International Review for Environmental Strategies
Vol. 5, No. 1, pp. 3 – 14, 2004

Special Feature on the Kyoto Protocol

The Legacy of the Kyoto Protocol: Its Role as the Rulebook for an International Climate Framework

Kunihiko Shimada[a]

1. Introduction

Global climate change has been one of the most contentious issues in international negotiations since the 1980s. At the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro—popularly known as the Earth Summit—most countries of the world adopted the United Nations Framework Convention on Climate Change (UNFCCC), which obligates them to work together to achieve the aim of stabilizing the atmospheric concentration of greenhouse gases (GHG) regardless of their level of development. The UNFCCC, however, did not contain concrete plans to attain this objective.

Recognizing the necessity to fortify the international commitment, the Parties to the UNFCCC gathered at the first Conference of the Parties (COP) in Berlin in 1995 and agreed on the Berlin Mandate, which required the Parties to start negotiations and reach agreement on the legal text regarding the numerical emission reduction targets for developed countries by COP 3 in 1997. There, as the benchmark for international efforts to tackle global climate change, the Parties agreed on the Kyoto Protocol, which includes GHG emissions reduction targets for Annex I countries during the protocol's first commitment period from 2008 to 2012.[1]

At present, seven years since COP 3 in Kyoto, Japan, the protocol has not come into force, although the COP is about to mark its tenth anniversary in December 2004 in Buenos Aires. Since 1997, there have been several changes in the Kyoto framework. The largest shock to the international commitment on climate change was the withdrawal of the United States (US) from the protocol in 2001, the largest emitter of GHGs.

There have also been positive developments since Kyoto. For example, although the European Union (EU) was initially reluctant to accept the use of Kyoto mechanisms at the time, it decided to launch its EU-wide Emissions Trading Scheme (EUETS) from 2005. The EUETS is now regarded as a possible core of the international emissions trading framework to which other countries may consider a possibility of linking their own domestic systems. Many countries appear prepared to do so regardless of the future direction of the Kyoto Protocol. The withdrawal of the United States and the ambivalent

a. Researcher, Climate Policy Project, Institute for Global Environmental Strategies (IGES), Japan.

1. For example, the European Union is required to reduce its GHG emissions by 8 percent relative to the 1990 base level, the United States has a 7 percent target, and Japan and Canada each have 6 percent reduction targets.

attitude of Russia make the fate of Kyoto uncertain,[2] however, the protocol appears to have been recognized as the foundation of climate change policies in many countries, particularly the use of the Kyoto mechanisms, such as the Clean Development Mechanism (CDM), joint implementation (JI), and emissions trading (ET), although these need further improvement.

Since official negotiations on post-Kyoto issues will start in 2005, the focus of discussions is now shifting to the international regime that will exist after the first commitment period. In order to establish a post-Kyoto regime that can accommodate the will of as many Parties as possible, it is also important to analyze whether the Kyoto Protocol framework will become the de facto international climate regime before COP 10. In order to establish a post-Kyoto international climate regime, it is important to consider its future; whether the protocol should be kept as it is now, or abandoned completely and the process started over, or whether the future regime should be constructed based on the Kyoto Protocol.

In this issue of the *International Review of Environmental Strategies* (*IRES*), various experts provide their assessments on the status of the protocol and offer suggestions for the future climate regime. This paper attempts to provide a quick review of their views. Recognizing that the Kyoto Protocol is the only international agreement that carries the name of a Japanese city, the Institute for Global Environmental Strategies (IGES), as a policy research institute in the country that hosted COP 3, wishes to provide a resource on the Kyoto regime and perspectives for a future framework.

2. Summary of the expert assessments

Seven years since Kyoto and just before COP 10 (December 2004), it is an invaluable time to review the lessons learned and the progress made since COP 3. Furthermore, from 2005, discussions on the post-Kyoto international climate regime will officially start. Under the common theme of assessing the Kyoto Protocol and related commitments, various international climate experts provided IGES with their views for this special issue of *IRES*. Table 1 is a summary of the views expressed in their articles, organized in terms of the following questions: “Is Kyoto recognized as the de facto climate regime?” and “What are your suggestions and views on a post-2012 international climate policies?”

