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Global Governance and China: The Hu Jintao Era and Governance of International Public Goods*

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I. Global Governance and China

1. What Is Global Governance?

The concept of global governance, as used today, was first employed in the latter part of the 1990s, both in the study of international relations and in the arena of international politics. In 1995, for example, the Commission on Global Governance, a body of 26 experts from around the world, looked ahead the most important issues of the approaching 21st century and advocated governance reform to build a new post—Cold War world order through a report titled *Our Global Neighbourhood*. The scholarly journal *Global Governance* made its debut that same year. As a book title *Governance without Government* implies, these years also saw active arguments stressing the importance of nonhierarchical modes of policy coordination and the involvement of nongovernmental actors in planning and implementing public policy, in order to address many other issues associated with globally disseminating interdependent relations. Where an Internet search for "global governance" in 1997 returned a mere 3,418 hits, by early 2004 there were over 90,000 and by the end of 2010 over 12 million websites contained the phrase.

Despite—or perhaps because of—such frequent and varied use, the concept lacks a clear definition. One simple view, both formal and practical in nature, regards "global governance" as denoting both a state-centered *inter*national regime, consisting of the entire set of internationally agreed principles, standards, rules, and decision-making procedures (treaties, protocols, and so on), and a *trans*national regime that exists above the state framework and is led by the private sector, as typified by international standards set by nongovernmental actors (such as ISO1401 and certification marks).⁵ In the report cited above, the Commission on Global Governance defines governance as "the sum of the many ways individuals and institutions, public and private, manage their common affairs"; According to the definition, the decision-making process in global governance is characterized as guaranteeing the democratic principles such as ensured transparency, clarified accountability, and consultation with and effective participation of the stakeholders, and as "a continuing process through which conflicting or diverse interests are

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accommodated and cooperative actions are taken"; this includes both formal arrangements to enforce compliance, and informal arrangements. Thus, whatever detailed definition we may adopt, global governance can be seen as the totality of a continuous process in which, following democratic principles, rules, and procedures, governmental and nongovernmental actors work to resolve issues on an international or global scale by accommodating one another's interests in forums and institutions both formal and informal.

2. China and Governance of International Public Goods

This article sets out to ask what part China played in global governance during the Hu Jintao era. The question we must ask, then, becomes what are the objects of global governance. As discussed in section 1.1 above, global governance addresses issues on an international or global scale; in other words, it means providing or maintaining and managing international public goods such as international security, international economic order, the stratospheric ozone layer, and a stable global climate. How further or in what way was the China of the Hu Jintao era involved in governance of international public goods? Could it be said to have been a free-rider, inherently problematic in collective actions? To answer that question, after first providing an overview of the international economic order, international security issues, and China's role therein, I will focus on the issue of climate change and take a detailed look at how China responded to this issue before and during the Hu Jintao era.

On global issues such as climate change, international cooperation is essential. Not only does climate change have a global impact, but it cannot be mitigated by the efforts of just one or a few countries to reduce their greenhouse gas emissions. At the same time, if the world's two biggest greenhouse gas emitters such as China and the United States, accounting for over 40 percent of total carbon dioxide (CO₂) emissions, do not make serious mitigation efforts (if they free-ride, in other words), climate change will continue unabated and, moreover, other countries will follow their example. As the priority that many countries place on economic development leads them to discharge ever-increasing volumes of greenhouse gases, atmospheric CO₂ has risen to its highest level in the past 800,000 years and is approaching the level of the Miocene, 15 million years ago, thereby posing a growing threat of unprecedented harm to every country on Earth.⁸ The situation has been aptly called "the tragedy of the commons." Global governance is needed to solve climate change, and if China does not join that effort, it will share the fate that failure will bring.

As Chinese exports conquer world markets, some observers view China today primarily as a threat to be "contained" economically by the United States, as Japan was viewed in the 1980s, 10 but this strikes me as an oversimplification. Furthermore, in a situation like today's ongoing and intensifying globalization, in analyzing international relations it is not very useful to proceed from the basic assumption that the state is a unitary actor, as the realist school does. But I do not subscribe, either, to the argument that states are on the wane or disappearing. As the examples of "failed states" like Somalia make very clear, the state or government continues to have an important role in providing defense, diplomacy, social welfare services, and the like. Thus, in order to analyze the international community where global governance is required to address global issues, we need to "disaggregate" states into multiple components before analyzing them. As Anne-Marie Slaughter's work shows, regulators, judges, and legislators form global horizontal networks (like those under the auspices of the G7 and G20 summits), and through information exchange and learning, or at times by forming transnational institutions such as the European Court of Human rights or the International Criminal Court, ensure implementation of international agreement through vertical linkages with other national governments more firmly. In short, they are putting global

governance into practice.¹¹ Of course, the vertical connections that global governance requires may not be as easy to achieve in China, which has created a solid tripartite "super-stabilization mechanism" of state governance consisting of the Communist Party, the state, and the People's Liberation Army. Yet China can be seen to be playing a limited role, at least in horizontal networks, in those areas on which I focus in this article: the international economic order, international security arrangements, and climate change.

Having outlined my approach to the subject of global governance and China, in the following sections, based on the above discussion, I will first present a framework for behavior pattern analysis of China's actions as an emerging nation within the international community, then I will discuss the part China played in global governance during the Hu Jintao era while applying the framework, where applicable, to instances of China's behavior.

II. Existing International Institutions and the Involvement of an Emerging China¹³

In 2003, as the Hu Jintao era began, Goldman Sachs published a report on the effects on the world economy of the BRICs, the group of emerging economies or nations consisting of Brazil, Russia, India, and China. The emerging nation of China, with its striking economic growth, behaves differently in the international community depending on the area at issue, but its behavior can be broadly classified into three patterns: supporting existing international institutions, taking a limited-struggle approach (opportunism), and behaving as a veto state. In this section, I will provide overviews of economic globalization and the emerging China, and of China's policy toward the UN-centered collective security system; in the next section, I will trace China's opportunistic behavior pattern in more detail, focusing on the issue of climate change.

1. Global Economic Governance and China

China's pattern of behavior toward existing international institutions has become notably supportive since it joined the World Trade Organization (WTO) in 2001, and especially since changing circumstances have made it a likely beneficiary of economic globalization. Through trade and direct investment, China strengthens economic partnerships with the developed nations, promotes technological innovation and productivity to win the competition in the international market, increases its exports and earns foreign currency taking advantage of its cheap labor as a comparative advantage, directs these earnings into higher incomes and plant investment, thus further boosting both consumption and production. The outcome is a virtuous economic cycle. As a result, China has achieved massive trade surplus. At the same time, its share of global production of major industrial goods makes "the world's factory" an apt description: as of 2011, China accounted for 44 percent of world production of crude steel, 60 percent of concrete, 43 percent of machine tools, 68 percent of computers, 50 percent of television sets, 65 percent of refrigerators, 80 percent of air conditioners, 70 percent of mobile phones, 44 percent of washing machines, and 70 percent of microwave ovens.¹⁵

