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Climate Policy in the United States and Japan: Prospects in 2005 and Beyond, Workshop Summary

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William A. Pizer and Kentaro Tamura

Abstract

Resources for the Future and the Institute for Global Environmental Strategies convened a one and one-half day workshop on domestic and international climate policy May 11–12, 2005, in Tokyo, Japan. The first day included 49 participants hearing presentations from 13 speakers and discussing domestic activities, economics, and politics. The second day included a smaller group of participants listening to a panel of four experts and discussing opportunities for future international climate regimes. Participants included government officials from the Japanese Ministry of the Environment; the Japanese Ministry of Economy, Trade and Industry; the U.S. Environmental Protection Agency; the U.S. Department of State; and the Massachusetts Department of Commonwealth Development; representatives from business and environmental groups; and academic experts. Over the course of both days, it was clear that great opportunities exist for regularly informing experts from both countries on recent policy developments, economic analyses, and political nuances in the other country. For example, U.S. participants had an opportunity to learn the process through which Japanese technology standards are set and implemented, the subtle evolution of mandatory policy discussions, and details of current policies on voluntary trading and an emission registry. Japanese participants benefited from a frank discussion with U.S. experts of how and why it would be difficult to link different domestic emissions trading markets, the current process to establish a regional emissions trading program, and the evolving dynamics in the U.S. Senate.

Looking forward, important lessons may be taken from past negotiating experiences. A small group of national leaders, including large emitters of greenhouse gases and major economies, addressing not only climate change but also developmental issues, could be a useful vehicle for meaningful international efforts. Such a small-group process should be carried out in parallel with the multilateral United Nations Framework Convention on Climate Change process. In addition, policies in both the United States and Japan reflect a strong emphasis on technology development and commercialization; this may be an area where bilateral cooperation could be particularly beneficial.

Key Words: climate change, global warming, United States, Japan, Kyoto

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Climate Policy in the United States and Japan: Prospects in 2005 and Beyond, Workshop Summary

William A. Pizer and Kentaro Tamura*

Introduction

Climate change is the one of the most serious and urgent challenges for human beings. Responses to this challenge are occurring at all levels of society. Businesses and nongovernmental organizations (NGOs); local, regional, national, and federal agencies; legislatures; and numerous international policy fora are contemplating mitigation, technology, and adaptation strategies. Keeping abreast of these developments in one's own country, let alone in other industrialized and developing countries around the world, is increasingly difficult if not impossible. However, the *interrelatedness* of these developments—in terms of learning from others' experience, synchronizing and cooperating on domestic efforts, improving international efficiency and, ideally, linking these policies through common measures and mechanisms—makes such awareness essential. As the first and second biggest economies in the world, the United States and Japan are in a position of unique responsibility for tackling global climate change and have been deeply involved in climate initiatives. Given their long shared history, significant trade relations, and common interests in technological development, the opportunity for and importance of cooperation is that much greater.

Since 2001, however, the two countries have been addressing the problems in different ways. While Japan ratified the Kyoto Protocol, the United States has withdrawn from the protocol. After its withdrawal, the U.S. government launched a series of international initiatives in technology research, development, and deployment. At the same time, various actions to address climate change have been taken at different levels of governance in the United States. These include state- and local-level governmental activities as well as shareholders' resolutions and nongovernmental policy commissions in the private sector, some of which are truly

* Pizer is a fellow at Resources for the Future; Tamura is a researcher at the Institute of Global Environmental Strategies. This work was supported by the Center for Global Partnership. The authors gratefully appreciate the meaningful participation of experts and audience members. All summary opinions reflect the observations of the authors alone.

innovative and warrant attention. On the other hand, in Japan, after the entry into force of the Kyoto Protocol, the Japanese Cabinet has just approved the Kyoto Target Achievement Plan, requiring additional policy measures to meet the Kyoto target. Japanese experiences in making such policies as well as in improving energy efficiency are also worth sharing with U.S. stakeholders. Climate change policies and politics are evolving rapidly in both the United States and Japan, with significant repercussions for both trade and international relations. As the two countries continue to address climate change issues in different ways, it is increasingly important for experts in each country to follow activities in the other country.

