

Lingnan University

Digital Commons @ Lingnan University

Conference on China and Global Climate
Change : Reconciling International Fairness and
Protection of the Atmospheric Commons

Day 2 : National and Multilateral Impacts and
Responses

Jun 19th, 9:00 AM - 10:30 AM

Do all roads lead to Copenhagen? The case of China's participation in the post-2012 climate change regime

Ho-Ching LEE

National Central University, Taiwan

Follow this and additional works at: https://commons.ln.edu.hk/climate_change_conf



Part of the [Environmental Studies Commons](#)

Recommended Citation

Lee, H.-C. (2009). Do all roads lead to Copenhagen? The case of China's participation in the post-2012 climate change regime. In *China and global climate change: Proceedings of the conference held at Lingnan University, Hong Kong, 18-19 June 2009* (pp. 323-329). Centre for Asian Pacific Studies and the Environmental Studies Programme, Lingnan University, Hong Kong.

This Presentation is brought to you for free and open access by the Centre for Asian Pacific Studies 亞洲太平洋研究中心 (Ceased publication from Jan 2021) at Digital Commons @ Lingnan University. It has been accepted for inclusion in Conference on China and Global Climate Change : Reconciling International Fairness and Protection of the Atmospheric Commons by an authorized administrator of Digital Commons @ Lingnan University.

Do All Roads Lead to Copenhagen?
The Case of China's Participation in The Post-2012 Climate Change Regime
Dr. Ho-Ching Lee¹

Abstract

Climate change is a global challenge and requires a global solution. In late 2007, governments adopted the Bali Roadmap, launching negotiations toward a new global climate agreement. Among nations with large CO₂ emissions, only China, sustains a rapid economic growth dependent on the expanded use of carbon-intensive coal. The role of China in post-Kyoto climate negotiations is therefore critical to the international effort to combat climate change and global warming.

In fact, China ratified the UNFCCC in January 1993 and was among the first ten countries to become Convention Parties. Over the years, China has been actively participating in climate change regime and has taken a multiple-track approach in climate change negotiations, including the UN Convention/Protocol hard law path, the APP partnership, multilateral and bilateral climate cooperation agreements, G8 and APEC processes and more recently, the US-led Major Economies Meetings.

China's FCCC/Kyoto Protocol participation draws largely from the previous experience of participating in the Montreal Protocol on substances that deplete ozone layer. To China, participating in climate change negotiations is a legitimate access to assistance and technology. Institutionally, China's led agency in climate change affairs has been shifted from China Meteorological Administration (science), Ministry of Environmental Protection (environment) to Ministry of Foreign Affairs (diplomacy) and National Development and Reform Commission (economic interests).

Internationally, China's multiple-track approach further raises its profile and boost negotiations for the post-2012 regime both inside and outside the UN process. The question that what does China want from the post-Kyoto climate policy depends entirely on how urgent China perceives climate change to be, and how badly it wants the world to agree a solution to the problem.

Introduction

Global environmental and ecological problems have been around for centuries. Among them, climate change has recently entered the center stage of global agenda. It is global in scale, including regional and local impacts that lead to melting glaciers, sea level rise, abrupt weather, and weather extremes. Human activities; mainly burning of fuels, and land use practices are increasing the atmospheric concentrations of greenhouse gases and causing warming of the climate system. It is evident in the IPCC Fourth Assessment Report (2007) that global warming is "unequivocal" in global average air and ocean temperatures. Eleven of the last twelve years (1995-2006) rank among the twelve warmest years since 1850. More specifically, the average temperature of the Earth's surface has increased by 0.74 degree Celsius over the past century, from 1906 to 2005, and is expected to further rise by 1.1 to 6.4 degrees Celsius by the end of the 21st century.

This human-induced global warming is a global challenge and needs to be addressed by globally coordinated policies. Under the United Nations (UN) mechanism, the Framework Convention on Climate Change (FCCC), and the Kyoto Protocol have been signed in 1992 and 1997 respectively as legal instruments. Based on the ozone negotiations, climate negotiations take a convention/protocol approach by setting up a general framework first and

¹ Professor, Center for General Education, National Central University, 300 Chong-Da Road, Chung-Li, Taiwan (32001), email: hoching.riverclear@gmail.com.

calling for specific emission reduction targets. The Kyoto Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.” Furthermore, the Kyoto Protocol requires the industrialized states (primarily OECD countries and economies in transition) to reduce their emissions 5.2% in average as compared to 1990 levels by the 2008-2012 commitment period.