Table 1. Summary of assessments on the Kyoto Protocol and its future[3]

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
Grubb Theme: Overview (developed countries), assessment of the Kyoto	YES • All parties seem set to accept it as a reasonable compromise to tackle climate change. • The attitude of the Unites States—which rejected the KP but has not provided any alternatives as it promised—may imply that the KP is recognized as the de facto	• Russia will ratify the KP anyway. • Much of the Kyoto structure is irreversible. • In case Russia does not ratify, the EUETS will be the centerpiece of global climate action. (The link among domestic schemes and JI/CDM will be the core of the regime.) • Low carbon technologies are a key part of long-run solutions, but technology cooperation alone

2. Acording to many sources, Russia’s Duma (lower house of parliament) will soon consider ratification of the Kyoto Protocol, and if approved it will enter into force as early as March 2005.

3. IRES Editors Note: The information contained in this table and the articles for this IRES issues were written prior to the official announcement by the Russian Federation to ratify the Kyoto Protocol.

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
framework, and suggestions for a future regime	climate framework internationally. • US rejection of the KP made the use of the Kyoto mechanisms more attractive for the parties to the KP. • Russia may affect the fate of the KP, but	cannot form the bedrock of effective global action. • The core engine of the post-2012 regime would be the absolute emission targets for the majority of industrialized countries.
Grubb	the spirit of the KP has already been accepted globally. • 123 countries have already ratified the KP.	
Hirono and Schroeder Theme: Japan/ Germany	YES? • Even though the KP has not come into force, it has served as a benchmark for national climate strategies in many countries such as the EU's ETS. • The KP may still provide sufficient impetus for spurring effective domestic action (since it is a process) and stronger influence on the negotiated outcome.	Not available.
Zammit-Cutajar Theme: International organizations	• The KP is an economic instrument, using flexible targets and market mechanisms to achieve emissions limitation at least cost. • In terms of the use of market mechanisms in the Kyoto instruments, the KP has become the foundation of national climate strategies of industrialized nations. But the withdrawal of the Unites States from Kyoto impairs the prospects for the emerging emissions trading regime, which also lowers incentives for Russia to ratify Kyoto. • The KP created the basis of international commitment on climate change, but the period it treats is too short from the viewpoint of corporate management (creates uncertainties). • The future regime without the Unites States cannot hold for long as long as the world economy is dominated by the United States.	• The future regime should comprise a menu of emission limitation commitments, suitable for different national circumstances, and be set in a longer time frame. Adaptation should also be given importance. • Future emissions targets for industrialized countries should include cost caps. For "industrializing" developing nations, national carbon intensity commitments may be the preferred type of target. Global sector standards for major emitting industries may also be negotiated. • An "aspirational" long-term target for atmospheric concentrations of anthropogenic GHGs could be adopted as a guide to action. • Environmental interests alone do not have enough clout to move the climate change negotiations. Major economic actors must be engaged. • Climate change needs to be viewed as a global security threat (as the US Department of Defense does) as well as from the aspects of oil security and political economy of clean coal.
Kameyama Theme: Views of Japan	YES • The KP is the only internationally agreed text to address climate change. • In Japan, the KP has been effective in moving Japanese policies on climate change forward (i.e., the Global Warming Prevention Headquarters' *Guideline*). • The KP served as a justification to introduce emission mitigation policies. • The KP created and stimulated the interest of Japanese NGOs and business groups in climate change. • The KP is a learning process for	• Japan is extremely interested in the debate on post-2012 issues. • The Ministry of Economy, Trade and Industry said that the "future regime should take into account the development and dissemination of innovative technology related to mitigation of climate change." • Focus: the roles of economy (flexible instruments) and technology. • The Ministry of the Environment considers the KP to be an important first step towards meeting the ultimate objective of the UNFCCC. • Focuses: "Ensuring environmental integrity of the