In addition, a better understanding about the domestic climate policies of each country will constructively provide insight into the design of future international climate regimes. The United States is the largest emitter of greenhouse gases (GHGs) and has one of the most dynamic and innovative markets in the world. Therefore, its engagement is critical to the success of any international effort against global climate change in the long run. One of the important lessons learned from its rejection of the Kyoto Protocol is that the United States needs to forge domestic consensus on climate policy before it aggressively engages international efforts. Stakeholders and policymakers in Japan, who have a keen interest in understanding—and perhaps influencing—the return of the United States to international activism on climate change, want to know what is actually going on in the United States in order to create an international regime conducive to future U.S. participation. Meanwhile, stakeholders and policymakers in the United States want to know whether, and to what extent, real action is occurring in key industrialized countries. Such concern is at the heart of the 1997 Byrd–Hagel resolution expressing conditions for U.S. participation in an international regime. (As a domestic policy interest, U.S. stakeholders are also interested in how Japan’s high degree of energy efficiency was achieved and how it might be encouraged in the United States.) Both countries clearly have an interest in understanding what is actually occurring on the ground in the other country beyond the official rhetoric. Policymakers in both countries are interested in furthering cooperation where possible in order to avoid having climate change policy become even more divisive.

Against this backdrop of divisiveness yet curious mutual interest, Resources for the Future (RFF) and the Institute for Global Environmental Strategies (IGES) organized a second workshop on U.S. and Japanese climate policy in Tokyo in May 2005 following a highly

successful initial workshop in Washington in February 2004.¹ A dozen U.S. participants from government, academia, business, and stakeholder groups came for one and one-half days of discussions with a larger group of their Japanese counterparts. The workshop had three main goals:

- First, the workshop sought to educate participants about on-the-ground developments in each country. Experts from government, academia, business, and NGOs in both countries gave detailed presentations of proposals, analyses, actions, and likely outcomes.
- Second, the workshop sought to elicit ideas for improving policies in each country. Each panel included ample time for questions, answers, and discussion. Participants debated, for example, whether U.S. climate technology policy is really sustainable, given its multi-billion dollar annual cost and current budget deficits, as well as different perspectives on widely acclaimed voluntary programs initiated by Japanese industry.
- Finally, the workshop sought ideas for bilateral and multilateral cooperation. A key point was that a small group of large emitters and major economies addressing not only climate change but also developmental issues could be a useful vehicle for meaningful international efforts alongside a continued parallel, multilateral United Nations Framework Convention on Climate Change (UNFCCC) process. A second point was that sharing—or at least coordinating—incentives and resources for technology development and commercialization may be an area of beneficial international cooperation in the near term.

In the remainder of this workshop summary, we highlight the presentations and discussions from each session, particularly the international policy discussion, and attempt to draw some useful conclusions. The agenda and participant list are attached as an appendix; presentations are available from the RFF website (<http://www.rff.org>).

¹ See Pizer, William, and Kentaro Tamura. 2004. *Climate Policy in the U.S. and Japan, Workshop Summary 2004*. RFF Discussion Paper 04-22.

Summary of Sessions

The workshop was divided into five sessions: domestic climate policy update, bridging stakeholder differences, encouraging technology development and diffusion, lessons from past experiences, and a panel discussion on international policy. The three sessions on domestic policy consisted of two or three presentations on the U.S. side and two presentations on the Japanese side, followed by a moderated discussion. The domestic policy sessions included 49 participants. The fourth session, on international policy, involved four presentations (two Japanese and two American), followed by the fifth session of a moderated discussion. The international policy sessions were smaller by design.

Session I: Domestic Climate Policy Update

The aim of the first session was to inform participants of the latest policy developments in the two countries. The discussion began with presentations by Osamu Mizuno, Ministry of the Environment, and Takao Aiba, Development Bank of Japan, on Japanese policy. Mizuno discussed both the process and progress for making climate policy in Japan, including an outline of the Kyoto Target Achievement Plan approved by the Japanese Cabinet on April 28, 2005. While the projected GHG emissions level of 2010 under the current policy program will be 6% higher than the base year, the Kyoto Target Achievement Plan includes additional domestic policies and measures to reduce the emissions level by 6.5%. Mizuno highlighted three elements of Japan's new policy: 1) a mandatory GHG accounting and reporting system, which requests large emitters to report their GHG emissions to administrative bodies; 2) a voluntary emission trading scheme, which was launched in May 2005; and 3) an upfront payment system for Clean Development Mechanism and Joint Implementation Mechanism (CDM/JI) projects. He also emphasized the on-going debate in the government on carbon tax, including recent proposals for a ¥2500–3000 tax per ton of carbon that have not gone forward.

