

**The Transformation of Japan's Environmental Policy:
Divide, Interaction and Convergence of Level-of-Politics**

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In the 1970s and 1980s, Japan was the leading market known for being an innovator of environmental policy. Other OECD countries found much to emulate from Japan's policies. Two decades later, Japan appears to have lost its innovative edge to other OECD countries. Why has Japan fallen from its position as the global leader? How should Japan regain its reputation? To answer these questions, I will examine possible causes of the rise and fall of Japanese environmental policy by exploring its domestic policy subsystem, the international arena, and the arena where domestic and foreign issues converge or the emerging space, in particular, where sub-national authorities have become increasingly recognised as a direct contributor to global environmental strategies. Each of three approaches - the domestic/foreign divide, interaction, and convergence - represents a partial explanation to these questions. This article suggests that analytical eclecticism is required to fully explain empirical puzzles.

Key words: climate change, environmental politics, industrial pollution, Japan

What accounts for environmental policy change over time? There is a different level of interests at work on the multilateral level for environmental protection. This article will examine how environmental policy making in Japan has developed over periods of time as Japan has gone through different phases of environmental protection from addressing domestic to global issues. To this end, it will analyse the dynamic relationships that exist in Japan among actors, interests, institutions and political coalitions and identify the determinants of changes in these relationships. It will illustrate that compelling analyses of the empirical puzzle can be conducted through combining the traditionally separated levels, the increasingly interactive levels, and the emerging convergence, of domestic and foreign politics to gain analytical leverage over multilayered and complex connections over the internationalisation of environmental issues.

In the 1960s, advanced economies in major countries, such as the United States, West Germany and Japan, ushered in the era of national environmental policy-making. By the early 1970s, Japan had one of the world's strongest environmental regulations. Yet Japan had also been known for its strong commitment to economic development and business interests. Why was Japan able to get environmental issues on the agenda and take legislative action only for a short period of time? Many scholars argue that the severity of industrial pollution made it impossible to ignore and thus prevailed over pro-development policies in electoral processes (Krauss and Simcock 1980, McKean 1980 and 1981, Reed 1981). Some focus on actors, for example, emphasising Japan's anti-industrial pollution movements as an ultimate factor (McKean 1981, Reich 1984). The policy shift was ascribed to political pressures that these movements generated as both the electoral threat to the ruling party and the productivity threat to big business grew rapidly (Broadbent 1998 and 2005, pp. 114-9). Opposition-controlled localities are also considered to be a continued source of pressure on the national government (Muramatsu 1975, Krauss and Simcock 1980, MacDougall 1980, Steiner 1980, Reed 1981, Foljanty-Jost 1995). Opposition parties in control of local governments were quick to adopt stricter pollution prevention measures than those imposed at the national level. But their labour constituency was reluctant to endorse the high pollution related expenses (McKean 1981, p. 183) and once the national ruling party incorporated some of the opposition's more popular measures into its platform, the momentum from local activism waned in the mid-1970s. Equally important, others are intrigued by the puzzle of why in the 1980s Japan began to lag behind major European countries, such as Germany, in environmental initiative and innovations. Foljanty-Jost (2000) has brought attention to the circumstances under which environmental policy was to be initiated and argued that the policy environment had fundamentally changed due to the improved air quality. Broadbent (1998) points out the failure of Japanese environmental movements to establish powerful national interest groups. Japan had subsequently a very small and weakly organised community of environmental groups (Schreurs 2002). The disintegration of anti-industrial pollution movements was seen as a reflection of shifts in public opinion (Vogel 1990). These studies view policy formation as an essentially domestic-level process taking place within states. The objective of this article, however, is to examine how the dynamics of environmental policy making has changed as environmental issues become internationalised over time. [1]

Traditional approaches to an explanation of this emerging phenomenon simply

highlight the mutual interplay between separated levels of politics. Domestic factors are considered to be a determinant of foreign policy (“second image”) (Waltz 1959) or the external environment is claimed to affect domestic politics (“second image reversed”) (Katzenstein 1976, Gourevitch 1978, Rogowski 1989). A more recent approach, the “two-level-games” theory, does suggest a shift from strictly delineated domestic-foreign dichotomies to an interactive levels approach while viewing international negotiations as influenced simultaneously by both domestic and international constraints (Putnam 1988, Evans, Jacobson, and Putnam 1993). This approach is subject to criticism on the grounds that it places the sub-national level of participation to the second level of the game or that it views that participation not as the direct sources of international bargaining, but as a mere constraint on the bargains. Equally important, it is inadequate to consider the effect of international norm diffusion on sub-national agents and specific domestic settings (Risse-Kappen 1995, Checkel 1997). Local and provincial actors have increasingly considered themselves direct players in a global game to cope with the local impact of climate change (e.g., Mlinar 1995; Litfin 2000). The dynamics of the sub-national level of participation would seem to reveal convergence, rather than a simple interplay of domestic and international politics. This can be seen as a rapidly expanding sphere of action in which the boundaries of domestic and foreign affairs are eroding (Rosenau 1997). The boundary-eroding dynamics have become highly salient in the field of international environmental cooperation precisely because the causes of environmental risk are locally specific in character yet local action can simultaneously be part of global strategies. The necessity of integrating local actions to ensure the optimal reduction of environmental risks has been provided for in the multilateral environmental agreements (MEAs). [2]