China, with other emerging nations, has been actively participating expanding summits of the key industrial nations, and is gaining an increasing voice there. The G20 finance ministers and central bank governors began meeting in 1999, and after the September 2008 collapse of US investment bank Lehman Brothers triggered the global "Lehman shock," the first leaders' summit on finance and the world economy (known as the G20 Summit) was held in Washington, DC in November of that year. Both at that first G20 Summit and at the April 2011 BRICs summit, among other meetings, China, with Russia and Brazil,

urged reform of the international monetary system, active use of special drawing rights (SDRs), and expansion of local currency settlement. In fact, it had already taken the first step toward an internationalized yuan when, in July 2009, it introduced yuan-denominated trade settlement with Hong Kong, Macau, and ASEAN. Also, the August 2011 downgrading of the US debt rating by American rating service Standard & Poor's (S&P) seriously worried China as the world's largest creditor nation, and it has since moved to diversify its foreign-currency reserves by investing more in Japanese government bonds. As Hironori Wada points out, ¹⁶ however, a cheaper yuan against the US dollar suits China, which, like Japan, Taiwan, and Korea, needs competitive exports to maintain its trade surplus, and it stands to gain from having its current account balance dollar-denominated and underpinning American debt. This highly distorted interdependency with the United States means that China cannot make a decisive move toward revaluation and internationalization of its currency, and at times it is forced to respond to US and EU demands for a higher yuan with an opportunistic or veto state's behavior pattern. In short, unless China changes course toward economic growth driven by domestic demand instead of exports, it is likely to continue resisting revaluation of the yuan for some time to come.

2. China's Involvement in the UN-centered Collective Security System

Among the issue areas where global governance is needed, international security is one in which China tends to adopt the behavior pattern of a veto state. In particular, with regard to humanitarian interventions involving the actual or possible use of force, China's position in the UN Security Council has, to date, been to exercise or threaten to exercise its veto, or to abstain in order to call for a cautious approach.

An example of Chinese refusal on international security matters was the question of succession and independence for ethnic Albanians in Kosovo, an autonomous province within Yugoslavia. From the mid-1990s onward, NATO sought an opportunity for what it termed humanitarian armed intervention to stop the "mass slaughter" of Albanians by Yugoslavia under President Slobodan Milosevic.¹⁷ Due to Chinese and Russian opposition, however, the Security Council was only able to pass a resolution in 1998 demanding an immediate ceasefire and ban on non-humanitarian behavior. Ultimately, after Serbia rejected Appendix B of the proposed peace accord, the Rambouillet Agreement, which would have allowed NATO forces to be deployed throughout the Federal Republic of Yugoslavia, in March 1999 NATO forces commenced an air campaign over Serbia and Kosovo without Security Council authorization, in the name of humanitarian intervention, and a peace agreement was reached with President Milosevic the following June. At that point, the UN Interim Administration Mission in Kosovo (UNMIK) was established; this was limited to a civilian presence.

According to Japanese experts on China's military and diplomatic affairs, NATO's bombing of Yugoslavia led China to clarify its policy stance on humanitarian intervention. The turning point is said to have been Jiang Zemin's speech at the UN Security Council summit in September 2000. At this meeting, Jiang stated that maintaining international peace and security were a pressing task for the international community but that (in a reference to NATO's bombing of Yugoslavia), "Willful use of force and interference in the internal affairs of other countries in the name of humanitarianism ... run counter to the United Nations Charter," that the Security Council is entrusted with the primary responsibility for maintaining international peace and security, and that the UN fulfills this responsibility by means of peacekeeping operations (PKO) that observe the principles of "respect for State sovereignty, noninterference in the internal affairs of recipient countries, seeking prior consent of the parties concerned, neutrality and the nonuse of force except for self-defence." The control of the parties concerned in the nonuse of force except for self-defence.

The Hu Jintao administration can be said to have inherited these principles. Like Russia, China

abstained but did not exercise its veto in the March 2011 vote on UN Security Council Resolution 1973 (in which 10 of the 15 members voted in favor and 5 abstained) which authorized the use of force against Libya "to protect civilians." However, the idea that NATO had broadly interpreted this resolution and continued military action until the Gaddafi regime fell gained increasing acceptance by several of the Security Council's nonpermanent members (India, Brazil, South Africa).²¹ At a Security Council meeting on October 5, 2011, China and Russia vetoed a resolution calling for economic sanctions against Syria. On February 4, 2012, a number of Western and Arab nations jointly pushed for a Security Council resolution calling on President Bashar al-Assad to step down, but this was again vetoed by Russia and China.²² These are examples of China's behaving as a veto state. Yet from the end of the Jiang Zemin era and into the Hu Jintao era, the same nation would come to play an active part in UN peacekeeping operations.

First, in 2001 China's Ministry of National Defense established a Peacekeeping Office as a unified center for the internal coordination and management within the armed forces that would be necessary for dispatches of peacekeepers. A year later, China joined the UN Stand-by Arrangements System (UNSAS) and registered personnel available for peacekeeping operations (PKO) with the UN Secretariat. In 2003, China decided to set up a Peacekeeping Center in the Defense Ministry to train personnel for PKO missions; this became operative in 2009. As of July 2012, a total of 1,925 Chinese peacekeepers have been sent to twelve UN peacekeeping missions, starting in 2003 with the People's Liberation Army contingent of 218 that joined the UN Organization Mission in the Democratic Republic of the Congo (MONUC). At that point, China was the biggest contributor of UN peacekeepers to the Security Council, having sent over 14,000 altogether.²³ In 2004, UN Under-Secretary-General Chen Jian praised the proficiency and strict discipline of China's peacekeepers, together with China's active participation in UN peacekeeping operations, and told the People's Daily that "the United Nations has great expectations of the role that China will play in maintaining world peace and regional security."²⁴ Thus, in the area of UN peacekeeping operations, which fall into the category of maintaining world peace and security, China can be said to actively support existing institutions in order to make an international contribution or fulfill its responsibilities as a major power.²⁵ To put it another way, China can be said to be actively involved in global governance in this area.²⁶

Up to this point, I have looked mainly at China's behavior patterns when it supports existing international institutions and when it refuses them. In the next section, I will focus on China's response to the climate change issue and trace its opportunistic behavior pattern in detail.

III. Global Environmental Governance and China, with the Focus on Climate Change

In the governance of environmental problems on an international or global scale, one group of observers divides nations according to their behavior pattern into "lead states," "support states," "swing states" or opportunists, and "veto states." Where climate change (and ozone layer depletion in the stratosphere) are concerned, China has tended to behave mainly as an opportunist, but we cannot deny that China has shown signs of behavior as a support state in recent years. A lead state is a country which provides scientific knowledge on global environmental issues, arouses the international community's concern on these issues as international policy issues, and provides leadership in hosting scientific meetings and negotiating international agreements through channels such as the UN Environment Programme (UNEP). For instance, Sweden, having suffered damage from acid rain, succeeded in convening the first UN Conference on the Human Environment (UNCHE) in Stockholm in 1972, with Norway as a support state, as part of their efforts to get this issue onto the international agenda. As an example of a veto state, we can cite the

United States refusing in 2001 to ratify the Kyoto Protocol, the core of the climate change regime.