Aiba presented the outline of the Japan GHG Reduction Fund (JGRF) and Japan Carbon Finance, Ltd. (JCF). The Development Bank of Japan and the Japan Bank for International Cooperation established JGRF/JCF in December 2004 with 31 private firms contributing US\$ 141.5 million. The purpose of the JGRF/JCF is to purchase Certified Emission Reductions (CERs) and Emission Reduction Units (ERUs) from CDM/JI projects issued for the first commitment period of the Kyoto Protocol on behalf of contributing firms. Japan faces the highest cost of GHG emissions abatement in the world, making credit acquisition from overseas emissions reduction projects through CDM/JI critical for Japan to achieve the Kyoto target cost-

effectively. However, large GHG emitters, like utilities, are unfamiliar with investment in developing countries, and institutional uncertainty regarding CDM/JI has created fears that privately acquired credits could be confiscated by the government. Against this background, the JCF and the JGRF were founded as the two main components of a government-backed credit purchase scheme (credit buyer and fund pool, respectively).

Joseph Kruger of RFF, Andrew Gottlieb of the Massachusetts Office of Commonwealth Development, and William (Billy) Pizer of the National Commission of Energy Policy continued the session with discussions of U.S. policy. Kruger discussed recent activities in Congress, especially the Energy Bill. He also discussed various provisions for emissions registry and reporting under alternate legislative proposals. Such provisions would arguably lead to a scheme to create transferable credit for voluntary reductions and provide hedging opportunity for businesses facing adverse consequences under a future climate policy, thereby encouraging reductions now. He noted that there are few prospects for legislating such provisions in the current Congress.

Gottlieb explained the current status of the Regional Greenhouse Gas Initiative (RGGI), an effort by nine northeastern states to establish a regional emissions trading program. In total, GHG emissions from the nine states of RGGI amount to 14% of U.S. GHG emissions and 3.2% of world GHG emissions (roughly equal to those from Germany). In designing the program, key issues included the determinations of model reference case (base case) and cap levels and offsets outside the region (reductions from external sources). Finally, Pizer summarized the climate and technology portions of the recent report by the National Commission on Energy Policy, particularly their proposal for a mandatory, economy-wide, emissions trading program with a “safety valve.” The report recommends that the trading system should begin in 2010. The system would set the GHG intensity target of 2.4% annual reductions. The safety valve price would be initially set at \$7 per metric ton of CO₂-equivalent and increase by 5% each year. Subsequent U.S. action, including continued increases in the safety valve price, would be linked with comparable efforts by other developed and developing countries via a program review in 2015 and every five years thereafter.

These presentations were followed by 90 minutes of questions and answers about the current policy landscape in both countries. On the Japanese side, there was considerable discussion about the proposed voluntary trading program. Currently, 30 to 35 companies have

submitted proposals, including a pledge of quantified reductions and a requested subsidy. The plan is for the government to accept roughly 30 bids, for trading to occur in 2006, and for compliance verification in 2007.² Unlike the U.K. trading scheme, there is no tax exemption to motivate participation in the program. There was also a brief discussion of the Japanese registry, which will cover all sources above roughly 3,000 tons or about 50% of Japanese emissions. Questions were also asked about whether the taxes discussed by the government would have been up- or downstream; except for gasoline/kerosene, the discussions focused downstream. The Japanese side also clarified that as part of their efforts to switch to more carbon-friendly fuels, completion of the three nuclear plants that was temporally suspended due to accidents is expected in the next few years.