This group of countries, also called Annex I countries, must first take domestic actions against climate change. At the same time, the Protocol allows them a certain degree of flexibility in meeting their emission reduction targets through three market-based mechanisms. Emission Trading (ET) is known as the carbon market, and the Joint Implementation (JI) and Clean Development Mechanism (CDM) are project-based flexible mechanisms which feed the carbon market. JI enables industrialized states to carry out joint projects with other developed countries (usually countries with economies in transition); while the CDM involves investment in emission reduction projects in developing countries.

Since the beginning of 2006, the estimated potential of emission reductions delivered to the CDM pipeline has grown rapidly to 2.9 billion tones of carbon dioxide equivalent, or the combined emissions of Australia, Germany and the United Kingdom. Overall, based on the essential CDM statistics provided by the UNFCCC web page (<http://cdm.unfccc.int/Statistics/index.html>), about 1,665 CDM projects have been registered as of June 2009, with around 4,200 more in the project pipeline.

Unlike the Annex I countries under the Protocol, China and other developing states (also called Non-Annex I countries) are not currently committed to reduce emissions by the 2008-2012 period. In terms of emissions statistics taken from the position paper titled “China's Policies and Actions for Addressing Climate Change,” from 1904 to 2004, carbon dioxide emissions from fossil fuel burning in China made up only 8 percent of the world's total over the same period, and cumulative emissions per capita ranked 92nd in the world. China's carbon dioxide emissions from energy consumption in 2004 totaled 5.07 billion tons.

However, according to a report conducted by the Netherlands Environmental Assessment Agency, China overtook the US in 2006 as the world's biggest emitter of carbon dioxide and the greenhouse gas blamed for the bulk of global warming. A similar report was released in 2008 by UC-Berkeley showing that China overtook the United States as the leading emitter of carbon dioxide about a year ago. Its emissions are now increasing about 10 times faster than in the United States. The current high level of emissions, negative impacts of climate change, a growing concern for environmental improvement, the business opportunities from finance, and technology are major forces at play in shaping China's climate change positions.

Over the years, China and other developing states have been evolved into a voting bloc, expressing specific interests, positions, and ideas. Recognized as the Group of 77 (G77, in fact consisting of over 130 member states now), China and G77 have led in linking environmental protection and economic development, stressing the environmental degradation caused by poverty. The right to development, ongoing industrialization process, rapid increase of energy consumption, and the heavy dependence on coal make it rather difficult for China to reduce emission reductions.

From Bali, Poznan to Copenhagen

In December 2007, at the 13th Conference of the Parties (COP 13) to FCCC held in Bali, Indonesia, governments adopted Bali Road Map towards a new agreement to replace the Kyoto Protocol after it expires in 2012. Throughout the COP 13, divisions between the UA and the EU, along with developed and developing states over the need for binding targets from the Non-Annex I countries almost collapsed the negotiation. India, backed by China and other G77 members, asked that mitigation actions by developing states be linked to financial

assistance, technology transfer and capacity building, a move opposed by the US. As the conference dragged on an extra day, there was a dramatic twist.

The Papua New Guinean delegate directly asked the US delegation that “the world is waiting for the US to lead but for some reason if you are not willing to lead, leaving it to the rest of us. Please, get out of the way.” The US delegation leader then took the floor, and in an unexpected U-turn, stated that the US would indeed join the global consensus. After a moment of shock, the convention hall erupted in applause, and finally, the Bali Road Map was adopted, setting an ambitious goal of achieving a new global climate agreement in December 2009 at the COP 15 in Copenhagen.