The behavior pattern of the opportunists or swing states (so called because they influence decisions) requires some further explanation. It should be noted that swing states do not refuse outright to cooperate, nor do they deny the need to make effort to cooperate; they are willing to accept restrictions, provided these are on favorable terms. China's and India's response to the regime for protection of the stratospheric ozone layer is a good example of this pattern. The stratosphere is the layer of the Earth's atmosphere at an altitude between 10-12 km and 50 km, and the ozone (O_3) present there screens out ultraviolet rays from the sun. These reach the Earth in small but nonetheless potentially harmful amounts, capable of causing cataracts and skin cancer in humans. Ozone layer depletion in the stratosphere is a global issue: colorless, odorless, inflammable inert gases known as chlorofluorocarbons (CFCs),28 the safest and most stable synthetic chemical substances developed by humans to date, are so stable that once released into the atmosphere, they would reach the stratosphere, destroying the ozone layer. The Vienna Convention for the Protection of the Ozone Layer was adopted in 1985, and the stricter Montreal Protocol on Substances that Deplete the Ozone Layer two years later,²⁹ with the industrial nations taking the lead in both cases. By the end of the 1990s, these nations had completely banned the domestic production and consumption of CFCs and related substances; the issue was now how to control these developing nations, such as China and India, who refused to accept restrictions and were expected to produce and use increasing quantities of ozone-depleting substances in the future. The industrial nations took the position that the developing nations must eventually join them in the ban because otherwise the global issue could not be resolved. Yet the developing nations lacked the funds and technology to develop CFC alternatives. At the 1990 Meeting of the Parties to the Montreal Protocol in London, developing nations including Argentina, China, India, and Indonesia set out the conditions under which they would accept future restrictions, namely, provision of funds and technology for CFC substitutes. After negotiations, it was decided to establish a multinational fund for the implementation of the Montreal Protocol, and the developing nations agreed to accept the restrictions after a grace period of 10 years. Between 1991 and 2011, the multinational fund disbursed 23 billion dollars for over 4,600 projects in 148 countries.³⁰

In light of this example of the ozone layer, let us return to our main topics; that is, the pattern of opportunistic behavior that China displays in relation to the climate change regime, and the factors at work in this behavior.

1. China's Response to the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol: Before the Hu Jintao Administration

(1) China's Response during the UNFCCC Negotiations Process

International deliberations on the climate change issue began with a scientific conference in Villach, Austria, in 1985. The Toronto G7 in June 1988 took up climate change as an international political issue, and further developments followed rapidly: the Intergovernmental Panel on Climate Change (IPCC) was established in November 1988 by UNEP and the World Meteorological Organization (WMO), and in August 1990 it published an interim report, which assessed the scientific and socioeconomic impacts of global warming and discussed climate change mitigation policies. Then, at the request of developing nations, the talks which had till then been led by UNEP and WMO were transferred to the ambit of the UN General Assembly, where developing nations held the numerical advantage, and in December 1990 it was decided that negotiations for a climate agreement would be conducted through the Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change. The drafting work was completed by May 1992 after virtually six fruitful meetings.

China was initially a reluctant participant in the UNFCCC talks, citing scientific unreliability of the reasoning such as causal relationship between human-made greenhouse gas emissions and climate change. Its position was that of what might be called a bystander, but as the talks progressed, China began to play a leadership role in the caucus of developing nations known as the Group of 77 (G77) plus China. In speaking for the developing nations, alongside India, China's key concerns were equity and development. In particular, China gained the developing nations' support and applause³² by stressing the principle of "common but differentiated responsibilities" called for by the Rio Declaration.³³ According to China and India, it was the developed nations' emissions of human-made greenhouse gases dating back to the Industrial Revolution, together with their lifestyles based on high energy consumption, that were the cause of rapid global warming and the resulting climate change problems, and therefore developed nations should bear the main responsibility for mitigation (the historical responsibility argument).³⁴ As further grounds for arguing that the developing nations should not be required to reduce their emissions, they cited the fact that on a per-capita basis China and the other developing nations had far lower greenhouse gas emissions than the industrial nations (the equity argument). Thus, their position became that the developing nations would make some form of commitment to reduce their emissions only if financial and technological support were made available, as it had been in negotiating the ozone protection regime, and further that they possessed an inviolable development sovereignty over the use of their own natural resources (the development sovereignty argument). 35 These arguments remained the unified view of the G77 plus China (which today consists of over 120 developing nations) throughout the UNFCCC and Kyoto Protocol talks.³⁶

Although predicated on financial and technical assistance, China's declared support for international cooperation on global environmental problems was welcomed by environmental NGOs and the European nations. Beijing's expression of respect for the international norm of protecting the environment went some way toward improving its negative image³⁷ and was thus also diplomatically beneficial after a period of isolation due to international criticism of the 1989 Tiananmen incident.

The UNFCCC was opened for signature at the UN Conference on Environment and Development (Earth Summit) held in Rio de Janeiro in June 1992, and it entered into force two years later, in 1994. Negotiations to establish protocols under the UNFCCC began in 1995 with the 1st Conference of the Parties (COP1) in Berlin. The resulting "Berlin Mandate" agreed that, under the principle of "common but differentiated responsibilities," the protocols would not require the developing nations to make commitments to reduce their greenhouse gas emissions.

(2) China's Response during the Kyoto Protocol Talks

During the long negotiation process that began with COP1 in 1995 and culminated in the Kyoto Protocol's entry into force in 2005, China again demonstrated an opportunistic pattern of behavior, firmly upholding the principle-based position of the developing nations described above while at the same time arguing over conditions with the industrial nations. China's diplomacy during the talks focused on two issues: first, deciding its position vis-à-vis the international emissions trading mechanism being negotiated by the industrial nations; second, preventing the developing nations from being forced to make specific commitments to reduce their emissions.³⁸ At COP3 in Kyoto in 1997, Chen Yaobang, head of the Chinese delegation, stated China's firm opposition to committing itself to reduce emissions until it became a "middle-income nation," and also opposed flexibility mechanisms (also known as Kyoto mechanisms) among the industrial nations that were required to make reduction commitments, on the grounds that flexible arrangements such as emissions trading (ET) and joint implementation (JI) would allow them to

avoid efforts to reduce their own emissions.³⁹ These arguments were supported by the small island states and environmental NGOs. The Kyoto conference ran into complications over the flexibility mechanisms issue, but mechanisms of this type were ultimately adopted on condition that their role be merely supplementary to domestic mitigation policies.⁴⁰

China modified its opposition to the flexibility mechanisms after it saw potential advantage to itself in the Clean Development Mechanism (CDM; see below), originally proposed by Brazil and adopted in Kyoto, which aims to reduce greenhouse gas emissions through cooperation between developing and developed nations. In 2000, China decided to pursue a "no regrets" policy in the climate change negotiations; that is, it would take on specific reduction commitments up to a point, provided they did not adversely affect its economic growth. Starting in 2000, China initiated CDM projects using aid from the Asian Development Bank and other multilateral funds.

China also began indirectly to acquire a better image as a "responsible power." In March 2001, President George W. Bush declared that the United States—which was then the world's biggest emitter of greenhouse gases—would not ratify the Kyoto Protocol. The main reason he gave was that a protocol that did not require China and other major emitters to commit to reductions was inadequate, while requiring commitments of the United States that would harm its economy. China, on the other hand, ratified the Kyoto Protocol in 2002 together with the EU and Japan, thereby helping bring it into force in 2005. In addition to winning trust as a leader of the developing world, China was thus able to strengthen its relations with the developed nations, including the EU and Japan.