On the U.S. side, discussions centered, in part, on the RGGI program. Competitiveness was discussed, recognizing that there are 10–15 utilities participating and 100-plus sources. It was also pointed out that if the RGGI program only succeeds in raising electricity prices in the region and driving generation to other parts of the country it will not be considered a success. The program needs to be set up so that it does not encourage significant leakage, which is a real problem in a regional program. Questions were raised about whether RGGI would consider credits from other countries. This led to a discussion of the additionality trade-off: seeking the cheapest reductions anywhere versus asking states to make reductions within their borders. Concerns were also raised about whether state governments could really guarantee the quality of reductions achieved beyond their borders, as well as state authority to be involved in international markets. (Similar concerns over overseas offsets under the McCain–Lieberman bill led to a 15% cap on offset credits in that proposal.) On the plus side, it was noted that international trading by states could build more momentum for a federal program. Finally, a question was raised about whether windfall profits might accrue to some generators under the RGGI program; it was pointed out that rewarding clean generators is not necessarily a bad thing.

At one point, the similarity between U.S. and Japanese domestic programs was pointed out: reliance on voluntary programs and a fear of taxes. It was pointed out that two committees of Japan's Liberal Democratic Party—Environment and Agriculture (whose stakeholders stood to benefit from some of the carbon tax revenues)—supported the carbon tax proposal. The Commerce Committee was against it; the Transport Committee is currently against it but open

² On May 17, 2005, the Ministry of the Environment announced that the number of participating companies was 34.

for the future. On the U.S. side, in response to a question about why we (states, some in Congress, academics) continue to focus on trading despite clear opposition, it was pointed out that: a) taxes are not a great alternative because people do not trust government with the revenue—even though carbon taxes were and continue to be supported by some stakeholders;³ and b) the trend is toward market-based approaches and away from command-and-control style regulation—even though there are some notable exceptions, like proposed motor vehicle standards in California.

Toward the end of the first session, there was a discussion about tackling transportation emissions. The Japanese have a three-part approach: fuel economy improvements, improving traffic flow, and improving freight movements. On fuel economy, the Japanese have achieved a 22.5% improvement in 2005 relative to 1990—this represents voluntary achievement of a 2010 standard five years early. On the last two, frustration was expressed that efforts and achievement in these areas is difficult to quantify, leaving fuel economy to bear a greater burden.

Session II: Bridging Stakeholder Differences

This session involved presentations by Masayuki Sasanouchi (Toyota Motor Corporation) and Kevin Fay (International Climate Change Partnership) on the Japanese and U.S. business perspectives, followed by Yurika Ayukawa (World Wildlife Federation Japan) and Vicki Arroyo (Pew Center on Global Climate Change) on Japanese and U.S. NGOs' views. Sasanouchi summarized the essence of voluntary action by business, using examples from the automotive industry. He pointed to the manufacturers' voluntary achievement of fuel economy standards (more than 15.1 km per liter) in 2003, well prior to the target year of 2010, as an example of success in self-regulation. He also noted the necessity of pursuing a parallel approach to technology development to hedge technological uncertainty as well as to meet diversified consumers' tastes. In addition, Sasanouchi cast doubt on numerical reduction targets and proposed a sector-based benchmarking approach. The presentation by Fay included a series of U.S. business perspectives and concerns regarding current and future climate policy. An interesting point was that current mixed messages to industry from the administration—that climate change is a serious problem but little tangible guidance about when and how various

³ Several U.S. participants pointed to the recent statement by Duke Energy (a regional power producer in the southeastern United States) in favor of a carbon tax.

solutions are expected/desired—would be unlikely to produce enough voluntary action or spur a technology revolution.

Ayukawa expressed the NGO perspective on Japanese climate policy. She presented the outline of the WWF Japan's proposal for a mandatory domestic emission trading system for large emitters and proposed a policy mix of emission trading and carbon tax. She also claimed that Japan should adopt a long-term target, such as keeping temperature rise below 2°C by 2100, and then provide plans on what we need to do to achieve that target by 2050, by 2030, and now. This long-term target will make people understand better where we are heading for and actions needed now to get there. Finally, Arroyo explained the role of U.S. NGOs in domestic climate policymaking and differentiated NGOs in terms of their policy stances.