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
	multinational negotiation.	climate regime requires global participation" and "the climate regime beyond 2012 needs to achieve the participation of all countries, including the United States and developing countries."
Petroula et al. Theme: European Union	YES • By ratifying the KP, the European Union takes the KP as the basis of its climate change policies (national and regional targets, the EUETS, national allocation plans, etc.). • The ideas of internal burden sharing and the emissions trading system in the European Union (as a party to the KP) are innovative achievements originating from the KP. • Weak points of the EU internal burden sharing under the KP include uncertainties (about actual emissions), vulnerability (emissions dependent on developments other than climate policy), and equity (national targets for some member states more difficult to achieve than for others). • In acceding countries, the KP plays a role as the basis of their climate policies, but they are not part of the 15-country EU burden-sharing agreement.	• No concrete suggestions are made in the paper regarding the post-2012 period. Despite the uncertainties and increasing pressure from some countries and sectors, EU policy makers generally keep supporting the implementation of policies aimed at complying with the KP, considering it as a first step towards more stringent emission reductions in the future. • It is widely recognized that it is difficult for the European Union to achieve its Kyoto target in the first commitment period through only domestic measures. It is likely that the flexible mechanisms will have to be used to meet the targets. As yet, few countries have taken concrete steps to put the mechanisms in practice. Also, additional measures beyond those in place today are likely to be needed.
Watanabe and Metz Theme: Germany	YES • Adoption of the KP did not have a direct impact on German climate policy, since Germany had already set a domestic emissions reduction target more ambitious than that set in the KP and developed policies and measures to achieve the target. • Nevertheless, the KP has had an indirect impact on Germany through the European Union's common and coordinated climate policies and measures, including EUETS. • Since Germany is one of the few western industrialized countries among Annex 1 Parties that managed to reduce its GHG emissions, it treats the KP as a de facto climate regime.	Not available.
Parikh and Parikh Theme: The KP and India	YES? • The KP has not come into force yet, but many Kyoto activities have already been implemented around the world. • It offers developing countries the CDM as an incentive to participate in international commitments.	• Unless the cost issue is solved, not accept any emission reduction commitments. • There should be no bilateral negotiations with Annex I Parties (on market mechanisms). • The CDM and technology transfer need to be planned based on country-specific needs and available capacity and technologies.

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
	• The concept of the CDM is welcome, but the US withdrawal from Kyoto lowers the attraction of the KP for developing countries. • The idea of the CDM is good, but much more is needed to improve it in order to	• A technology acquisition fund may need to be created in which all CDM projects are required to contribute (idea for negotiating economic instruments with Annex I Parties).
Parikh and Parikh	attract the participation of developing countries (now it is too costly for them!).	•
Murdiyarso Theme: Indonesia	UNCERTAIN (maybe not) • Indonesia's government has experienced difficulties in disseminating information on the progress of the KP to engage public participation. The US withdrawal gave a bad signal to the public—"Why should we bother?" • The government fails to recognize the opportunity to integrate the CDM into the national sustainable development agenda and to engage the private sectors in the CDM. • For the general public, the Kyoto mechanism is perceived as a simple transfer of funds and yet no real emissions reduction in developed countries, hence potentially introducing a further divide or dichotomy between the developed and developing worlds.	• Put more resources into the use of adaptation measures (a major issue for negotiation at COP 10). • Address the avoidance of including deforestation (not included under the first commitment period) under the new markets or a renegotiated KP. • Strengthen financial mechanisms, including the Global Environmental Facility and Special Climate Change Fund.
Kotov Theme: Russia	UNCERTAIN • Whether the KP becomes de facto or not is uncertain: There is no united view on the KP in Russia. (Russians are not fully convinced by the arguments that it would bring them benefits from commitments.) • Will Russia ratify the KP? Who knows? • Compared to the political and economic importance of Russia's entry into the World Trade Organization, the ratification of the KP is less important in Russian political and business circles.	• Need more economic interests in the future framework rather than pure environmental interests in order to obtain Russia's participation. • Strengthening emissions trading schemes and making "hot air" more valuable would be the key incentives needed for Russia to join the international community in addressing climate change.
Purvis Theme: Unites States	• There is no chance that the United States will ratify the Kyoto Protocol in its current form, regardless of who wins the next US presidential election. • The Kyoto process and in fact the FCCC negotiations generally have shown that developing countries are unwilling to make substantive emission commitments even though they are the most vulnerable to global change. • The Kyoto process led to serious discussion and innovations on such issues as emissions trading and carbon sequestration. Kyoto in this regard has	• There is a growing consensus in the United States supporting mandatory domestic carbon regulation. Progress may take several years. • The Kyoto experience demonstrates that the United States needs to start at home first before ratifying an international agreement with emissions limitations. • Even when the United States does return to the international negotiating table, it is not clear that working primarily or exclusively under the UNFCCC will be the most effective means for securing progress. • The United States might choose to work with Europe, the G8, or the Organisation for Economic