As we have seen, in negotiating the UNFCCC and the Kyoto Protocol, not only did China succeed in introducing the principle of "common but differentiated responsibilities," along with financial and technical assistance and the Clean Development Mechanism, as conditions of its own participation in the climate regime and that of many other developing nations, but it was also able to win the trust and respect of the developing and many of the developed nations.

2. China's Responses during Post-Kyoto Protocol Negotiations: The Hu Jintao Era

A twin-track process has evolved to create a framework for international cooperation in the Kyoto Protocol's first commitment period (2008–2012) and beyond: it consists of the Conference of the Parties to the UNFCCC (COP), and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP). Thus, the UN-centered international talks known as the UN process have become complex in themselves. To create the next framework under the UNFCCC, first, COP11 (Montreal, 2005) launched a series of "dialogs for long-term cooperative action to address climate change," four of which took place in 2006 and 2007. The idea was to discuss long-term cooperative action to stabilize the global climate, which is the aim of the Convention, with all the parties thereto taking part, including the Unites States, which had not ratified the Kyoto Protocol. However, these discussions could not deal directly with the international negotiations. Hence, the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA) was established, and as the official forum for the negotiations to create the next framework, was tasked with completing its work by 2009.

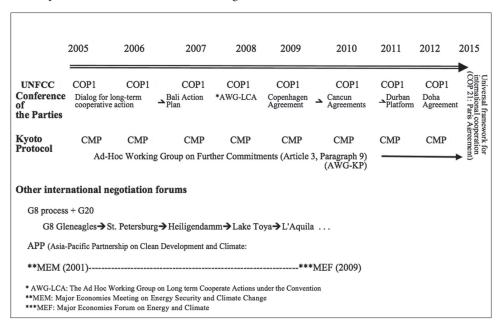
Also, in 2005, in the First Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP1), based on Article 3, Paragraph 9 of the Protocol, agreement was reached to initiate the consideration of commitments by the parties included in Annex I (the industrial nations) for 2013 onward. As the next step, in 2006 a special working group, the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP), was formed. The AWG-KP discussed measures by the Annex I parties under the framework for 2013 and beyond, but the Unites

States could not participate in substantive discussions as it had not ratified the Kyoto Protocol, and measures by the non-Annex I nations (the developing nations), which were not required by the Kyoto Protocol to commit to reducing their emissions, were also outside the scope of discussion.

The above is the UN process based on the UNFCCC and the Kyoto Protocol. Strong support for this framework came from the small island states, many developing nations, and the EU. The latter, in particular, displayed international leadership on climate issues, for example, by introducing the EU emissions trading system (EU ETS) and setting medium-term targets for 2020.

In contrast, the United States under George W. Bush, after dropping out of the Kyoto Protocol framework in 2001, discouraged international action on climate change in its capacity as leader of the Asia-Pacific Partnership on Clean Development and Climate (APP) and the Major Economies Meeting on Energy Security and Climate Change (MEM). The new administration of President Barack Obama, however, replaced the MEM with the Major Economies Forum on Energy and Climate (MEF) in March 2009. Summit meetings of the major industrial nations are also important forums for international negotiations. In particular, since the G8 summit in Gleneagles in 2005, there has been a series known as the Dialogue on Climate Change, Clean Energy and Sustainable Development (G20 Dialogue), which has added a new process for talks among the G8 and other major nations. Thus, the creation of an international structure for cooperative action beyond the commitment period of the Kyoto Protocol; that is, from 2013 onward, has become very complex. The processes discussed above are summarized in Figure.

Figure. 1. The Multiple Channels of the International Negotiations Process



As the international community's interest shifted to drawing up a new international framework which would require commitments from all nations, or from the major emitters, including the developing nations, it gradually became difficult for the Hu Jintao administration to pursue an opportunistic course. In fact, China began to be held accountable and at times to be seen as a major impediment to forming an international coordination mechanism. In April 2007, a senior official of the International Energy Agency (IEA) predicted that China would become the world's largest CO₂ emitter as early as that year, and the Chinese government began to be concerned about how this would affect international

public opinion. Against this background, at the May 2007 IPCC meeting in Bangkok, China strongly opposed calls for an international carbon tax.⁴³ It also coldly denied the EU's internal long-term target⁴⁴ of allowing average global temperatures to rise by no more than 2 degrees Celsius above preindustrial levels by 2050 (a figure which was becoming a worldwide symbolic target), and declared that it had no scientific basis.⁴⁵

Responding to the international community's changed attitude, in June 2007 China's National Development and Reform Commission (NDRC) drew up a National Climate Change Program and announced plans for a 20 percent reduction in energy consumption per unit of GDP by 2010.⁴⁶ Negotiations toward medium- to long-term reduction targets began in earnest at COP13 in Bali in December 2007, but China refused to accept legally binding reduction targets for itself and the other developing nations on the grounds of "common but differentiated responsibilities." Instead, it began trying to deflect international arguments, choosing to take responsibility in its own way by setting the carbon intensity (reduction) targets mentioned above, which aim to reduce energy consumption per unit GDP.

The international community, however, was monitoring China more closely now that it had become the world's largest CO₂ emitter. After China joined the WTO, its industrial structure underwent rapid conversion to mainly heavy and chemical industries instead of light industry, with increasing direct investment from the industrial nations. As China developed into "the world's factory," its CO₂ emissions per unit of energy consumption (carbon intensity) for 2002–2005 exceeded those for 1980–2000; in other words, its CO₂ emissions per unit were on the rise.⁴⁷ According to measurements by the US Department of Energy's Oak Ridge National Laboratory, China's CO₂ emissions from fossil fuel combustion were already the world's highest in 2007.⁴⁸ International opinion began to call on China, as well as the United States, to substantially reduce its greenhouse gas emissions.

In the Bali Action Plan adopted at COP13 in 2007, it was decided to form a new international consensus at Copenhagen in 2009 (COP15), in order to set medium- to long-term reduction targets for the Kyoto Protocol's first commitment period (2008-2012), but this attempt failed due to the unresolved conflict between the industrial and developing nations over the principle of "common but differentiated responsibilities." As medium- to long-term reduction targets, in advance of COP15 the United States had announced a plan to reduce its emissions by 17 percent below 2005 levels by 2020 (30 percent by 2025, 42 percent by 2030), and by 83 percent by 2050. China, similarly, announced in advance that it planned to reduce energy consumption per unit GDP by 40-45 percent below 2005 levels by 2020, as a new medium-term target for reducing carbon intensity. However, there were growing calls for substantive reductions, especially from the Alliance of Small Island States and environmental NGOs, due to world concern about China's rising energy consumption, which had gone from half that of the United States to the world's highest between 2001 and 2010,49 and in particular the very high ratio of coal in its primary energy consumption (67 percent in 2009) and correspondingly high CO₂ emissions.⁵⁰ Further, in the final phase of the COP15 talks, China made a diplomatic fiasco due to lack of serious attitude toward international negotiation; for example, at an informal meeting where two dozen countries, both industrial and developing, sought agreement, and where the United States was represented by President Obama and Japan by Prime Minister Yukio Hatoyama, instead of Prime Minister Wen Jiabao China sent an official from the Foreign Ministry, who repeatedly held up proceedings while he obtained instructions from Beijing.51