An interesting point made by two presenters—on both the NGO and business side—was the need for long-term goals. Further discussion elaborated that from the business perspective it is important to know where policies are headed in concrete terms. The goal need not be a concentration or temperature goal but should be something that helps businesses make better decisions. This is in contrast to the NGO perspective, where the goal is viewed as something to highlight environmental concerns—such as a warming limit of 2°C—and to help envision a structural reform of society in which there will be less threat of global warming. There was more push back on the business side, with questions raised about whether such long-term goals really influence business decisions versus the need to define real metrics for success. While recognizing the importance of such long-term goals for policymakers, one participant also raised a question about whether the long-term goals, which are not broken down by sectors or companies, can really change the investment decisions of the private sector. The discussion emphasized that it was really a matter of balance—something longer-term than a five-year emission target, on one hand, but shorter-term than a 2100 concentration goal. A closing comment on this topic emphasized that any such goal needed to balance environmental and economic concerns; just focusing on environment is irresponsible.

The discussion of long-term goals led to the discussion of sectoral performance standards as an alternative to or supplement for Kyoto-style targets. U.S. businesses do not like this approach if it looks like regulation, but on the other hand, it was pointed out that opposition to negotiated, economy-wide emission limits could push the regime in that direction. Arguably, some combination of broad incentives, regulatory frameworks, and sectoral programs is likely necessary to combat such a complex problem.

This session also included a brief discussion of U.S. business concerns about possible trade sanctions or barriers by Kyoto participants (including imposition of an energy-equalization tax or carbon levy) against non-participants. It was pointed out that some U.S. businesses are concerned about such practices but such things always seem unlikely until they happen and that provisions for such actions existed in the Montreal Protocol.

A question was also asked about whether there were any “poison pills” for U.S. climate policy from a U.S. NGO perspective. For example, would provisions for nuclear, clean coal, or a safety valve make any proposal unacceptable to the environmental community in the United States? The response was that any practical NGO needed to realize that society needs either coal or nuclear, if not both, to solve the climate change problem in the long run. The sense was that at the end of the day, NGOs would not block a deal because of a safety valve, although there is a question of whether there is a threshold price below which they might balk. It was also pointed out that while at one point NGOs would have supported technology programs (including the current proposal by Senator Hagel) or a registry, now those efforts are seen as giving away votes for a real policy, making such policies less popular with NGOs.

Session III: Encouraging Technology Development and Diffusion

The presentations and discussion in this session focused upon the issues related to technology development and diffusion. Toshiyuki Sakamoto of the Japanese Ministry of Economy, Trade, and Industry, and Mark Heil of the U.S. Environmental Protection Agency, presented climate change-related technology policies in Japan and the United States, respectively. Masahiko Kaneko (West Japan Engineering Consultants) explained several issues related to renewable energy technology transfers. Jae Edmonds (Pacific Northwest National Laboratory) discussed the design of technology policy.

Explaining Japanese technology policy, Sakamoto emphasized the importance of both “government push” and “market pull,” along with voluntary action by business. He also pointed out that despite the huge potential of CO₂ emission reduction by energy conservation in developing countries, the current CDM has failed to realize this potential. He suggested that CDM should be reformed to provide incentives for developing countries to promote conservation and renewable energy more effectively. Heil’s presentation summarized the progress of the U.S. multilateral and bilateral technology initiatives. He also provided case studies of a Climate Technology Partnership program with South Korea.

Kaneko provided a practitioner's view on the development and deployment of renewable energy technology with special reference to geothermal development in Indonesia. He pointed out two main barriers—initial investment burden and resource development risks—and suggested that appropriate policies by local and host governments and technology transfer could help to overcome such barriers. Edmonds provided a study of long-term emissions scenarios and what kind of institutional architecture would be necessary to reach a certain level of GHG atmospheric concentration.

An important discussion on this panel was whether climate technology policy is sustainable given its multi-billion dollar annual cost and current budget deficits. Responses included: a) that these are small compared to Kyoto costs; b) that part of technology policy is prioritization and re-programming; c) funding at least at current levels has been constant, and d) that the Energy Bill could be a vehicle for seeking more funds, especially for deployment.

This panel also led to a discussion of CDM reform—something picked up on the second day.

One question that was asked is why voluntary programs, especially technology deployment, are successful in Japan. It stems in part from active government involvement; the government reviews progress each year by all 34 sub-sectors. Businesses also have flexibility in designing their targets in terms of one of four metrics: absolute energy consumption, absolute emissions, emissions intensity, or energy intensity. In the end, public data are submitted and the process of reviewing the efforts is quite transparent to the public. Therefore, public shame is a significant threat. Moreover, CEOs consider their goals as commitments to the society. Both the Japanese government and public successfully put pressure on the *keidanren* (a Japanese business association that coordinates these voluntary policies). There is a good dialogue between business and government, and there is almost a competition among companies to exceed environmental standards and receive favorable public recognition.