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
	already succeeded to a large degree. This does not mean, however, that the Kyoto	Co-operation and Development (OECD) to develop common approaches to national targets,
Purvis	blueprint should be the basis for all future climate cooperation.	emissions trading, and developing countries. • Nations interested in engaging the United States should keep an open mind about how and where to do so, rather than assuming that future climate cooperation will occur primarily in the United Nations based on Kyoto-style emission targets. • The most important thing nations can do to move the United States forward is to demonstrate their own domestic commitment to abate emissions. • When it comes to asking the United States to do more, nations should insist that it enact mandatory *domestic* emission controls. This would be far more helpful than pressing the United States to return to the Kyoto process.
Fisher et al. Theme: Australia	UNCERTAIN • The KP is an initial attempt to address global climate change problems. • It is not successful in finding an approach that is truly global. • It contains shortcomings in terms of environmental effectiveness, economic efficiency, and equity. • The KP, which was negotiated by all parties, only covers a few selected parties (no substantial commitments by the developing world). UNFCCC Articles 3.1 and 4.7 are the source of this problem. • The crucial role of technology is recognized in the KP, however, and the parties have already taken actions to enhance technology development and transfer to mitigate climate change.	• Use the currently-existing policy drivers such as energy-efficiency measures, international trade and investment frameworks, domestic counter-pollution policies, and domestic desire to deal with climate issues. • Utilize foreign direct investment (FDI) for energy-efficient technologies (development and transfer). • Include emissions trading in the future framework. • Liberalize trade flows of climate-related technologies. • Full technical diffusion needs to be integrated with trade and development strategies.
Haites and Yamin Theme: Kyoto mechanisms (overview)	YES • The Protocol establishes differentiated commitments for Parties and the mechanisms separate the burden of meeting those commitments from the implementation of emission reductions while reducing the total cost of meeting the commitments. • The mechanisms have influenced the choice of emissions trading as a domestic policy to limit GHG emissions in most Annex B Parties. • This regime will fail if there is substantial non-compliance. The mechanisms enable	No suggestions offered because this was considered beyond the scope of the article.

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
	parties to benefit from non-compliance. Time will reveal whether the mechanisms to limit non-compliance—the commitment period reserve and penalty—are effective.	
Michaelowa Theme: CDM (EU, Annex I)	YES? • In terms of the CDM, the KP establishes the basic incentive for governments through the concrete emission reduction targets of industrialized countries. • Governments, however, have not translated this into incentives for the private sector to invest in CDM projects. • Instead they have started to develop publicly-funded purchasing programs that are, however, insufficient to acquire enough certified emissions reductions (CERs) to cover the projected gap in their Kyoto targets.	• More private sector initiatives and commitments to the CDM are needed. • More substantial funding sources for CDM projects need to be established. (The Prototype Carbon Fund and other current sources are not sufficient to respond to needs.)
Matsuo Theme: CDM (Asia)	YES? • The CDM (KM) is a good channel and should be promoted to fill the gap between developed and developing worlds. • COP and the KP do not solve problems such as unfairness, perception of historical contribution to global warming, developing countries' commitments, and diversified attitudes of developed countries.	• Unilateral and/or South-South CDM. Non-Annex I countries can see the CERs (secondary credit transfer) *or* hold CERs in their account in the CDM Registry. • Capacity building and broadening awareness in the financial sector about carbon financing are needed.
Pearson Theme: UKETS	YES • The UK Emissions Trading Scheme was designed in line with KP commitments. • In the form of the Kyoto mechanisms, the KP enabled parties to seek low-cost options to attain their Kyoto targets.	• Negotiators for a future framework should not consider a "one-fits-all" type regime. • Emissions trading schemes, both domestic and international, should remain as a significant component of the future regime.
Shukla et al. Theme: CDM (India)	YES • The KP could be a good first step in furthering the ultimate objective of the UNFCCC (Article 2). • The withdrawal of the United States and the ambivalent status of Russia have resulted in keeping the price of CERs quite low. • Hence, the CDM market may not be big enough to really give us enough experience. • The architecture of the Kyoto regime has made climate projects peripheral to mainstream development activities in developing countries.	• The involvement of financial and consulting intermediaries should be changed and indigenized in the host country to reduce transaction costs. • Utilize technology transfer potential among developing countries (South-South technology transfer). • Development activities not directly aimed at mitigation have reduced emission levels in India and other developing countries. The Kyoto mechanisms can augment the decoupling of energy and carbon emissions. • Decoupling can be further aided by retargeting and augmenting official development assistance to help least developed countries in adaptation and supporting other developing countries in