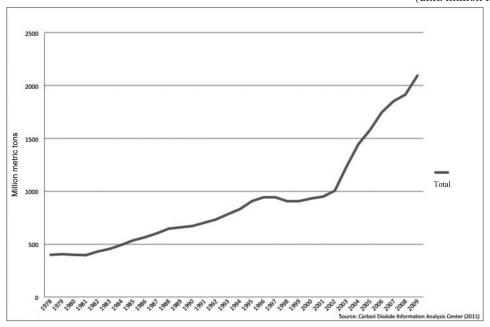
At COP16/CMP6 in Cancun, Mexico, in 2010, a number of matters left pending in Copenhagen were formally adopted as COP decisions, including commitments on greenhouse gas reduction targets

or programs by all the major economic powers—some 80 countries, including China, the United States, the EU, India, and Brazil—together with efforts to systematize the mechanisms for monitoring, reporting, and verification of mitigation actions, international consultation and analysis by the developing as well as the developed nations, and annual assistance for the developing nations of 100 billion dollars until 2020 through the creation of a Green Climate Fund.⁵² However, several decisions were postponed to COP17/CMP7 in Durban, South Africa; these included the most important topics, that is, a legally binding framework for international cooperative action to succeed the Kyoto Protocol, and agreement on the second commitment period. A year later, in the Durban Agreement, it was decided to form a consensus on a universal and legally binding framework of international cooperative action by 2015 and to aim for its implementation by 2020. At COP18/CMP8 in Doha, Qatar, in 2012, some three dozen parties, including the EU and Australia, accepted the extension of their reduction commitments into a second commitment period, but Japan and Russia refused to do so. It was also decided at Doha that future talks toward international consensus should be pursued on a single negotiation track.

Thus, China now finds itself in a far harsher atmosphere at the UN-centered international meetings on climate change. As its insistence on avoiding legally binding commitments happened to coincide with a rapid rise in its CO₂ emissions during the Hu Jintao era (Figure. 2), China is becoming a target of criticism not only by the industrial nations but by developing nations vulnerable to climate change, and by environmental NGOs.

Figure. 2. Total CO₂ Emissions from Fossil Fuel Combustion in China

(unit: million metric tons)

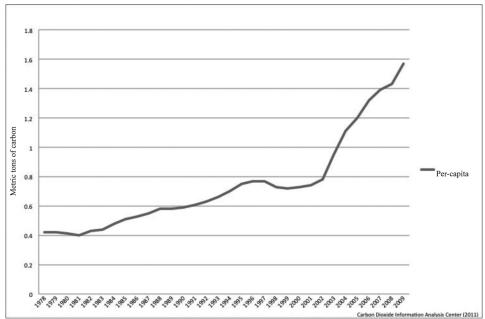


Further, in the Hu Jintao era, not only total but also per-capita CO₂ emissions rose at a striking rate (Figure. 3). Whereas per-capita CO₂ emissions (from fossil fuels) were below the world average of 1.21 tons in 2004, at 1.11 tons, by 2006 they had risen to 1.32 tons, exceeding the world average of 1.27 tons. China's per-capita emissions continued to rise more rapidly than the world average, in 2009 reaching 1.57 tons in contrast to the global figure of 1.28 tons. That year, China ranked 69th in the world for per-capita emissions (with Japan 41st at 2.37 tons).⁵³ However, levels in China's economically advanced coastal regions were comparable to those of the Western industrialized nations; it was once the lower emission

levels seen in inland regions were factored in that the nationwide figure appeared relatively low. There is thus what might be called a "North-South problem" within China itself, a disparity which may indicate a need to differentiate reduction commitments by region within the country, based on local emission levels.

Figure. 3. Per-capita CO₂ Emissions in China

(unit: metric tons of carbon)



Nevertheless, China still has low overall per-capita emissions compared to the industrial nations; thus, the logic of its avoiding reduction commitments on the grounds of "common but differentiated responsibilities" cannot quite be said to break down, but it has undeniably become less persuasive. In fact, the small island states and other vulnerable developing countries have increasingly been calling on China to substantially reduce its greenhouse gas emissions, and cracks have appeared in the cohesion of the G77 plus China.

From China's standpoint, there are counterarguments to a situation that is beginning to resemble "China bashing." Its basic argument is that the industrial and other products it exports to the rest of the world (especially the industrial world) are being produced offshore for companies in those countries, and that by importing goods cheaply from China they are generating large quantities of greenhouse gas emissions in China. As discussed above, it is a fact that the rapid rise in China's CO₂ emissions is correlated with a rapidly growing foreign corporate presence in China after it joined the WTO. One study calculates that one-third of China's CO₂ emissions in 2005 came from manufacturing for export. ⁵⁴ Certainly, with ongoing economic globalization, production sites are becoming more widely dispersed and their carbon footprints (CO₂ emissions) are becoming both locally concentrated (like in China) and widely distributed around the globe. To solve the issue of climate change, we must think in terms of the planet as a whole. Yet in today's international community, where sovereign states are still the main actors, the drafting and implementation of concrete policy measures remain in the hands of national governments.

Accordingly, in the final section I will first outline the ministries and agencies central to China's climate change policy, while discussing their core approach, and then take a brief look at the Clean Development Mechanism and renewable energy development, and how these relate to China's interests.

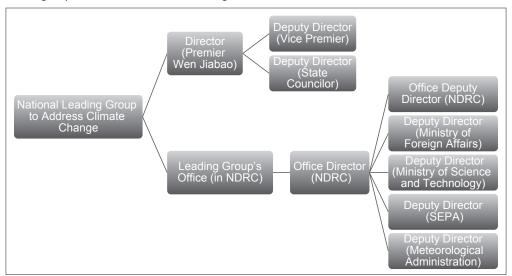
3. The Domestic Policy-Making Process for Climate Change Policy

In China, it is the ministries concerned with development and energy policy, rather than the Ministry of Environmental Protection or the Meteorological Administration, that play the central role in making and implementing climate change policy. A particularly strong influence over climate policy is wielded by the National Development and Reform Commission (NDRC), which coordinates the macroeconomy and energy management.⁵⁵ The next most influential agencies are the Ministry of Foreign Affairs, the Ministry of Science and Technology, the China Meteorological Administration, and the Ministry of Environmental Protection. Under the NDRC's lead, China seeks to gain advantage in international climate change negotiations according to the principle "development first," with the Foreign Ministry focusing on preservation of the sovereign right to development, while the Ministry of Science and Technology administering foreign technological aid and transfers.

In June 2007, the National Leading Group to Address Climate Change was formed to coordinate policy among the agencies concerned with climate change. Prime Minister Wen Jiabao became its director, with two deputies, one of them the vice premier and the other a state councilor. Effective power over the Group, however, is still held by the chief of the NDRC, in which the administrative office of the Group is organized; Under the Secretary of the National Leading Group, Deputy Secretaries who represent the Ministry of Foreign Affairs, the Ministry of Science and Technology, the State Environmental Protection Administration (SEPA, which later became the Ministry of Environmental Protection), and the Meteorological Administration were appointed (see Figure. 4).