Another question was asked regarding the financing of carbon capture and storage. Two financial issues involved in carbon sequestration were pointed out. The first is the necessity of carbon price. Unless CO₂ mitigation has value, either explicitly or implicitly, there is little reason to invest in capture and sequestration technology. The second is the financial liability of carbon leakage. CO₂ needs to be stored for an indefinite period (hundreds if not thousands of years) and there are real risks that sequestered CO₂ will leak. If investors become liable for long-term, perhaps unknowable, leakage risks, those risks become a disincentive to invest.

Sessions IV and V: Multilateral International Climate Policy

The international policy discussion began with initial comments by four speakers from both the United States and Japan, followed by an open discussion for two hours. Rafe Pomerance (Climate Policy Center), Hironori Hamanaka (Keio University/IGES), Ray Kopp (RFF), and Kotaro Kimura (Global Industrial and Social Progress Research Institute) presented their own views on future climate regimes.

Pomerance pointed out the significant differences between climate change and other international environmental problems and related areas of negotiation. In particular, climate change is more complex, more uncertain, more long-lived, and fundamentally more connected to economic growth and vested interests than most other issues. A key problem with the Kyoto Protocol is that it attempted to lead domestic action with international negotiations—whereas the reverse is a more practical model. Pomerance concluded with the need to emphasize domestic policies, long-term commitment (e.g., R&D investment), and practical, short-term efforts that create useful long-term structures. Hamanaka’s presentation complemented Pomerance’s by emphasizing the need for both “push” and “pull” long-term technology efforts. He highlighted the likely need for a variety of mechanisms to successfully push and pull new technologies: economic incentives, more traditional regulation, and voluntary initiatives.

Both Kopp and Kimura emphasized the potential usefulness of a parallel negotiating track involving a subset of UNFCCC signatories—particularly major emitters and economic powers, including developing as well as industrialized countries. Kopp also emphasized the need to pursue climate change in the context of a larger package of issues, including trade, development, and technology transfer. This is necessary to provide more dimensions for compromise as well as to alleviate developing countries’ fear of climate change becoming a vehicle for curbing their development aspirations. Kimura discussed the potential for bottom-up, sectoral policies if top-down approaches falter, as well as the need to balance resources between mitigation and adaptation.

The general discussion of international regimes began with interest in potential technology “pull” policies in developing countries, somehow accommodating developing country interest in growth and industrialized interest in mitigation. That is, development policy needs to be crafted in a way that embraces environmental goals, with industrialized countries providing considerable support. In response to the suggestion to broaden negotiations to include trade and development, it was pointed out that stakeholders in the trade debate (or at least economists in that debate) often seek to keep it pure: They seek free trade for trade’s sake and do

not like complicating the otherwise simple notion of unfettered trade with side agreements. On the other hand, it was pointed out that such issue bartering underlies the European Union support of Russian entry into the World Trade Organization. The potential to broaden climate policy discussions among developing countries will soon be tested by efforts, led in part by Japan, to reform the CDM to necessarily emphasize engagement in more activities versus strict environmental certainty.

The bottom line, participants noted, is that cash speaks louder than anything else and that when industrialized countries are willing to put money on the table to encourage real developing country action, action will happen. The devil, of course, is in the details: how exactly to structure such incentives. Rising carbon prices in industrialized countries coupled with developing country offset programs are certainly one route. Another idea is a donor's conference focused on encouraging carbon-friendly economic development. It was pointed out that the Montreal Protocol created roughly \$1 billion for such support in the phase-out of ozone-depleting potential (ODPs) substances.

There was significant interest among the participants in potentially linking emerging domestic emissions trading markets. However, the views expressed by the participants, particularly those from the United States, were not so optimistic. Such linkage implies equalizing marginal costs among countries along with corresponding wealth transfers—transfers that may be problematic politically. Different countries also appear to have different ideas on what level the carbon prices should be (e.g., the European Union is interested in high prices to stimulate technology innovation, while others prefer lower prices in conjunction with more direct technology policy). While global trading is more efficient in terms of making all nations as a whole better off, it may lead to distributional impacts within nations that are undesirable. Based on these concerns, the linkage of systems with significantly different autarkic prices may not be desirable. These concerns exist in addition to technical issues, including different rules for offsets, possible “safety valve” prices, and measuring and monitoring requirements.

