of the Paris Agreement is to set GHG emissions and other targets based on the social, economic, and energy situations of each country, and to encourage each country to make further efforts to achieve the target or to enhance it based on a review of the target and its achievement. When conducting a review, the philosophy and policies behind the review, and the perspective of conducting the review, will be particularly important.

For example, the energy supply-demand structure of a country underlying its GHG emissions is determined by factors specific to the country, including climatic factors, natural resource reserves, geography, culture, and way of life. GHG emission targets are set considering energy, economic, and other policy measures that are tailored to specific circumstances, and GHG emissions are generated as a result. Differences in climatic conditions significantly affect the cost and feasibility of introducing renewable energies. Developing countries need to choose less expensive energy sources in view of their economic growth. For some developing countries, adopting the most efficient coal technology is the most effective and economically efficient option to reduce CO_2 emissions. Further, it is more important for some countries than others to pursue nuclear technologies as a policy based on their energy self-sufficiency and national energy security situations. Thus, it is necessary to build a scheme which enables a comprehensive review of the numerical targets and policy effects of the parties while taking note of their different situations, and which provides implications for promoting their actions.

Need for Adopting Objective and Fair Indicators and Methods for Evaluation

When reviewing each party, for instance, energy efficiency levels and progress in decarbonization technologies will be evaluated basically by comparison among the parties. In doing so, the same methods and premises must be used in all evaluations in order for their results to be objective and comparable. For example, the conditions and methods for measuring the energy efficiency of steel mills in the manufacturing sector, fuel mileage of automobiles, and energy efficiency of household electric appliances must be standardized when evaluating the situations and policy effects of different parties. International standardization initiatives such as ISO and IEC are developing standards for such evaluation methods. Accordingly, for conducting reviews under the Paris to the Paris Agreement, each party should be encouraged to consider utilizing existing international standards, while also developing new ones and making them available to other parties.

Similarly, it will be important to share the method for evaluating the GHG emission target announced by the parties. It is sometimes difficult to compare, quantify, and evaluate GHG emissions due to political and other factors, but adopting objective evaluation methods based on cost, for example, may reveal additional economically-possible reduction capabilities of parties and

encourage them to take further action.

Conclusion: Achieving a Harmonious rather than Confrontational Implementation Process

The Paris Agreement aims to not only reduce GHG emissions but also promote various climate change-related actions including adaptation measures, financial assistance, and technology transfer between developed and developing countries. To date, international negotiations have mainly discussed GHG emission targets and assistance from developed to developing countries as a package and sought to find a middle ground in a confrontational environment. Yet another key feature (achievement) of the Paris Agreement is that it has boosted the number of parties that have set numerical targets for GHGs, etc. by introducing a pledge & review-type scheme, successfully shifting to a permanent structure in which the international community strives to achieve a specific target temperature in an effective manner. Thus, creating a critical and confrontational environment would run counter to the objective of the Paris Agreement, and parties to the Paris Agreement might decide to leave it as a result.

The technological requirements for building a fair and objective review process are naturally important for making the Paris Agreement more effective. However, the essential requirement may be to ensure that the parties try to implement the Paris Agreement harmoniously so that no party wants to leave the framework which is built on a permanent process.

Writer's Profile

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He joined IEEJ in 1991. He has held many senior positions in IEEJ. His specialized field of research is: Energy Supply and Demand Analysis and Forecasting, Global Warming, Energy Conservation and Renewable Energy Policy, Standardization for GHG related activities (ISO). He participates as committee members related to climate change policy and renewable energy policy organized by the government, university, etc. He has authored numerous publications.