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
		mitigation. • Instead of continuing with a regime that is focused on outputs, such as the emissions level, the new regime should concentrate on giving adequate incentives and wherewithal to align the economies of developing countries along rapidly declining emission intensity pathways.
Shrestha Theme: CDM (Thailand, Sri Lanka, Vietnam)	YES • The KP has opened an avenue for mutually-beneficial cooperation between developing and industrialized countries through the CDM. • The KP has boosted the expectations and interest of policy makers and planners. • The CDM is a useful concept, but there are a number of barriers to utilizing the CDM in developing countries (regulatory, FDI, financing, technologies, CDM specific risks, and uncertainty).	• In terms of cost-efficiency, fuel switching from coal or oil to gas appears to be more promising than renewable power technology options in the power sector at low CER prices. • In order to reduce CDM project costs and make implementation of CDM projects feasible, the future regime should be formed in ways that allow or help developing countries to overcome the barriers to CDM projects.
Zheng Theme: CDM (China)	YES? • The CDM/KP may provide an opportunity to transfer highly efficient, low-GHG energy supply and energy use technologies. They may help stabilize the environmental impact of economic growth at a relatively low level (China). • The CDM may assist (China) to foster its own ability to produce mitigation technology.	No suggestions made.
Mizuno Theme: CDM (Japan)	YES • Japan plans to address a 1.6% shortfall of its 6% emissions reduction target using the Kyoto mechanisms. • For now, Japan is putting emphasis on the CDM and JI. The KP is the basis of Japan's Climate Change Policy Program (1998 and 2002). • The private sector has started to become involved in the CDM and JI in order to learn the process by doing, which will be useful when they need to acquire CER credits in the near future.	• Financial mechanisms need to be established in order to boost private sector participation in the CDM (i.e., Japan Carbon Fund). • In addition, the option of the government procuring the credits obtained by private sector companies through the CDM should be considered (to boost participation).
Philibert Theme: Lessons learned and implications for the future	YES • Kyoto is just a beginning. As a beginning, it has done a good job. • Even if it does not enter into force, the KP will likely be considered in the future as an important step towards effective climate change mitigation because it introduced emissions trading into the "ballpark." • The KP's direct effects on climate change can only be small because climate change	• Options are "keeping the KP," "rejecting the KP," and "transforming KP." The latter is preferred. • A modified Kyoto structure is recommended (transforming the KP) with an emissions trading framework, fixed and binding targets, price caps, indexed targets, and non-binding targets for developing countries. • Dynamic targets—partial indexation of assigned amounts on actual economic growth. Likely to reduce risk of "double pain" in case of economic downturn or unexpected boom; Broader concept

Table 1—*Continued*

Author(s) and theme of paper	Is the Kyoto Protocol (KP) the de facto climate regime?	Suggestions/views on a post-Kyoto regime
	is a problem of a "stock" nature. • Its main strength may lie in its emissions trading feature (cost-effectiveness with environmental benefits, policy flexibility for governments). • Weakness lays in the incapacity of	than pure "intensity targets."; Aim at keeping the required "level of effort" constant if economic growth deviates from expectations. • Price caps into the international trading regime: Making supplem
Philibert	Kyoto-type targets to deal with the uncertainties surrounding climate change. • The CDM is a good concept for developing countries, but it will only play a minor role because of high transaction costs.	unlimited quantity at a fixed price at the country level (for domestic entities) and/or at the international level (for countries). All emission abatement needed to achieve the quantitative commitments would be undertaken as long as the marginal cost of abatement is lower than some agreed price. • Non-binding targets for developing countries; Allowing them to be sellers on allowance markets if their emissions are below the target; Not requiring them to be buyers to cover their emissions if above their target.

3. The next steps

After reviewing those assessments, it seems reasonably acceptable to claim that all agree that the Kyoto Protocol is an important step and has become the de facto international and domestic climate change regime. For example, as many argue, the parties to the protocol have already taken steps to comply with the Kyoto targets, such as the establishment of the European Union's Emissions Trading Scheme (EUETS) and the CDM, though at the time of writing it is still uncertain if the protocol will enter into force. Funds have been established; technological and financial transfer for mitigation and/or adaptation to climate change is being discussed internationally, and several CDM projects have already been approved and are about to be implemented. Despite the uncertainty about the fate of the Kyoto Protocol, most countries seem to view the Kyoto mechanisms positively as one of the most effective methods to attain two objectives—climate change mitigation/adaptation and sustainable development. Since the protocol contains these implications within its mechanisms, there is little disagreement over the observation that it is de facto for climate change policies.

