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Panelist

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Norichika Kanie is associate professor at the Graduate School of Decision Science and Technology, Tokyo Institute of Technology, Japan, and visiting associate professor of the United Nations University Institute of Advanced Studies. Among others he serves as a scientific steering committee member of the Earth Systems Governance programme of IHDP, and editorial board member of the journal Global Environmental Governance. Currently he is a vice chair of Working Party on Global and Structural Policies (WPGSP) at OECD, and among the fifteen UNEP International Environmental Governance Advisory Group member. From August 2009 to July 2010 he was a Marie Curie Incoming International Fellow of the European Commission and based in SciencesPo, Paris. His recent publications include, Norichika Kanie, Hiromi Nishimoto, Yasuaki Hijioka, Yasuko Kameyama (2010) “Allocation and architecture in climate governance beyond Kyoto: lessons from interdisciplinary research on target setting”, International Environmental Agreements: Politics,Law and Economics, Volume 10, Issue 4, pp 299-315; Norichika Kanie “Post-2012 Institutional Architecture to Address Climate Change: A Proposal for Effective Governance. Global Warming and Climate Change”, in Grover, V.I. ed. Global Warming and Climate Change: Ten Years After Kyoto and Still Counting, Vol. 2., NH, Science Publishers (2008), pp.1065-1077; Yasuko Kameyama, Agus P.Sari, Moekti H.Soejachmoen and Norichika Kanie eds. Climate Change in Asia United Nations University Press(2008), pp31-48. He received his Ph.D. in Media and Governance from the Keio University.

The objectives of this research team are to articulate the possible forms of medium and long-term governance architecture to establish low-carbon societies in Asia, and to propose concrete policy options to make them a reality. To achieve these objectives, we are tackling two challenges.

Consideration of Required Emission Reductions and Equity

First, we are considering the gap between the current situation and emission reductions required to create low-carbon societies. The 16th Conference of the Parties to the UN Framework Convention on Climate Change (COP16), held last year in Cancun, Mexico, acknowledged that the ultimate objective for climate change countermeasures was the concrete target of keeping the average increase to no more than two degrees Celsius above pre-Industrial-Revolution temperatures. As for long-term targets, the agreement reached at COP16 settled on large emission reductions globally by 2050. G8 countries, however, had already agreed earlier to aim for a 50 percent reduction globally by 2050. The prospects are still not clear for negotiations on an international framework for the medium term, to 2020, but political consensus is gradually moving toward concrete numbers that will put us on the path toward low-carbon societies.

In parallel, medium-term target-setting is progressing at the national level, at the local government level, and at the corporate level, and one can gradually discern the outlines of the framework of climate change responses and the realization of low-carbon societies. In effect, target-setting work accelerated in the lead-up to the COP 15 Copenhagen Conference in 2009. This research team is regularly updating a database of these medium-term targets at the various levels, and providing them publicly on the Internet.

If the approach taken under the Kyoto Protocol continues—in which international commitments are made at the national level to achieve reduction targets—it will be important to consider the issue of international equity in those targets. Our research team considered this issue of equity. Domestic debate in Japan focuses on effectiveness, and there is a strong tendency to address the topic of equity based on the capacity of each country to make reductions based on the level of marginal costs of

reduction. Such discussions, however, are largely affected by the parameters set for simulation-based models. Meanwhile, the concept of equity emphasizes the responsibility for causing climate change, as well as capacity to make emissions reductions and the capacity to pay for them, and some initiatives have tried to describe equity using combinations of these indicators. Indicators of equity such as these are also being used broadly in international debate. Using a variety of such indicators of equity, this research team calculated the emission reductions required to realize a low-carbon society in the medium and long term, in Asian countries and in the world. Going forward, we will assess the required emission reductions as indicated by this type of consideration, compare our findings with current targets, and consider approaches to address any gaps that become evident.

Consideration of International Low-Carbon Governance in the Medium and Long Term

In order to achieve the required emission reductions in an effective way while also optimizing the process internationally to realize low-carbon societies, it is also necessary to consider the most effective international institutional architecture. Thus, the second challenge our team tackled was consideration of an effective medium- and long-term international institutional architecture. Model-based research to date has been able to calculate the required emission reductions in a variety of countries, but there has not been adequate consideration of topics such as by what mechanisms the required reductions can be achieved. By conducting this research, we aim to contribute to these model-related studies.

When it comes to international governance research, attention tends to be drawn toward the stalled international negotiations on climate change. The current state of negotiations is important, naturally, but regardless of their current status, if we are to effectively realize low-carbon societies in Asia and globally in the medium and long term, we must promote low-carbon technologies through international technology transfers and also popularize low-carbon products.

When considering international institutional arthitecture, the typical approach has been to consider frameworks based on negotiations between state governments. For example, the Cancun Accords reached at COP16 included the decision to establish a Technology Executive Committee, and to establish a network of climate technology centers. If we think about this, however, it is corporations and the private sector that actually own low-carbon technologies. Unless those actors are involved, these frameworks will not be effective, and it is likely that they will not be implementable through multilateral negotiations. For example, our research project found that the CDM has not led to as much technology transfer as was expected. Admittedly, the corporate objective is to make a profit, so if initiatives are led by corporations or the private sector, then in the future, it will become more difficult to ensure the long-term public benefits of climate change countermeasures. What thus becomes necessary is a new style or form of governance in which corporations—which are non-governmental actors—cooperate with national governments, and by working in partnership with them, fulfill a mission in society by making use of networks.

Some systems research has suggested that compared to centralized systems, autonomous and decentralized systems are more robust and superior, due to their problem-solving capacity. In particular, it is known that there is a strong tendency for this to be true in complex systems. This is because the collapse of one system will not lead to the collapse of the entire system, and institutional innovation also becomes easier. Furthermore, the more actors involved the easier it becomes to find solutions to problems as a whole. If one seeks to design systems or institutions that are less susceptible to fragmentation, partnerships based on networks can offer robust solutions.

We will continue to work on case studies to augment this type of theoretical research, and are continuing to investigate effective ways to transfer low-carbon technologies, as well as ways to spread these technologies.