The midpoint conference, or the COP 14, was held in Poznan in December 2008. Governments were taking stock of the progress made since Bali, discussing various proposals that had been proposed and adopted work plans for 2009. On a more political level, Poznan is the final round of positioning by governments before heading into a period of intense negotiations. In general, there are four key issues (or building blocks) to be addressed: mitigation, adaptation, finance, and technology. Among these, some of the most pressing issues include: the emission reduction targets to be adopted by developed countries; the type of mitigation actions to be taken by developing countries, particularly China, India, and other major emerging economies; and the types and level of support to be provided to developing countries for both mitigation and adaptation.

Throughout climate change negotiations, China has taken actions to address climate change with the following principles:

1. Sustainable Development

For China, climate change can only be addressed within the framework of sustainable development. In this sense, climate change is not only a scientific debate, but also a development issue.

2. Common but Differentiated Responsibilities

The Article 3.1 of the FCCC is the cornerstone of climate change negotiations for China. Both developed and developing countries are sharing these responsibilities, but the developed countries should take the lead in emission reductions. The Bali Action Plan also calls for “a shared vision” for long-term cooperative action, but China continues to maintain the legal distinction between Annex I and Non-Annex I countries by stressing this principle.

3. Mitigation and Adaptation Strategies

China thinks that “deceleration is a long and arduous challenge, while adaptation is a more present and imminent task.” At this time, adaptation is necessary, inevitable, and currently taking place. Both mitigation (domestic emission reductions from the sources) and adaptation to climate change go hand in hand in China.

4. Access to Finance and Technology

Taking part in the Kyoto Protocol provides access to financial assistance and technology transfer from the developed countries. China has become the largest recipient country in CDM projects. At the COP 14, China called for a Multilateral Technology Acquisition Fund and the financing for adaptation to be “predictable and stable, new and additional, and adequate and timely.” The Kyoto approach offers a special channel to accelerate the development of renewable energy.

Internationally, US climate change policies and actions will have impacts on Chinese responses. The US withdrew from the Kyoto Protocol when the Bush Administration turned its back on emission reduction target of 7%. From 2001-2008, the largest cumulative emitter—US was absent from compliance under Kyoto regime. Without the US at the table

and prepared to negotiate, a new international agreement is very unlikely. Due to the change of Administration, President Obama now engages more actively in climate negotiations and calls for a federal cap-and-trade system to reduce emissions to 1990 levels in 2020, and another 80% by 2050.

What roles will the US and China play in reaching a new global agreement? What are realistic expectations for Copenhagen in 2009? For the US, any binding new international agreement must be ratified by the Senate. It would be important for the Obama Administration to consult closely with the Congress in shaping its negotiating positions. And for China, as the spokesperson for the developing bloc, committing to a specific target in Copenhagen would be difficult. A more realistic outcome may be an agreement on the basic architecture of the post-2012 climate change framework with binding economy-wide targets for developed countries; policy commitments for the major emerging economies (such as China); and support mechanisms for technology, finance, and adaptation capacity-building in developing countries.

China's Action to Address Climate Change

China has actively taken part in the FCCC and Kyoto Protocol. In line with the reporting requirement, China has completed and submitted its national inventories of greenhouse gases. A National Plan for Coping with Climate Change was released by the Chinese government in June 2007. Furthermore, the 11th Five Year Plan sets up the mandatory goals to achieve 20% energy efficiency improvement by 2010 from 2005 baseline and 10% key pollutant reductions. On the development of renewables, a target is set to raise the percentage of renewable energy in primary energy supply to 10% by 2010. So far, China has not yet taken any binding emission reduction targets and may not take any reduction targets for the next round of negotiations.

As a power on the rise, China has taken a multi-track approach in climate negotiations. The most important legal instruments addressing climate change would be the FCCC and Kyoto Protocol under the United Nations framework. They have laid the legal foundation for further mitigation and adaptation plans. They have also encompassed some highly technical negotiations over mechanisms for locating funds from carbon trading to mitigation projects, and over reducing emissions from deforestation and degradation.