China's climate policy, headed by the NDRC, is based on the "no regrets" strategy discussed earlier; that is, China supports the international framework for cooperative action provided it stands to benefit. The core of the NDRC's policy is energy security and economic growth, and it is willing to adopt certain policies to curb climate change if they are compatible with these objectives. For example, rather than being motivated by climate change mitigation, China's promotion of domestic development of renewable energy could actually be a strategy to increase energy security by reducing fossil fuel imports and to maintain economic growth by fostering new industries. China is therefore unlikely to accept emission curbs significant enough to impede its economic growth; its willingness to cooperate internationally on climate change is limited to measures that raise energy efficiency, improve productivity, and create jobs. Global use of renewable energy rose 230 percent between 2005 and 2009, and in 2009 renewables were said to be supplying the energy needs of 75 million households, equivalent to 6 percent of the world's population. In 2005 China obtained 7.5 percent of its primary energy from renewables, including hydroelectricity, and it aims to raise this ratio to 15 percent by 2020 while reducing its dependence on coal (coal use is to be reduced by 400 million tons) and cutting CO₂ emissions. In 2009 China was the G20's biggest investor in renewable energy, at 34.6 billion dollars.⁵⁶ A huge market for solar and wind energy exists in China. But while the domestic market for solar power is still developing, Chinese solar panels made for export are sweeping markets worldwide and causing trade friction with the United States.⁵⁷ Thus, while it is true that China is rapidly expanding its use of renewable energy, mitigating climate change is secondary to ensuring energy security and opening up new areas of economic growth.

Figure. 4. Inter-Agency Mechanism on Climate Change



Source: Chen, China's Climate Policy, 27

Much the same can be said about China's international cooperation utilizing the Clean Development Mechanism (CDM), a flexibility mechanism of the Kyoto Protocol. Simply put, the CDM is a system to reduce greenhouse gases by means of projects (such as building power stations with good energy efficiency and low CO₂ emissions) undertaken jointly by developing countries and industrial countries that have reduction commitments under the Kyoto Protocol. The latter support such projects as part of their financial aid or technology transfers and in return receive credit for the resulting emission cuts in the form of certified emission reductions (CERs), which supplement their own domestic reduction effort. At the same time, the developing nations receive benefits such as technology transfers which also contribute to sustainable development. Initially, however, questionable CDM projects proliferated, and their actual contribution to the reduction of greenhouse gas emissions was viewed skeptically. These were hydrofluorocarbon (HFC-23) destruction CDM projects that focused on the fact that destruction of one ton of HFC-23, a strong greenhouse gas, was rated as equivalent to 11,700 tons of CO₂. HFC-23 is a product of the manufacture of hydrochlorofluorocarbon (HCFC-22), which is used in insulating foam and coolants, and the projects offered CERs for destroying HFC-23. The problem is that the large numbers of credits generated by these projects depress the market value of CERs and that a perverse incentive is created for host countries to unnecessarily boost HCFC-22 production merely to qualify for CDM projects. Further, HCFCs are restricted under the ozone layer protection regime, and there is thus a risk that these CDM projects might make it harder for the ozone layer regime to achieve its goals.⁵⁸ Due to these issues, HFC-23 destruction projects were subsequently limited to HCFC-22 production plants that were already operating in 2004.⁵⁹ In any case, China has been the greatest beneficiary of CDM projects, including projects of this type. The CER credits it had earned by 2012 accounted for over 60 percent of the world total (Figure. 5). Ideally, CDM projects should be conducted mainly in the least developed countries, which are the most vulnerable to climate change, but they have become concentrated in China due to the attractions of large volume, efficiency, and relatively low costs. This trend has exacerbated the distrust toward China in much of the developing world. Other countries that have hosted many CDM projects are India (14.1 percent), Korea (8.8 percent), and Brazil (6.8 percent); these top four countries alone account for 90.6 percent of the total. Since climate change is a global issue, this tendency to locate greenhouse gas reduction preferentially where it can be done most efficiently should not be a problem, but it remains unclear how much reduction actually results from current CDM projects. Arguably, the projects should be conducted where they are most needed, even if this means they will be smaller in scale and less efficient.

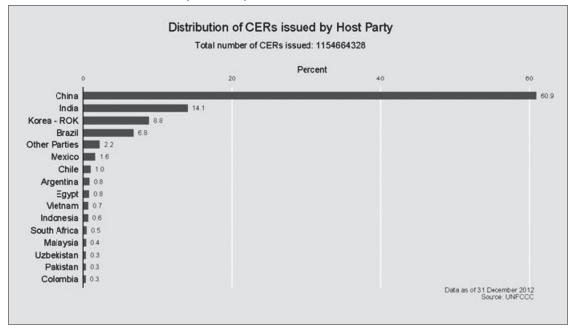


Figure. 5. Distribution of CERs Issued by Host Party

Although CDM projects boosted China's GDP in fiscal 2010 by only 0.03 percent, forecasts suggest they will raise GDP by 0.34 percent in 2020 and by 5.2 percent in 2030.⁶⁰ It is not necessarily the case that CDMs contribute to solve climate change, while boosting China's growth, but they do have many advantages for China. These include: (1) funding for emission reduction projects; (2) the profitability of selling CERs; (3) a new route for environmentally friendly technology transfers; (4) the enhancement of energy efficiency and energy conservation; (5) the improvement of regional environmental conditions; and (6) the contribution to poverty alleviation

IV. Conclusion

What part did China play in global governance during the Hu Jintao era, when it became the world's second largest economy? China may give the general impression of being the world's enfant terrible, a power that pursues its self-interest and does not respect the existing international order. However, when China's behavior is analyzed using the framework adopted in this chapter, it can be seen (albeit with variations depending on the issue area concerned) to engage in global governance based on three behavior patterns: supporting existing international institutions, taking a limited-struggle approach (opportunism), and behaving as a veto state. In the first section of this chapter, I presented an overview of China's relationship to economic globalization; in the second, I outlined its relationship to the UN-centered collective security arrangements; and in the last section I took a detailed look at China's behavior pattern in relation to climate change.

Put plainly, since economic growth is essential to maintain the Communist Party's one-party rule, China supports the existing international economic order while being reluctant to raise the value of the yuan in order to maintain its export industries. In its involvement with international security arrangements, meanwhile, it tends to take a cautious attitude to "humanitarian interventions" accompanied by

the use of force and either exercises its veto or abstains from votes on the grounds of respecting state sovereignty and not interfering in internal affairs. China seems likely to adopt similar policies in the Xi Jinping era. At the same time, it has shown interest in making an international contribution as a responsible power through UN peacekeeping operations, and the new administration is also expected to play an active role in this regard.