At the same time, it is also claimed that the Kyoto Protocol is not enough to address the problems related to global climate change. Developed countries that have not ratified the protocol, especially the United States, claim that it is unfair that there is no substantial commitment required of developing countries; even though several have achieved high rates of economic growth and increased the amount of GHG emissions, they can still be eligible to receive financial and technological assistance from developed countries as their "right." On the other hand, developing countries also claim that the current Kyoto regime is inequitable. For example, some argue that it is ridiculous if developing countries need to accept a certain level of commitment while they have not emitted significant volumes of GHGs as developed countries have. These developing countries are most vulnerable to climate change (being

affected the most without emitting any GHGs), thus, their basic position in negotiations is to gain as much support from developed countries as possible in terms of technologies and financial resources for adaptation and mitigation. Some of their requests have been already accepted by the Conference of the Parties, and the rules have been modified to accommodate them. As Fisher argues, the Kyoto Protocol and the current regime are still an agreement made by all Parties to the UNFCCC, however, the commitments rest on the shoulders of a few countries.

Despite criticism on the Kyoto Protocol and its regime, nobody would disagree that it is an important initial step and creates the framework for international commitments to mitigate climate change. The current mechanisms for tackling global climate change, such as the CDM, derive from the protocol. The Kyoto framework, especially the commitments to the Kyoto mechanisms, was fortified at COP 7 in Marrakesh in 2001, and now it has become the de facto of the international climate regime.

The initial time frame of the protocol, which ends in 2012, seems to be too short to observe any effects of international efforts. The "stock" nature of climate change requires a much longer-term commitment and time frame, thus the next step has to be considered. Experts, including those who provided their views for this special *IRES* issue (particularly Philibert), suggest possible forms of the future regime—namely, keeping the Kyoto Protocol as it is, abandoning it, or transforming the protocol. Further, Philibert argues, neither keeping the protocol nor abandoning it seems favorable but transforming the protocol. The option to abandon the protocol requires countries to start over all negotiations to create a new international framework or protocol on climate change. It seems impossible to repeat the process from the start. Another option—keeping the protocol as it is—seems unsatisfactory; it has already been criticized in many ways. Keeping the protocol is likely to provide a partial and weak response—which will not be valid for the long term—to the threats of global climate change. Other forms of commitment and action need to be considered.

Since the Kyoto Protocol and its framework now seems to be recognized as the de facto for international climate change policies, it is possible to argue that the next or future regime should be formed based on it (i.e., the "Transforming Kyoto" option). Currently, the IGES Climate Policy Project, in close cooperation with the National Institute for Environmental Studies (NIES) in Japan, is conducting research on the design of a future framework beyond 2012 based on the idea of transforming the protocol. Among many possible issues on the design of the post-Kyoto framework, major aspects chosen for the research are (1) institutional design, (2) legal framework, and (3) analyses of policy developments in major countries.[4] In relation to the post-Kyoto research, in order to help negotiators and policy makers design policies on the future framework, another IGES/NIES project team (AIM Team, Prospect 2050) is working on setting the goal for long and medium time frames in terms of the level of atmospheric concentrations of carbon dioxide in 2050 and 2100.[5] This kind of collaboration in research and policy planning will help Japanese as well as international policy makers formulate relevant policies and frameworks for a future climate regime.

4. For details, see http://www.iges.or.jp/en/cp/index.html.
5. Similar research has been conducted in other major countries such as the United Kingdom, Germany, and France.

Is the Kyoto Protocol the recognized de facto international climate change regime? This paper began with this question, and this whole issue of *IRES* is dedicated to the assessment of the Kyoto Protocol and its framework from various aspects. To answer this question, based on the analyses of the arguments made by the experts and my own observations, it may be fair to reply "Yes." Whether the Kyoto Protocol enters into force or not, many commitments based on the concepts embodied in the protocol have already been or are likely to be implemented. This paper, which includes a review of the articles by outstanding experts, suggests that the "Transforming Kyoto" option is the way to proceed in designing the future climate regime after 2012. Even if the Kyoto Protocol does not enter into force and the world decides to seek another framework, the spirit and legacy of Kyoto will likely live on in any new international climate regime that emerges.