The Asia-Pacific Partnership on Clean Development and Climate (APP) is another ongoing track addressing global climate regime. It is an innovative new effort to accelerate the development and deployment of clean energy technologies. The APP is currently made of seven partner countries: Australia, Canada, China, India, Japan, Korea, and the United States. These seven countries have agreed to work together along with private sector partners to meet goals for energy security, national air pollution reduction, and climate change in ways that promote sustainable economic growth and poverty reduction. The Partnership focuses on expanding investment and trade in cleaner energy technologies, goods, and services in key market sectors. The Partners have approved eight public-private sector task forces covering: aluminum, building and appliances, cement, cleaner fossil energy, coal mining, power generation transmission, renewable energy, and distributed generation and steel. Overall, the seven partner countries collectively account for more than half of the world's economy, population and energy use, and they produce about 65 percent of the world's coal, 62 percent of the world's cement, 52 percent of world's aluminum, and more than 60 percent of the world's steel.

For the past few years, climate change has been placed up-high on the G8, Asia-Pacific Economic Cooperation (APEC), East Asia Summit (EAS), and Boao Forum for Asia sessions. At the same time, endorsed by G8 leaders, a US-led effort—Major Economic Meeting (MEM) is now shaping up as an alternative negotiation track to address climate

change. Representing the FCCC secretariat, MEM is made of 17 major economies: Annex I countries including Australia, Canada, France, Germany, Italy, UK, EU, Japan, Russia, US and Non-Annex I countries such as Brazil, China, India, Indonesia, Mexico, South Korea and South Africa. The MEM is significant in the fact that in 2005 it is accounted for 87% of world GDP, 64% of world population, 80% of world primary energy consumption, 79% of world carbon emissions from the fossil fuel combustion, and 73% of world greenhouse emissions. The US repeatedly claims that MEM process is intended to support and contribute to the FCCC negotiations. In reality, it stresses business and energy opportunities and tends to neglect to push for any emission reduction targets.

In China, institutional building to tackle climate change started in 1980s when climate change science began to take off. The lead agency at that time was the Chinese Meteorological Administration (CMA), where science initiated policy debates. When climate change became a policy issue that focuses on climatic impacts, the lead agency in the early 1990s was the National Environmental Protection Administration (NEPA) and gradually turned into Ministry of Foreign Affairs (MOFA) with the national focal point established there. NEPA is now upgraded to the Ministry of Environmental Protection and serves as lead agency for ozone protection, desertification, and Ramsar Convention. Later on, when carbon market and CDM was more emerging and developed, and the Kyoto Protocol was put in place and entered into force in 2005. The National Development and Reform Commission (NDRC) also took over.

The NDRC is a huge ministry-level agency in charge of promoting the strategy of sustainable development and undertaking comprehensive coordination of energy saving and emission reductions. In terms of strategic planning, the NDRC also makes plans for resource conservation, ecological and environmental protection, promotion of environment-friendly industries, and clean production promotion. Moreover, NDRC takes the lead with related ministries in attending international negotiations of climate change; to undertake relevant work in regard to the fulfillment of the United Nations Framework Convention on Climate Change at a national level.

To summarize, the Chinese government set up a special institution to address climate change in 1990. The National Coordination Committee on Climate Change (NCCCC) was also established in 1998. To raise profile, the National Leading Group to Address Climate Change, headed by the premier and made of 18 public agencies, was set up in 2007 to assure the overall coordination. The member agencies have been increased to 20 in 2008, and the NDRC started serving as the secretariat in this Leading Group. Taking a programmatic approach, China issued National Climate Change Programme in June 2007, calling on all regions and ministries for full implementation.

China in Post-Kyoto Regime

For the next round of climate negotiations, the pressure is mounting on both Annex I and Non-Annex I countries to further cut down their greenhouse emissions. This pressure is especially high for major developing economies such as China and India to fully participate in a future international climate agreement. But at the moment, it is unclear how China could make the best contribution and be supported in various mechanisms. Based on the project findings from the German Environment Agency, Ecofys and the Wuppertal Institute, China's post-Kyoto participation can be viewed from the three principles of responsibility, capability, and potential.

To estimate reference emissions for major developing countries, four scenarios are outlined to analyze mitigation potentials.