Finally, with regard to climate change, both before and during the Hu Jintao era, China consistently maintained the opportunistic behavior pattern of cooperating internationally as long as it could benefit thereby, while supporting the climate regime. Citing the principle "common but differentiated responsibilities" and speaking for the interests of the developing world, it adamantly opposed legally binding commitments to reduce greenhouse gas emissions. In the Hu Jintao era, however, China's total and per capita CO₂ emissions rapidly increased, rendering its argument based on principles less convincing, while at the same time China also became the biggest beneficiary of CDMs. As a result, it has come under pressure from both the industrial and the developing nations to make substantive commitments to reduce its emissions. However, China's climate change policy is regulated by the unconditional command to ensure its energy security and the absolute priority it places on "development" and "economic growth." Thus, in the negotiations for a new framework for international cooperative action, it is unlikely that China will take on commitments equal to those of the industrial nations; rather, it is expected to repeat the kind of limited struggle it has pursued in the past. Absent a change in priorities in its domestic policies, China in the Xi Jinping era is likely to continue to take an opportunistic approach to the issue of climate change.

^{1.} Commission on Global Governance, Our Global Neighbourhood: The Report of the Commission on Global Governance (Oxford: Oxford University Press, 1995). (Japanese edition: Chikyū rīdāshippu: Atarashii sekai chitsujo o mezashite [Global Leadership: Toward a New World Order] (Tokyo: NHK Publishing, 1995)).

^{2.} Global Governance: A Review of Multilateralism and International Organizations (Lynne Rienner Publishers, vol. 1, no. 1, Winter 1995).

^{3.} James N. Rosenau and Ernst-Otto Czempiel, eds., *Governance without Government: Order and Change in World Politics* (Cambridge: Cambridge University Press, 1992).

^{4.} Frank Biermann and Philipp Pattberg, *Global Environmental Governance Reconsidered* (Cambridge, MA: The MIT Press, 2012).

^{5.} Oran R.Young, ed., *Global Governance: Drawing Insights from the Environmental Experience* (Cambridge, MA: The MIT Press, 1997).

^{6.} Commission on Global Governance, Our Global Neighbourhood, 2.

^{7.} Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, MA: Harvard University Press, 1965).

^{8.} The average global air temperature in the Miocene was 3° to 6° above the current level; the oceans were acidic, the poles had no ice cap, and the sea's surface was 25 to 40 meters higher than it is now. (Laurence C. Smith, *The World in 2050: Four Forces Shaping Civilization's Northern Future* (New York: Dutton, 2010: 28). Translated as 2050-nen no sekai chizu: Semarikuru Nyū Nōsu no jidai (Tokyo: NHK Publishing, 2012: 44).

^{9.} Garret Hardin, "The Tragedy of the Commons," Science, vol. 162 (December 13, 1968), 1243-48.

^{10.} James Fallows, "Containing Japan," The Atlantic Monthly, vol. 263, no. 5 (May 1989), 40-55.

^{11.} Anne-Marie Slaughter, A New World Order (Princeton: Princeton University Press, 2004).

^{12.} Kazuko Mōri, Chihiro Katō, and Yoshiki Mine, *Niju-isseiki no Chūgoku, seiji shakai hen: Kyōsantō dokusai o yurugasu kakusa to mujun no kōzō* [21st-century China: Politics and Society. The Structure of Disparities and Contradictions Destabilizing the Communist Dictatorship] (Tokyo: Asahi Shimbun Publications, 2012).

^{13.} The contents of this section owe much to the discussion in Shinkōkoku no taitō to gurōbaru gabanansu no shōrai [The Rise

- of Emerging Countries and the Future of Global Governance] (Tokyo: Japan Institute of International Affairs, 2012), the report of a FY2011 Ministry of Foreign Affairs–sponsored International Affairs Study and Policy Recommendation Project. In particular, see the discussion by research chair Prof. Masatsugu Naya (op. cit., 1-18).
- 14. D. Wilson and R. Purushothaman, "Dreaming with BRICs: The Path to 2050," *Goldman Sachs Global Economics Paper*, no. 99 (2003).
- 15. Hideo Ōhashi, "Shinkōkoku o meguru seichō paradaimu no tankan: kokusai keizai shisutemu e no inpakuto" [A Growth Paradigm Shift in the Emerging Nations: Its Impact on the International Economic System], in *Shinkōkoku no taitō to gurōbaru gabanansu no shōrai* (see note 13), 77-78.
- 16. Hironori Wada, "Shinkōkoku no chōsen to kokusai makuro-keizai gabanansu no yukue" [The Challenge of the Emerging Nations and the Future of International Macro-Economic Governance], ibid., 132-38.
- 17. Mamoru Sadakata, "Kyū Yūgo funsō to heiwa kōchiku no kadai" [The Conflict in Former Yugoslavia and the Issues of Peace-building], *Kokusai mondai* [International Affairs] no. 567 (September 2007), 34-42.
- 18. Ibid., 39.
- 19. Masayuki Masuda, "Chūgoku no Kokuren PKO seisaku to heiin, butai haken o meguru bunmyaku hensen: Kokusai kōken, sekininron no hōga to seisaku tenkai" [The Changing Context of China's UN Peacekeeping Operations Policy and Dispatch of Troops and Units: The Germination of an Argument in Favor of International Contribution and Responsibility and the Evolution of Policy], Bōei Kenkyūjo kiyō [Bulletin of the National Institute for Defense Studies] vol. 13, no. 2 (January 2011), 1-24. Ikuo Kayahara and Yoshiki Mine, Nijū-isseiki no Chūgoku, gunji gaikō hen: Gunji taikokuka suru Chūgoku no genjō to senryaku [21st-century China: Military Affairs and Diplomacy: China's Present Situation and Strategies in Becoming a Military power] (Tokyo: Asahi Shimbun Publications, 2012), especially chapter 7.
- 20. Jiang Zemin, "Address at the Summit of the UN Security Council," *Gazette of the State Council, People's Republic of China*, 2000, no. 32, p. 9 (cited in Masuda, op. cit.).
- 21. Daisaku Higashi, "Gurōbaru na 'heiwa shikkō, heiwa iji katsudō' to 'shinkōkoku' no taitō" [Global Peace Enforcement and Peacekeeping Operations and the Rise of the Emerging Nations], in *Shinkōkoku no taitō to gurōbaru gabanansu no shōrai* (see note 13), 195-210.
- 22. Reuters, "Tai-Shiria Anpori ketsugi wa futatabi hiketsu, Chū-Ro ga kyohiken kōshi" [Security Council resolution on Syria blocked again, China and Russia exercise veto], February 5, 2012. http://jp.reuters.com/article/idJPTYE81K27Z20120205, accessed February 14, 2013.
- 23. Kayahara and Mine, Nijū-isseiki no Chūgoku, gunji gaikō hen (see note 19), 203-5.
- 24. People's Daily, November 15, 2004 (cited in Kayahara and Mine, ibid., 208).
- 25. Masuda, "Chūgoku no Kokuren PKO seisaku to heiin, butai haken o meguru bunmyaku hensen: Kokusai kōken, sekininron no hōga to seisaku tenkai." (See note 19.)
- 26. The UN Security Council passed many resolutions to stop the attacks by Sudanese government forces against antigovernment forces in Darfur, West Sudan, but China abstained whenever sanctions or the use of armed force were proposed. It abstained again in the August 2006 vote on deploying UN peacekeepers in Darfur, on the grounds that the Sudanese government had not given its consent. However, after the international community criticized this behavior (for example, condemning Chinese aid to Sudan as self-interested, since China imports oil from Sudan), China then made approaches to the Sudanese government as a mediator seeking resolution of the conflict (a role also played by the UN Secretary General, among others), and obtained acceptance of a joint UN–African Union Mission in Darfur (UNAMID). Interestingly, in characterizing this behavior, informed commentators within China have proposed the concept of "creative intervention" as a compromise between the norm of humanitarian intervention and the principles that China has invoked in the past, such as respect for state sovereignty and noninterference in domestic affairs (Masuda, ibid., 19-23).
- 27. Pamela S. Chasek, David L. Downie, and Janet Welsh Brown, *Global Environmental Politics, Fifth Edition* (Boulder, CO: Westview Press, 2010). See also Detlef F. Sprinz and Martin Weiss, "Domestic Politics and Global Climate Change," in Urs Luterbacher and Detlef F. Sprinz, eds., *International Relations and Global Climate Change* (Cambridge, MA: The MIT Press, 2001), 67-94. Sprinz et al. propose classifying the stances of states in international climate change negotiations into "pushers" of the regime, "intermediates," "bystanders," and "draggers," according to how ecologically vulnerable they are and how much they spend on mitigation.
- 28. Chlorofluorocarbon (CFC) gases have many uses, including coolants for large-scale systems such as building air conditioners, a foaming agent (CFC-11) for insulation materials, home refrigerators, car air conditioners, a coolant (CFC-12) for vending machines, and a detergent (CFC-13) for electronic devices and precision instruments.