The first analytical framework – divide - views environmental policy-making as a fundamentally domestic-level process occurring within the internal arena. Actors in the process of political coalition building treat the reduction of environmental risk as a local or national public good whose benefits accrue to the public of a nation and correspond to national boundaries. The question of who bears the cost of providing the public good at the local or national level lies at the heart of environmental politics. The second analytical framework – interaction - refers to environmental policy-making based on the simultaneous interplay between domestic interests and international bargaining while presuming the different levels of domestic/foreign affairs. Environmental degradation may well spread beyond national borders and could have a regional/global range. Public intervention is thus required to provide both local/national and regional/international public goods for environmental risk-reduction. Policy-makers deal with two sets of constraints: domestic constraints on cost-sharing for environmental risk-reduction and foreign pressures on collective action over resources to contribute regional/international environmental benefits. Environmental politics is a locus where policy-making must choose how to reconcile international and domestic concerns. The third analytical framework – convergence - is defined as a penetration phenomenon where environmental policy-making at one level of politics serves as decision-making in the political process of another. The reduction of industrial pollution by a municipal authority will improve air quality in the locality, and at the same time the locally specific action may directly contribute to global governance for greenhouse gas emissions reduction. Environmental politics tends to evolve around coordinating the provision of the intermeshed public goods.

The following section explores the expansion of environmental regulations over industrial pollution and voluntary agreements between business and government in the 1970s and the use of pro-business, market-oriented approaches to environmental protection in the 1980s. These two decades saw policy formation as an essentially domestic-level process. The second section presents the case study of Japan's international bargaining over climate change in the 1990s. Environmental policy formation in the 1990s was quite compatible with much in the interactive two-level-games of constraints and opportunities on both the domestic and international levels. The third section gives a relatively unexplored view of sub-national participation in international environmental regimes. It illustrates the emerging phenomenon of convergence from the perspective of the cross-border and cross-level harmonization of politics and policy. The final section analyses the transformation of these environmental affairs in terms of an eclectic interpretation of environmental politics operating along the domestic/foreign divide, interaction, and convergence forces.

National environmental policy in the 1970s and 1980s

These two decades saw the era of national environmental policy-making. The most fundamental explanation of policy expansion is as a response to new or increased demand. Environmental policy growth and innovations are directly related to the situational circumstances that would create or increase the demand of policy making. In this regard, the case of Japan would suggest two key events: the industrial pollution crisis in the late 1960s and the two oil crises in the 1970s (e.g., McKean 1981, Broadbent 1998). In the late 1960s, the polluted air, soil and water began to cause human hazards in a visible way. In Japan, local authorities, the layer of government closest to the people, were quick to respond to local populace demands (Krauss and Simcock 1980, pp. 221-2). During this period, disgruntled voters elected a wave of candidates from the opposition coalitions as local chief executive positions in the highly urbanised areas where the quality of life was deteriorating. The electoral success brought about a political crisis to the party in power, Liberal Democratic Party (LDP) (Muramatsu 1975, Steiner 1980, Broadbent 1998). In 1970 the National Diet of Japan, the so-called "Environmental Pollution Diet," passed radical improvements to the 1967 comprehensive government countermeasures against a wide range of environmental pollution, pledging the steepest reduction of environmental pollutants in the world. [3] The conservative coalition of the bureaucracy, LDP and business, responded to environmentalists' demand with its emphasis on the use of strict regulations rather than market-based solutions.

Following the passage of the new environmental laws at the Environmental Pollution Diet, the most important factor was the external environment in which the 1973 oil crisis claimed to trigger a greater concern nationwide about Japan's need to promote more energy efficiency. Japanese leaders viewed the nation as the potential victims of uncontrollable external forces as Japan relied on imports to meet a full 85 percent of its energy needs. [4] In 1978 the Japanese government created a tax incentive system for investment of energy conservation facilities and just after the second oil crisis in 1979, it began to apply the Energy Conservation Law to energy conservation measures. [5] In the 1980s, the Japanese government played a regulatory role in two fundamental ways: financial incentives to boost energy-saving initiatives and investment, and energy efficiency standardisation for manufacturing facilities, transportation machines, buildings, houses and consumer products. On average in the

1980s, Japan spent 1.0 energy unit per GDP, while the OECD average spent 1.5, Britain 1.3, West Germany 1.5, the United States 1.9, and China 3.8 energy unit. [6] Japanese government's regulations to improve the energy efficiency of production were not part of environmental policy, but rather conceived of as industrial policy for managing Japan's energy demand/supply structure. Nonetheless, Japan's efforts to maximise energy efficiency consequently contributed to emission reduction efforts. The 1980s was distinctive in that "Most of Japan's new environmental improvements during this period came as a by-product of energy conservation measures" (Broadbent 2005, p.119).