An unanswered question was the potential role for export banks, that is, a carbon portfolio standard for export bank loans.

There was a lengthy discussion about the potential for, and inherent difficulties of, lifestyle changes for both mitigation and adaptation. Both U.S. and Japanese publics seem to like their current lifestyles. Recycling was cited as the one of the few successful campaigns to change lifestyles in both countries. (Changing U.S. behavior with respect to smoking was also identified,

but arguably smoking consequences accrue primarily to the smoker compared to recycling or climate change mitigation, where the benefits generally accrue to society).

The need to balance mitigation and adaptation, as well as the potential for adaptation efforts to draw attention to the need for mitigation, was noted. It was also noted that the United States is a great responder to crisis, but not such a great predictor of, or preparer for, crisis. The largest single U.S. expenditure on climate change in the near future is likely to be adaptation: More than \$300 million will likely be spent on relocating Alaskan communities threatened by changing climate conditions.

Participants discussed various reforms to the CDM, particularly shifting away from a focus on additionality and ton-for-ton accounting and toward an emphasis on channeling climate-friendly funds to developing countries. While the current focus is understandable, practical interest in a more flexible approach and longer-term institution building—versus short-term reductions—could encourage this evolution. The end result need not be overly restrictive nor unduly generous; a focus on transparent, performance and/or multi-project standards was suggested. Use of investment and private sector experts, rather than climate policy experts, was suggested as a way to expedite review—an enforceable limit on the maximum time for review is another. Finally, it was noted that CDM projects should not be used as or viewed primarily as a route to lowering program costs—that is most effectively achieved via a safety valve mechanism. The CDM should be a vehicle for encouraging climate-friendly activities in developing countries.

The discussion of international regimes ended with support voiced for a more flexible pledge and review approach, as well as for a smaller, parallel negotiation effort among nations that include major emitters and economic powers. It was emphasized that this effort must be carried out in parallel with the multilateral UNFCCC process, which is important in terms of normative developments and representing developing countries that are most vulnerable to the negative impact of climate change.

Conclusion

In his summarizing comments on the first day, Richard Morgenstern (RFF), returned to the question of similarities and differences among Japanese and U.S. policies. On the one hand, both currently have a focus on voluntary programs and technology. On the other hand, closer scrutiny suggests that voluntary programs in Japan involve more coercive elements. Also, the United States has chosen not to ratify the Kyoto Protocol and, unlike Japan, has not put any

money into international projects via CDM and JI mechanisms. The U.S. government has not attempted to subsidize a voluntary emissions trading program, as the Japanese government has chosen to do. There are also notable differences among stakeholders. Japanese businesses are more in harmony with the government, while in the United States there is a range of positions ranging from those who want to see more action to those who want to see less. Japanese NGOs are more focused on long-term, international goals, while U.S. NGOs are more focused on domestic action. In the technology arena, it is harder to find differences, with multiple, active programs in both countries (e.g., performance standards). Both the United States and Japan are reaching out for international cooperation, both face budget constraints, and both have sought creative accounting to document both effort and outcomes. Hironori Hamanaka (Keio University/IGES) concluded by noting there are many areas where mutual understanding can be enhanced, that the discussions have laid a good foundation, and that the future requires a better framework/ regime to address climate change issues.

On the second day, there was a rough consensus favoring reform of the CDM, a more flexible international process, and parallel negotiations among a smaller group of countries.

As RFF and IGES plan to hold another workshop on climate policy in the United States and Japan in March 2006, participants provided comments and suggestions concerning topics for next year. These suggestions included:

- Continued updates on domestic policy developments in each country. The high level of specificity and detail in this workshop is particularly valuable.
- Continued emphasis on ideas for future regimes. There was a specific interest in focusing on Asian concerns at the next conference, building on a new IGES effort focusing on that region. Careful attention should be paid to developments at November's COP 11/MOP 1 meeting in Montreal.
- Attention to the long-run domestic policy outlook in the United States, beyond the current administration.
- Domestic policies within key sectors, such as electricity and transportation. This could also include a discussion of sector-based international frameworks.
- Non-federal activities in the United States, including nongovernmental and state-level developments.
- Long-term technology needs and pathways.
- Long-term objectives and goals, including a shift away from 1990 as a base year.