1. Business-as-usual: The BAU scenario follows production, energy consumption, and

- energy efficiency trends that are based on moderate assumptions.
2. No-regret: The no-regret scenario involves emission reduction options that can be achieved at negative or no direct costs. Measures related to energy conservation, energy efficiency, and voluntary reductions are in this category.
 3. Co-benefit: The co-benefit scenario considers options that are reasonable due to political aims or the increased use of renewable energy at some costs.
 4. Ambitious: The ambitious scenario includes reduction options that are technically feasible, but at extranet costs. This ambitious approach can be realized if the non-market barriers are taken away and financial incentives are provided to cover the extra net costs.

In order to meet the two degree Celsius limit, the IPCC calls for a domestic emission reduction of at least 30% below 1990 levels by Annex I countries. Non-Annex countries like China, currently exempt from carbon reductions, should also play a contributing part in the future climate treaties. Highly populated, heavy dependence on coal, embedded emission for exports, and relatively low energy efficiency enable China to have rooms to reduce greenhouse emissions. China's reduction potential is estimated at 8% by no-regret scenario and 15% by co-benefit scenario below business as usual. And the three sectors with highest reduction potential between 2005 and 2020 are power, industrial, and transportation.

Conclusion

China is now the largest emitter in the world and its emissions are rapidly increasing. Under the Kyoto Protocol, China has no binding emission targets from 2008 to 2012. Recently, the NDRC issued the National Climate Change Programme in 2007 and another position paper titled "China's Policies and Actions for Addressing Climate Change" in 2008. At the same time, institutional building to address climate change has been in place with diverse forces of science, the environment, foreign affairs, and economic interests at play.

China has actively participated in climate negotiations, guided by the principles of sustainable development, common but differentiated responsibility, mitigation and adaptation strategies, and access to financial assistance and technology transfer. Taking a multi-track approach, China has become the largest recipient country hosting CDM projects. With the mounting pressure to commit emission reduction target at the COP 15 in Copenhagen, China may consider pathways under the no-regret and co-benefit scenarios to further increase energy efficiency and take voluntary measures. A realistic outcome resulting from Copenhagen may not be a new climate treaty, but an agreement on the basic architecture of the post-2012 climate framework.

References

- Clemencon, Raymond. 2008. The Bali Road Map: A First Step on the Difficult Journey to a Post-Kyoto Protocol Agreement. *Journal of Environment and Development*, 17(1) 70-94.
- Information Office of the State Council of the People's Republic of China. 2008. China's Policies and Actions for Addressing Climate Change. <http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File419.pdf>
- Intergovernmental Panel on Climate Change (IPCC) 2007. Summary for Policymakers, *Climate Change 2007: Synthesis Report*. http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf
- Harris, Richard. 2008. Greenhouse Gas Emissions Rise in China. 03/14/2008 <http://www.npr.org/templates/story/story.php?storyId=88251868>
- Barkdull, John, and Paul Harris. 2002. Environmental Change and Foreign Policy: A Survey of Theory. *Global Environmental Politics* 2(2) 63-91.

- Lee, Ho-Ching. 2005. China and Climate Change Agreements: Science, Development and Diplomacy. In *Confronting Environmental Change in East and Southeast Asia* edited by Paul Harris, New York: United Nations University Press, 135-150.
- National Development and Reform Commission (NDRC) 2009. Implementation of the Bali Roadmap: China's Position on the Copenhagen Climate Change Conference. http://en.ndrc.gov.cn/newsrelease/t20090521_280382.htm
- National Development and Reform Commission (NDRC) 2007. China's National Climate Change Programme. <http://www.ccchina.gov.cn/WebSite/CCChina/UpFile/File188.pdf>
- Netherlands Environmental Assessment Agency 2007. China Now No. 1 in CO2 Emissions; USA in Second Position, June 19, 2007 <http://www.mnp.nl/en/dossiers/Climatechange/moreinfo/Chinanowno1inCO2emissionsUSAinsecondposition.html>.
- Hohne, Niklas et al. 2008. Proposals for Contributions of Emerging Economies to the Climate Regime under the UNFCCC post 2012.
- Zhong, ZhongXiang. 2009. In What Format and under What Timeframe Would China Take on Climate Commitments? A Roadmap to 2050 (July 2 version) http://mpira.ub.uni-uenchen.de/15587/1/FEEM_INEA_special_issue_SSRN_2009.pdf