In Japan, by the mid-1970s, the focus of environmental protection shifted from identifiable sources of industrial pollution to diffuse, no-point sources of non-industrial pollution. Environmental citizens' movements were unable to display the same level of community solidarity that was a key characteristic of the earlier movements. Most environmental groups remained small and poorly funded at the grassroots level and failed to have a direct voice in the national policy-making process. In the late 1970s, when the public responsiveness to environmental pollution problems significantly declined, progressive local chief executives in major metropolitan areas departed from the political arena. [7] Public opinion surveys also reflected this trend by indicating a significant drop from over 20 percent in 1973 to 9 percent in 1981 in the percentage of the public that felt adversely affected by air pollution (JEA 1982, chp 2-1-3). [8] The conservative coalition-building thus prevailed in the absence of the attentive public and highly mobilised societal actors. In the early 1980s, salience of environmental regulations decreased rather abruptly due to changes in the situational circumstances. Faced with the urgent necessity of fiscal reconstruction, the Japanese government followed the "zero-ceiling" policy from 1983 to 1987, which amounted to a freeze on government spending. This was accompanied by Prime Minister Nakasone Yasuhiro's initiatives toward neoliberal economic strategies, namely, market-driven, voluntary solutions to environmental problems. In the 1980s, there was lack of socially mobilised forces that were able to put on the political agenda environmental issues unattended by government or corporations.

Coalition building for national environmental policy in the 1970s and 1980s

In post-World War II, Japan's state-led corporatist policy networks with big business were to provide public opinion with less opportunity to affect policy outcomes. The passage of the 1967 Basic Law for Environmental Pollution Control was a result of the coalition building in which a Ministry of Health and Welfare draft (recommending strict industrial liability) had been emasculated by the economic ministries and the business peak organisations for giving priority to development over the environment (McKean 1981, p. 19, Broadbent 1998, p. 118). However, by 1970 a high degree of societal mobilisation against industrial pollution created a new support basis for environmental policies and led to LDP's devastating losses at local elections. LDP politics subsequently entailed a crisis effort to advance environmental policies into an electorally attractive proposition. Its leadership rushed to radically revise the Basic Law at the Environmental Pollution Diet, without first coordinating with business peak organisations' interest (Broadbent 1998, pp. 120-1). It is important to point out that Japan's environmental policy community was too fragmented and weak to have a concerted, direct voice in the policy-making process. A potential key actor, the sub-

cabinet level Environmental Agency for coordinating the environmental policy community, was established only in 1971 and remained a weak, secondary body to larger economic ministries. Over 3,000 citizens' environmental groups were socially mobilised yet had never grown into a nationally coordinated movement or a national political party, such as Germany's Green Party. In the mid-1970s, the LDP began to regain its electoral momentum while incorporating some of the local policy innovations into its own platform. By then, the national government had caught up with local governments; the national standard was no less stringent than the locally-imposed innovative measures for air quality (JEA 1979).

In the 1980s, LDP's vote share rebounded nationally and locally. The electoral success brought back the old coalition-building process to Japan's environmental politics. Coordinating with LDP's business clients, industrial pollution control became integrated as part of traditional industrial policy (IDE 2007). The oil crises overshadowed a genuine concern for environmental degradation. The Keidanren (Japanese association of business organisations) worked with the Ministry of International Trade and Industry (MITI), which tended to see technology as the solution to environmental problems, in strengthening energy efficiency to free Japanese manufacturers of their external energy dependence (IDE 2007). To facilitate manufacturers' initiatives in energy conservation, the Japanese government offered support through low-interest loans and tax relief as well as opportunities to learn from collaborative government-industry-university research (Ren 2005, pp. 307-10). Japan's pollution-intensive sector output as a percentage of non-pollution-intensive sector production dramatically dropped from nearly 70 percent in 1975 to 35 percent in 1989 while its import/export ratios of polluting products rapidly increased from as low as 20 percent in 1976 to a high of 95 percent in 1990 (Mani and Wheeler 1998, pp. 224-9). [9] In short, the coalition building process effectively facilitated the accompanied net displacement of pollution production to trading partners as well as the decline of pollution-intensive industries.

Environmental foreign policy in the 1990s

Without environmental degradation, there would be no need for environmental protection. However, Japanese export sector's need for environmental protection did not derive from its anticipated environmental degradation, but rather from changing international market conditions to which it needed to adjust quickly. By the time when Europe-led business was fully engaged in the process of establishing environmental standards leading up the 1992 Earth Summit, the Japanese export sector acknowledged that not complying with international environmental management standards (ISO14000) would become a disadvantage to Japanese products sold in overseas markets. [10] In 1996 the business coalition of the Keidanren and the Japan Industrial Standards (JIS) Committee adopted the ISO (International Organization for Standardization) international standards as part of JISs, virtually in their original form (JEA 1997).

At the government level, by the mid-1980s, Japan was under increasing pressure from major OECD countries to play an international role appropriate for its economic power. In particular, Japan was strongly criticised for exporting polluting industries to Southeast Asia. Prime Minister Nakasone Yasuhiro pledged to actively participate in preserving the global environment. In 1984 the UN General Assembly established the

World Commission on Environment and Development (or Brundtland Commission) in response to a Japanese proposal. In the wake of the 1987 Brundtland Report, there was wide recognition among major OECD countries that global strategies would be needed to address inter-related social, environment, and development issues. In 1988 atmospheric scientists at the Toronto Conference sought to get climate change on the international policy agenda calling for a target of a 20 percent reduction in greenhouse gases (GHG) below 1988 levels in 15 years. The Japanese government could not afford the risk of damaging its international reputation by failing to respond to its international commitments and thus established the Cabinet Meeting concerning Global Environment Conservation in 1989 for policy coordination among key ministries (JEA 1990, chp. 9). In short, foreign pressure hit the Japanese policy agenda although there was no serious criticism from within in the absence of a strongly mobilised body of Japan's environmental NGOs.