- Use of a co-benefits approach to engage developing countries on the climate change issue in a way that meets the development need of those countries.
- Incorporating GHG pollution costs into carbon prices and sending the right signals to the market to encourage carbon use reduction.

Appendix

Climate Policy in the United States and Japan: Prospects in 2005 and Beyond

May 11-12, 2005, Conference Room 4-5, Villa Fontaine Shiodome
1-9-2 Higashi Shinbashi, Minato-ku, Tokyo 105-0021, Japan

Day One: Domestic Policies

Welcome (9:00 – 9:15) – Hironori Hamanaka (Keio University/Director IGES) and Richard Morgenstern (Senior Fellow, RFF)

Session I (9:15 – 10:45): Domestic Climate Policy Update

Chair: Mikiko Kainuma (NIES)

New Climate Change Program	Osamu Mizuno, Director, Ministry of the Environment
Japan Carbon Fund	Takao Aiba, Development Bank of Japan
Climate Policy in the US Congress	Joseph Kruger, Resources for the Future
Regional Greenhouse Gas Initiative	Andrew Gottlieb, Massachusetts Deputy Secretary of Commonwealth Development
Non-Governmental Initiatives	Billy Pizer, National Commission on Energy Policy

Break (10:45 – 11:15)

Session I Discussion (11:15-12:00)

Lunch (12:00 – 1:15)

Session II (1:15 – 3:15): Bridging Stakeholder Differences

Chair: Billy Pizer (RFF)

Japanese Business Perspectives	Masayuki Sasanouchi, Toyota Motor
US Business Perspectives	Kevin Fay, International Climate Change Partnership
Japanese NGO Perspectives	Yurika Ayukawa, Climate Change Policy Senior Officer, WWF Japan
US NGO Perspectives	Vicki Arroyo, Pew Climate Center

Break (3:15 – 3:45)

Session III (3:45 – 5:45): Encouraging Technology Development and Diffusion

Chair: Richard Newell (RFF)

Japanese Climate Technology Policy	Toshiyuki Sakamoto, Director, Ministry of Economy, Trade, and Industry
US Climate Technology Cooperation	Mark Heil, US EPA
Business Perspective on Technology Policy	Masahiko Kaneko, West Japan Engineering Consultants, Inc.
Economics of Technology Policy	Jae Edmonds, Pacific Northwest National Lab

Closing Comments (5:45 – 6:15): Observations and Wrap-up

Chair and remarks: Richard Morgenstern (RFF) and Hironori Hamanaka (IGES/Keio University)

Day Two: Multilateral International Climate Policy

Session IV (9:00 – 10:00): Lessons from Past Experience

Chair: Tae Yong Jung (IGES)

What does our experience negotiating at the COPs, as well as our broader experience with environment, trade, and diplomacy, tell us about how to negotiate a successful climate change agreement

Rafe Pomerance (Climate Policy Center)

Hironori Hamanaka (Keio University/IGES)

Ray Kopp (RFF)

Kotaro Kimura (GISPRI)

Break (10:00 – 10:30)

Session V (10:30 – 12:30): Panel Discussion

As the United States develops a new domestic policy and Japan expands its National Climate Change Program, a key question is how these policies can be woven together into a post-Kyoto international architecture. In particular:

- *What does it mean for international negotiations as we move from a focus on the first Kyoto commitment period to the second?*
- *What is the future role of the UN process versus bilateral or mini-lateral actions outside of the UN?*
- *Should future agreements continue the targets-and-timetables approach of the Kyoto Protocol? If not, what are the alternatives?*
- *How much should international agreements seek to influence domestic policies versus codifying policies in the leading countries?*
- *What is the role of technology policy and adaptation?*
- *How far can / should industrialized countries go without significant action in developing countries? How can that action be encouraged?*

Chairs: Tae Yong Jung (IGES) and Richard Morgenstern (RFF)

Adjourn (12:30)

Participant List

Climate Policy in the United States and Japan: Prospects in 2005 and Beyond May 11-12, 2005, Tokyo, Japan

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