- 29. The bloc that led the Vienna Convention talks consisted of the United States and the Scandinavian countries, which had already enacted domestic bans on the use of CFCs as aerosol propellants, while the EC, Japan, and the Soviet Union, which were slower to adapt their technologies, formed a bloc of veto states. However, as ozone holes began to be observed in the atmosphere over the polar regions, and as US and European chemical manufacturers gained the ability to make CFC alternatives (hydrochlorofluorocarbons or HCFCs), the veto bloc states became lead states in favor of the regulatory regime, and a landmark protocol to restrict the substances that destroyed the ozone layer was adopted internationally (Chasek et al., *Global Environmental Politics*, 164-166).
- 30. Chasek et al., ibid, 168.
- 31. Chasek et al., ibid, 67.
- 32. "Rio Declaration on Environment and Development," (Principle 2) "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." (UNEP, "Rio Declaration on Environment and Development," June 14, 1992, http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163), accessed February 8, 2016.
- 33. Gang Chen, China's Climate Policy (London: Routledge, 2012), 6.
- 34. Beijing Ministerial Declaration on Environment and Development, Beijing, June 19, 1991.
- 35. Michael Grubb with Christiaan Vrolijk and Duncan Brack, *The Kyoto Protocol: A Guide and Assessment* (London: RIIA and Earthscan, 1999), 36.
- 36. In fact, G77 includes countries with different interests and at different stages of economic development. For example, many members are among the relatively late-developing world, including the Alliance of Small Island States (AOSIS) and members of the Organization of the Petroleum Exporting Countries (OPEC), while others are developing nations with relatively advanced economies, such as Brazil, China, India, and Indonesia. As discussed later, in the negotiations to set mid- to long-term reduction targets extending beyond the first commitment period of the Kyoto Protocol, the positions of the developing nations belonging to G77 have been in disarray.
- 37. Chen, China's Climate Policy, 6.
- 38. Paul G. Harris, ed., Climate Change and Foreign Policy: Case Studies from East to West (London: Routledge, 2009), p.59.
- 39. Harris, ed., ibid.
- 40. Grubb, The Kyoto Protocol, 95-96.
- 41. Harris, Climate Change and Foreign Policy, 59; Chen, China's Climate Policy, 100.
- 42. MEF's membership consists of 17 states and regions: Australia, Brazil, Canada, China, the EU, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, South Africa, the United Kingdom, and the United States; also represented are Denmark, the host of COP15, and the United Nations. By October 20, 2009, it had met five times. http://www.state.gov/g/oes/climate/mem, accessed March 15, 2010.
- 43. Chen, China's Climate Policy, 9.
- 44. Yasuko Matsumoto, Hiroshi Ohta, and Norichika Kanie, "Ōshū ni okeru chōki mokuhyō settei katei to sono seijiteki haikei: Kagaku to seiji no intarakushon" [The Process of Establishing Long-term Targets in Europe and Its Political Background: The Interaction of Science and Politics], *Kikan kankyō kenkyū* [Environmental Research Quarterly] no. 138 (2005), 93-101.
- 45. Chen, China's Climate Policy, 9.
- 46. National Development and Reform Commission (NDRC), "China's National Climate Change Policy," 26. http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File188.pdf, accessed January 31, 2013.
- 47. Joanna I. Lewis, "China's Strategic Priorities in International Climate Change Negotiations," *The Washington Quarterly*, vol. 31, no. 1 (Winter 2007-08: 155-174), 156.
- 48. Carbon Dioxide Information Analysis Center (CDIAC), http://cdiac.ornl.gov/trends/emis/meth_reg.html, accessed February 17, 2013.
- 49. Chen, China's Climate Policy, 20.
- 50. Hiroshi Ohta, "Shinkōkoku no taitō to gurōbaru komonzu no gabanansu: Chūgoku no 'shin energī kiki' e no taiō" [The Rise of the Emerging Nations and Governance of the Global Commons: China's Response to the 'New Energy Crisis'], in *Shinkōkoku no taitō to gurōbaru gabanansu no shōrai* (see note 13), 150-51.
- 51. Mark Lynas, "How do I know China wrecked the Copenhagen deal? I was in the room," *The Guardian*, http://www.guardian.co.uk/environment/2009/dec/22/copenhagen-climate-change-mark-lynas, accessed January 31, 2013.

- 52. The United Nations/UNFCCC, Decision 1/CP.16 "The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention," FCCC/CP/2010/7/Add.1.
- 53. http://cdiac.ornl.gov/trends/emis/top2009.cap, accessed February 18, 2013.
- 54. Chen, *China's Climate Policy*, 22. For example, see Christopher Weber, Glen Peters, Dabo Guan, and Klaus Hubacek, "The Contribution of Chinese Exports to Climate Change," *Energy Policy*, vol. 36: 3572-7.
- 55. For the following, unless otherwise indicated, see Chen, chapter 3, "China's Energy and Environmental Bureaucracy," in *China's Climate Policy*, 24-34.
- 56. Chen, ibid., 46-48; Ohta, "Shinkōkoku no taitō to gurōbaru komonzu no gabanansu," (see note 50), 153-56.
- 57. Ohta, ibid.
- 58. Yasuko Matsumoto, "Chikyū kankyō rejīmu kan no seisaku mujun to inga mekanizumu: HFC-23 hakai CDM jigyō no jirei" [Policy contradictions and cause-and-effect mechanisms between global environmental regimes: The case of HFC-23 destruction CDM projects], *Kankyō keizai, seisaku kenkyū* [Environmental Economics and Policy Studies], vol. 1, no. 1 (2007), 54-64.
- 59. Global Environment Centre Foundation, "HFC23 kaishū, hakai purojekuto" [HFC23 recovery and destruction projects], http://gec.jp/gec/JP/Activities/cdm/copmop/hfc23.pdf, accessed February 20, 2013.
- 60. Chen, China's Climate Policy, 41.