Costs of provision for environmental foreign policy in the 1990s

Japanese government's contributions to the issue of climate change fitted well with its effort to ease foreign pressure to do more to contribute to international "public goods." In general, regardless of their cost-sharing for CO₂ emissions reduction, individual countries may receive the benefits of global strategies for climate change anyway. There is an aspect of public goods theory in this context (Olson 1965; Olson and Zeckhauser 1966). The benefits of climatic risk reduction are non-excludable so that any one country has a strong incentive to take a free ride on the efforts of others. Even if previously uninvolved in the cost sharing, Japan can be seen to benefit from it. From the viewpoint of international reputation, however, if others find Japan's contributions to be less than expected, Japan may suffer from the damage to its reputation. This damage may come with other types of material losses, such as carbon tariffs Japan has to pay to other countries. The image of a free ride will have a negative impact on Japan's international reputation. Environmental foreign policy affects material interests in a way quite different from that of domestic environmental policy. Differences in developmental paths among countries have revealed specific geographical orientations, that is, North-South focuses. Climate change has been seen as a site for dialogue to tackle the North-South divide. Japan has provided technical training to people from developing countries to diffuse environment-friendly technologies, and official development assistance (ODA) loans in the fields related to climate change. In 1992, with an eye to the Rio Summit, the Cabinet adopted the ODA-guiding principle of "Environmental conservation and development should be pursued in tandem," which was incorporated into Japan's first ODA Charter (JMOFA 2001). At the summit, Japan pledged a substantial increase in its environmental ODA – an increment of about US\$ 7 – 7.7 billion in a five year period. [11] Other parties in the climate negotiations expected Japan's greater economic capability to incur more international responsibility for environmental protection by extending environmental aid to developing countries.

Despite its cost-sharing in the form of foreign aid, Japan's necessary but costly policies, like any other country's concerns, were the ones that were perceived by business as likely to affect its profit expectations or lose its market share. In the 1970s and 1980s, Japan set the benchmark in energy efficiency that other major OECD countries were aspiring to emulate. Yet, in the 1990s, Japan and certain environmentally advanced countries switched positions in terms of government and

industry initiatives in environmental risk reduction. Climate change/carbon taxes were adopted in the early 1990s in Scandinavian countries and the Netherlands, and later in Britain and Germany while Japan's business community was largely left to voluntary self-regulation for reducing CO₂ emissions. Japan has been caught up by European countries in the field of industrial energy efficiency and even slipped behind in certain industrial sectors (IEA 2007). It is true that, as the Japanese government claims (JMETI 2007), Japan's CO₂ emissions per GDP are the lowest level among OECD countries. [12] However, Japan's GDP is overvalued in currency conversions because of the high cost of living and thus Japan appears to be much more environment-efficient than it is. By using purchasing power currency values rather than simple currency conversions, Japan's CO₂ emissions per GDP are only equivalent to the EU-15 average (IEA 2007). Japan is relatively efficient but it is largely because the energy-efficient residential and transportation sectors make up for the high level of commercial and industrial CO₂ emissions per GDP. Japanese housing consumes energy far less than those in major OECD countries, although significant growth in the proportional share of total CO₂ emissions has been continuing for the residential sector. Along with the importance of consumer behaviour and lifestyles, the commercial and industrial sectors are expected to play a critical role in reducing CO₂ emissions in Japan yet the reductions have been driven by Keidanren-led voluntary action. [13] The business community has successfully avoided mandatory requirements, such as tax or cap-and-trade schemes at the national level.[14]

Coalition building for environmental foreign policy in the 1990s

International pressure alone did not suffice to account for Japan's climate change diplomacy. Japanese domestic politics became entangled via international negotiations. Domestically, the coalition building of climate change differed significantly from that of industrial pollution on the dimensions of interests and actors. Since the costs and benefits of industrial pollution in the 1970s were relatively concentrated on a narrow range of industrial interests and effected residents in industrial cities, these groups intensified their political conflict in a direct way. A discrete dichotomy of polluters-versus-victims interest representation effectively influenced the course of events regarding pollution control and compensation. In contrast, a proposed agreement over climate change tends to impose both diffused and uncertain adaptation costs on a sectoral basis while offering diffused benefits to a wide range of social groups.

Due to the scientific technicality of climate change, Japan's Environment Agency technocrats, who were well informed at international conferences, began to assume a major part of the policy debate while drawing on help from scientists in the fields of energy, economics and atmospheric science. The Environmental Agency, which had been established in 1971 with the aim of coordinating the administration of environmental policies, still had to rely in practice on the exclusive exercise of other ministries' jurisdiction over environment-related matters. In this respect, climate change was an ideal area where the agency could expand its jurisdiction for policy coordination. Yet this environmental coalition was destined to face a tenacious resistance by an industrial coalition. Not surprisingly, the Ministry of International Trade and Industry (MITI) took on the issue of climate change as a matter of industrial policy. The ministry, together with a strong business lobby, opposed a carbon tax as well as an emission trading system (Oshitani 2006). Climate change also

presented a challenge for energy demand/supply policy to take GHG emissions' constraints into consideration. MITI's Agency of Natural Resources and Energy, in collaboration with coal, electricity, gas, nuclear and petroleum industries, had been instrumental in managing Japan's energy demand/supply structure after experiencing the two oil crises (Uchihashi 1995, pp. 163-70). On the other hand, as its negotiations took place in the international arena, climate change put the Ministry of Foreign Affairs in a position to be at the very front of coalition building. As Japanese diplomats and conservative politicians had been obsessed with international reputation, Japan's leadership in the negotiations was conceived of as its international contribution. In 1995 the Japanese government announced its willingness to host COP-3 and its reputation was at stake in the success or failure of the conference. The objective of the ministry for hosting COP-3 was to adopt a successful multilateral protocol and thus enhance its reputation as a leader in the Asia-Pacific. To this end, the host nation needed to assure US participation in the protocol and had no choice but to persuade other countries to bend to the wishes of the United States (Kameyama 2004). [15]

In 1990 Japan's Cabinet adopted an Action Program to Arrest Global Warming, which stated "the emission of CO₂ should be stabilised on a per capita basis in the year 2000 and beyond at about the same level as in 1990" (JMOE 2009). As COP-3 approached, the apparently unattainable targets remained intact without any careful re-examination. Japan was criticised by some countries and environmental groups for not accepting legally binding targets at COP-2 yet failed to present its host nation's domestic plan at the opening of COP-3. As negotiations at COP-3 progressed, Japan had to submit a proposal for reducing GHG emissions. The environmental coalition, led by the Environmental Agency and the National Institute for Environmental Studies, argued, by using a model based on the introduction of carbon tax, that a 7.6 percent CO₂ reduction from 1990 levels by 2010 could be achieved (Takeuchi 1998, p.156). The industrial coalition argued that Japan had produced the lowest per capita CO₂ emissions among OECD countries and thus would find it much more difficult than others to reduce GHG emissions. As Keidanren announced its voluntary action plan in June 1997, the MITI decided to propose reduction targets without imposing mandatory requirements on business. The ministry emphasised that reducing CO₂ emissions to 1990 levels by 2010 would be the best Japan could do to combat climate change (Tanabe 1999, pp. 122-23). As the European Union called for a 15 percent reduction target at COP-3, the Ministry of Foreign Affairs argued for an internationally acceptable target of 6.5 percent. [16] In September 1997 the Prime Minister's Office, when informed that the United States would finally present its proposal, intervened in the bureaucratic impasse, and set Japan's proposal as a reduction of 5 percent reflecting a compromise between bureaucratic interests and "internationally acceptable reductions" (Schreurs 2002).

Environmental sub-national-participation in the 1990s and the 2000s

The 1992 Earth Summit recognised the importance of sub-national participation in the resolution of global social issues. Agenda 21, which was adopted at the summit, also stressed the vital importance of international cooperation on a local level (UNCED 1992). Article 34 of Japan's Basic Environment Law, which was enacted in 1993, acknowledged the role of local governments as the subjects of international environmental cooperation (JMOE 2007). In 1993 the International Council for Local

Environmental Initiatives (ICLEI) established its Tokyo office with aim to promote local initiatives (or Local Agenda 21) in Japan and other Asian countries. [17] Sub-national participation is desirable for two basic reasons: the need for locally specific response to global strategies (as the causes and effects of climate change are local in character) and the need for a decentralised form of international environmental cooperation (especially as partnerships between local North and South authorities can help the developing world to build the capacity of local government) (Shuman 1994; Green, Game and Delay 2005). As global strategies for environmental risk reduction reach the implementation stage, they demand local action. The linkages between international environmental regimes (based on multilateral agreements) and the local live-in environment become converged to follow the details of locally specific needs for global strategies. The implementation of international agreements links people in small-scale social structures to a global environmental regime and then increases the visibility of sub-national action in a global game.

In the EU settings, sub-national participation that is mandated in the EU treaties allows a direct contact between sub-national authorities and supranational EU institutions (e.g., the Committee of the Regions). Increased freedom of sub-national participation may also derive from changes in the formal powers of sub-national authorities within national boundaries. In 1992 the French government passed national legislation allowing its local authorities to sign agreements with overseas counterparts (Art 131, Loi d'orientation No. 92-125). Such institutional rules are yet to be seen in Japan. The Japanese government has neither clearly regulated nor enabled sub-national level of participation in international environmental cooperation but in the absence of national policy a few front-runner local authorities in Japan are willing and capable of contributing to bridging policy gaps between local action and global strategies. Without any familiar ground of institutionalized rules or the right to legitimately represent itself at the international level, the agency of sub-national actors finds a way through political mobilization to move across levels of governments and deal directly with overseas counterparts and supranational actors in a rather *ad hoc* fashion.

Coalition building for environmental sub-national-participation

To reduce environmental risks at the regional and international levels, Japanese local governments have been working with counterparts, such as overseas local authorities, domestic/international NGOs and international organisations. There has been an emerging form of environmental activism, transnational coalition building, in which local governments are bound together with overseas partners by shared values and exchanges of information to work internationally on global environmental strategies. According to a Ministry of the Environment's survey conducted in 2002 (with 47 prefectures and 40 major cities), 68 percent of the environmental government officials "have experience in international environmental cooperation" (JOECC 2003). International environmental cooperation at the sub-national level can be categorised into four patterns that are not necessarily mutually exclusive: bilateral cooperation/partnerships, and sectoral, regional, and international networks/coalitions.

One of the early pioneering efforts was Kitakyushu-Dalian cooperation. The City of Kitakyushu was once a polluted "steel town" yet now is renowned for having

successfully overcome one of Japan's worst environmental problems. As the city accumulated its environmental management expertise, by the early 1980s a neighboring city across the Yellow Sea, Dalian, was about to experience every imaginable environmental problem, much like those experienced in Kitakyushu. As early as 1981, Kitakyushu began to transfer the know-how of environmental management to Dalian. Local knowledge that the Dalian-Kitakyushu partnership had provided, persuaded Japan's Ministry of Foreign Affairs to acknowledge the importance of locally initiated approaches as an alternative to nationally defined ODA projects. The Japanese government thus pledged ODA funds to China for implementing a proposed Dalian-Kitakyushu pollution control plan. The national government financed the project, but it depended on the Dalian-Kitakyushu partnership for successful planning and implementation (COK 1998). This successful bilateral cooperation drew much interest among other cities in Asia.

The oldest sectoral network, initiated by a Japanese local government, is the International Lake Environment Committee Foundation (ILEC). It was created in 1986 by Shiga prefecture to support environmentally sound management of lakes and their environment, which the United Nations Environmental Programme (UNEP) promotes for developing countries (Kotani 2006). Its activity, such as information databases and reporting and monitoring trends, is to enhance environmental knowledge in the provision of national and international benefits for reducing degradation of lakes (ILEC 2009). Other major sectoral networks followed in the 1990s: the International EMES [Environmental Management of Enclosed Coastal Seas] Center (established by Hyogo prefecture in 1994), the Acid Deposition Monitoring Network in East Asia (EANET) (established in 1998 with the UNEP Regional Resource Centre of Asia and the Pacific as the Secretariat and managed by Niigata prefecture), and the Kushiro International Wetland Centre (established in 1995 to implement the Ramsar Convention on Wetlands of International Importance and operated by the City of Kushiro).

Regional environmental networks would be defined as where the benefits of environmental risk reduction accrue to the public of nations with contiguous borders or of neighbouring nations across the sea. In 2000, for example, Kitakyushu City established the Kitakyushu Initiative Network, comprising 62 cities from 18 member countries of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) to coordinate the reduction of urban environmental risks (KINS 2008). Other major regional networks are: the Asian Network of Major Cities (ANMC-21) (created in 2001 as a metropolitan multi-issue-oriented network with the Tokyo Metropolitan Government as the Secretariat), the Environmental Cooperation Network of Asian Cities (established in 1997 by the City of Kitakyushu with 7 cities in Southeast Asia), and the Northern Forum (proposed by the government of Hokkaido in 1974 and set up in 1991 with 15 regional governments from 8 northern countries).

The Regional Network of Local Authorities for the Management of Human Settlements (CITYNET) is an international environmental network among local authorities with an Asia-Pacific origin, which has Category II Status with the United Nations Economic and Social Council. In 1987 it was established with the support of the UNESCAP, the United Nations Development Programme (UNDP) and the United Nations Centre for Human Settlements (UN-HABITAT). The City of Yokohama has

hosted the Secretariat of CITYNET to promote environmentally sustainable cities through: consultation services, training and workshops, joint research projects, information dissemination, and convening forums for members (Tjandradewi and Marcotullio 2009). As of 2009, the membership comprises 139 organisations (local authorities, municipal associations, NGOs, research institutions and private companies). While they may not apply to every city on the globe, the benefits of knowledge and governance for environmentally sustainable cities extend well beyond national boundaries.

Analysis and conclusion

In the 1970s and 1980s, there was a broad trend in environmental politics in Japan. This domestic political game was reverberated by the two oil crises yet the international events were largely exogenous from the viewpoint of domestic politics. The outputs from the events at the international level were used as the inputs to the domestic political game; this was a domestic adaptation to changes in the international environment. The oil crises as an exogenous variable for explaining the policy expansion are apolitical in the sense that these events caused unilaterally systemic effects on the policy formation regardless of the pro-business political orientation of the party in power. In essence, the environmental policy formation can be seen as a domestic-level process occurring within the Japanese state.

The environmental policy expansion was a rather direct product of decisions made in the process of electoral politics. In this process, the LDP implemented its platforms to co-op the opposition party's environmental appeals and thus maintained power, and the national government effectively responded to heightened pressures from anti-industrial pollution movements. The government party advanced environmental policies into an electorally attractive proposition. In the 1980s the LDP regained popularity and brought back the old bureaucratic-industrial dominant process to Japan's environmental politics. Nakasone's government single-mindedly pursued a technology-oriented policy for strengthening energy efficiency to reduce Japan's external energy dependence.

A shift of Japan's environmental responses from industrial pollution to climate change created far more complex and uncertain constraints on decision-making. Japan's diplomacy over climate change was shaped both by what other countries will accept and by what domestic constituencies will ratify and implement. In the process of the Kyoto Protocol negotiations, domestic constituencies' demands were not exogenous in the sense that Japan's delegation had to manipulate domestic politics for exploring a possibility of bargaining advantage over other countries. In the domestic political game of climate change, foreign pressures were not exogenous either in that the Japanese negotiators simultaneously employed foreign pressures to alter the scope of domestic constraints on the negotiations. Primarily due to the scientific technicality, and the uncertain adaptation costs of climate change, the domestic political game took place in the national bureaucracy. Domestic constraints derived from the bureaucracy-led coalition building of sectoral interests. The course of Japanese delegation's action leading up to the Kyoto Protocol reflected a simultaneous decision-making in both the domestic coalition building and the international negotiations. The coalition of diplomatic interests insisted a 6.5 percent reduction, using EU pressure (its proposed 15 percent reduction) as one of their primary arguments against a zero percent

reduction proposed by the coalition of business interests. Internationally, Japan's delegation was quite sensitive to U.S. wishes, due to its close relations with the United States. To ensure U.S. participation in the protocol, the Prime Minister's Office intervened in the domestic political game, and settled Japan's proposal with a 5 percent reduction, which was to both internationally accepted by delegations from other countries and domestically ratified and implemented by the domestic constituencies. In the end, it placed Japan as the host nation in a leadership role with regard to the Kyoto Protocol; Japan needed to have ratified it while the United States refused to do so.

At the early stage of COP-2, Japan expressed its opposition to any legally binding targets. Prior to the negotiations for the Kyoto Protocol, the Japanese government proposed a voluntary "pledge and review" approach, in a bid to bridge the differences between the EU and the United States who had consistently opposed legally binding fixed targets. How and why did Japan change its stance to adopt the Kyoto Protocol? The potential answers to this question reflect a theoretical link between the two levels of the domestic political game and the international negotiations. International pressure was employed by the Prime Minister's Office to change the character of domestic constraints for opening up a new possibility that had not previously been available to Japan's delegation for international accord. International pressure on the host nation had been building up in order to succeed in Kyoto and it became evident that the host nation was expected not to propose an approach that would drift apart from a possible international accord. The argument for Japan to go along with an internationally acceptable target thus gained much ground in the domestic political game. Both the Ministry of Foreign Affairs and the Environmental Agency expressed their concern by saying: "We have been in contact with the countries concerned and in situations where failing to reach a 5 percent reduction among developed nations will be conceived of as a failure of the conference and may bring the host nation to account" (Takeuchi 1998, pp. 166-70, Tanabe 1999, pp. 125-26). They welcomed the international pressure on the Japanese government. Given the situation that set limits on its resistance, the MITI attempted to bring down Japan's reduction rate as low as possible so that it could still manage the costs of business for emission reduction within the existing framework of energy efficiency policy. In the end, the Prime Minister's Office successfully used international pressure for persuading the MITI to reduce its expectation with Japan's proposed 5 percent.

Citizens groups and local communities in the domestic political game were left out in the process leading to Japan's proposal as the proposed 5 percent was determined on the run with little time to consult with other interested domestic constituencies. Local community groups began to direct their attention to local action that the global strategies of climate change would require. In this context, the increased visibility of Japanese local governments at the international level invites a closer examination.

This study demonstrated four types of sub-national government participation, with a range of potential influence on international politics. First, a bilateral city-to-city partnership across borders has a potential for the exercise of locally-initiated international cooperation while persuading the home state to subsidise their projects and the reluctant state of partner's to change its policy. This is one type of alternative to the two-level games (domestic/foreign divide) and may be regarded as a variation of "the boomerang effect" (Keck and Sikkink 1998). Second, a sectoral network is the

place for the exchange of local knowledge in a specialised area of environmental issues, which could contribute to agenda-setting for international agreements. It controls the specialised, objective knowledge that negotiators require to reach the desired outcomes. This type of networks is known as “epistemic communities” (Hass 1992). Third, a regional network highlights the value of decentralised cooperation in which local authorities take up a primary role and have become increasingly recognised as partners in regional affairs. The objective of a regional network is to use the network as mechanisms of equal, horizontal learning and knowledge exchange that benefits each other and/or to employ the network as instruments for local capacity building of the Southern members within the network. Fourth, a global network is likely to facilitate more systematic sub-national participation within international organisations (often with official consultative status) and induce more states’ responses to sub-national participation in the resolution of global social issues. It is presumed that network members work toward developing common understanding and pursuing wider public benefits beyond simple interest calculations (provision of international public goods). Perhaps its claim to political legitimacy by the global network that somehow represents the wider common good is a key source of influence. Finally it is important to note that local authorities in these different types of networks have taken part in international environmental regimes (consisting of principles, rules and regulations – more than 500 MEAs), which have been coordinated by international organisations, such as the UNEP, the UNDP, and the World Bank. These organisations, in particular, the UNEP, have facilitated the establishment and operation of the networks and extended expert advice on how sub-national participation can effectively engage in the national/regional preparation for, international negotiations on, multilateral environmental agreements and in the ratification/implementation phases.

Notes

1. One major factor in the start of Japan’s attention to international environmental norms was the first United Nations Conference on the Human Environment held in Stockholm in 1972.
2. A large number of MEAs, while imposing direct legal obligations on member states, prescribed the necessary planning and operational actions at the sub-national level, for example, Article 3 of the 1971 *Convention on Wetlands of International Importance*, Article 5 of the 1972 *Convention concerning the Protection of the World Cultural and Natural Heritage*, Article 4-2-(c) of the 1989 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes* and Article 4 of the 1997 *Kyoto Protocol*.
3. In this session of the Diet, fourteen pollution control bills were passed; nation-wide regulations instead of regulations only in designated areas were to be applied to air and water pollution, traffic pollution and noise, hazardous material transport, waste disposal and sewage, toxic waste, and Natural Parks. Equally important, the new antipollution laws held polluters financially responsible to their victims under civil law, and clarified the division of regulatory powers between national and sub-national governments. All regulatory power over business operators was delegated to municipal governments. This regulatory mechanism, however, did not specify any nationally-defined mandatory emission standards. It left regulation and enforcement

up to sub-national authorities. In the following year, the Environmental Agency, a successor to the Pollution Control Office, was established to coordinate the implementation of these new laws. See Broadbent (1998, pp. 123-24 and 2002, pp. 312-14).

4. Japan's energy self-sufficiency ratio, if uranium is considered as an energy import, dropped from 14 per cent in 1970 to alarming 4 per cent in 2000 (IEA 2006). Japan has the lowest ratio among industrialised countries.

5. In accordance with the law, a wide range of conservation measures were adopted. The most extensive one was the "Top Runner Program," which set up fuel efficiency standards for vehicles and energy efficiency standards for household appliances; required energy-intensive plants, major transportation businesses, and large office buildings to submit energy-conservation plans and reports; and provided incentives for integrated management of energy use at plants and offices.

6. Calculated from *OECD Factbook 2009: Economic, environmental and social statistics* (OECD 2009, p. 117). In this source, primary energy supply per unit of GDP is based on tonnes of oil equivalent (toe) per thousand 2000 US dollars of GDP calculated using PPPs.

7. Kyoto Governor Ninagawa Torazo (1950-1978) and Tokyo Governor Minobe Ryokichi (1967-1979) retired in 1978 and 1979 respectively and Osaka Governor Kuroda Ryoichi (1971-1979) was voted out of office in 1979.

8. These surveys were conducted by Public Relations Office in Prime Minister's Office in 1971, 1973, 1975, 1979 and 1981. Respondents were asked about the pollution problem if they had personally experienced in the last five years. The number of environmental protest incidents dramatically dropped in 1974 and local protests remained sporadic throughout the 1980s. See Broadbent (1998, p. 288).

9. Mani and Wheeler, while drawing on emissions per unit of output, designated as pollution-intensive industries five sectors: iron and steel, nonferrous metals, industrial chemicals, pulp and paper, and metallic mineral products. Using the same pollution-intensity measure, they identified five non-pollution-intensive sectors: textiles, non-electrical machinery, electrical machinery, transport equipment, and instruments.

10. The International Organization for Standardization (ISO) was established in 1946 voluntarily by industrial sectors of the world, with the aim of creating international standards for the purpose of promoting international exchange in the manufactured product and service sectors.

11. Although the volume of environmental ODA increased, Japan's accountability to the implementation of this new policy initiative was limited by certain factors, such as bureaucratic politics, yen-loan-dominated aid, and commercial strings attached to aid (or "tied aid") (e.g., Potter 1994).

12. If CO₂/GDP is kg CO₂/1000 US\$ at 2000 prices, then Japan was the smallest polluter per unit of economic output in 2004. The ratio of Japan's figure to other

major developed countries was 1.4 for Britain, 1.6 for Germany, 1.8 for France, 1.9 for EU 27, 2.0 for United States, and 3.2 for Canada (JMETI 2007, p. 4).

13. Keidanren was to resolve problems of the business community and make proposals to government officials. In May 2002, Keidanren merged with Nikkeiren (Japan federation of employers' associations) to form Nippon Keidanren (Japan Business Federation or JBF). The JBF membership of 1,609 is comprised of 1,295 companies, 129 industrial associations, and 47 regional economic organisations (as of May 28, 2009).

14. In April 2010, Tokyo Metropolitan Government's cap and trade program started as the world's first urban model of mandatory reduction of total emissions.

15. It is important to note that the Japanese government had always accommodated its plan to the interest of the United States in the process of climate change treaty negotiations. When the United States stood alone in public opposition, Japan proposed a "pledge and review" system in which parties would unilaterally pledge specific actions and then an international body would review performance (Kameyama 2002).

16. For the position of the foreign policy coalition and the process of Japan's negotiations, see Tanabe Toshiaki (1999), Japan's chief negotiator and Ambassador for Global Environmental Affairs at COP-3.

17. The ICLEI refers to Local Agenda 21 as a participatory, multi-sectoral process in which local participants voluntarily create long-term, strategic action plans and implement them to achieve sustainability in a way integrating environmental, social and economic priorities (ICLEI 1993).

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