

## **China and International Climate Change Negotiations**

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Climate change is widely recognized as a looming threat to international peace and security.<sup>i</sup> The United Nations Security Council held its first ever debate on climate and security in 2007 leading to a surge of new publications and reports aimed at understanding the security implications of large-scale climate disruption.<sup>ii</sup> As the new security challenge in the twenty-first century, climate change is now firmly on the political agenda. But reaching a global consensus over how to respond remains elusive. China's rapid industrialization drive, large population, and heavy reliance upon coal mean that it is currently in the spotlight in the lead up to final negotiations over a post-2020 global agreement. It has already overtaken the United States as the world's biggest emitter of carbon dioxide in aggregate terms.<sup>iii</sup> As a consequence, it is facing increasing pressure to participate more fully in international climate change negotiations (ICCN). What is striking is the continuing discrepancy between inside and outside perceptions of China's contribution.

China was one of the first developing countries to ratify the United Nations Framework Convention on Climate Change (UNFCCC) in 1993.<sup>iv</sup> While the Chinese government sees itself as an active and responsible participant in ICCN, many developed countries, and increasingly vulnerable developing states, remain dissatisfied with its persistent refusal to commit to a mandatory reduction in greenhouse gas (GHG) emissions. In 1998 Benjamin Gilman, Chairman of the US House of Representatives' Committee on International Relations, characterized China's position on climate change at the Kyoto conference as a "policy of the 'Three Nos': no obligations on China, no voluntary commitments by China, and no future negotiations to bind China."<sup>v</sup> As several Western scholars have noted, "China's tough, sometimes inflexible positions have won China the reputation of hard-liner in international negotiations."<sup>vi</sup> At the Copenhagen Summit in December 2009 the Chinese government faced scathing criticism over its perceived stalling tactics and refusal to support mandatory targets. This stood in stark contrast to domestic perceptions that in general viewed the government's stance as one of sharing responsibility on an equitable basis demonstrated by the new emphasis upon carbon intensity targets .

Clearly, the gap in perception between China and the outside world is detrimental to diplomatic negotiations and over the longer term may act as a major constraint upon collective action at the regional and global levels. The question is whether this gap be narrowed? An important first step is to arrive at a deeper understanding of both changes and continuities in China's position. Drawing on official Chinese documents and

government statements and declarations, this chapter aims to provide a systematic analysis over a longer time span. It addresses two key questions: have there been any changes in China's position since it entered into ICCN in 1990? And what are the key factors shaping China's position and policies on climate change negotiations? The analysis reveals patterns of continuity and change. Simply put, although resistance to mandatory targets remains unchanged, China's increasingly flexible and cooperative attitude towards ICCN has evolved quite considerably. Abatement cost, ecological vulnerability, and the principle of equity are identified as key factors in determining China's position on climate change. On balance, the trajectory of Chinese participation in international negotiations reveals that the principle of equity is likely to continue to impede progress. Technological cooperation and a growing sense of vulnerability may provide sufficient incentives to shift China's current stance in a more positive direction, but this is unlikely to take place over the shorter term.

### **Inadequate answers: a review of the current literature**

Surprisingly limited research has been conducted by mainland Chinese scholars on the evolution of China's position and policies towards ICCN. Most of the research is heavily policy-oriented, providing advice on what kinds of policies China should adopt in order to maximize the national interest.<sup>vii</sup> Notably, the earliest study of the evolution of China's position towards ICCN was carried out by foreign scholars. As early as 2002, three Norwegian scholars, Kristian Tangen, Gorild Heggelund, and Jorund Buen observed that China's stance on climate change shifted after the Kyoto Conference in 1997. They argued that the Chinese government was becoming increasingly flexible, as indicated in its response towards the Clean Development Mechanism (CDM) changing from defensive skepticism to active support.<sup>viii</sup>

A few years later, a small number of Chinese scholars began to show interest in this issue. In taking a longer term perspective, Zhang Zhihong has argued that China's climate change policy has been driven by three principal forces: promoting the national interest, protecting state sovereignty, and enhancing international image.<sup>ix</sup> The problem is that the national interest is such a broad concept that it can easily conflate the protection of sovereignty with the promotion of an international image. In using a different framework, Xu Huaqing and Zheng Shuang have analyzed China's position in ICCN in relation to decision-making logic, the impacts of stakeholders, economic and environmental awareness, attitudes towards international affairs, and measures taken to slow down climate change.<sup>x</sup> The major problem with this analysis is that it is too comprehensive to be concise, leading to a weak causal linkage between the listed factors and China's position in negotiations. Ren Guoyu and Xu Ying, on the other hand, emphasize that it is the different projections of future climate change that lead to diverging positions between the major players (including China) and country blocs.<sup>xi</sup> This intriguing conclusion, however, fails to serve as a complete framework. The aforementioned study by Norwegian scholars provides a more convincing explanation

for why China takes a hardline position on binding emissions targets. However, a major deficiency in the analysis is the lack of consideration given to the issue of South--North equity. Above all, equity concerns are a crucial determinant of China's international policies on climate change.

In the broader international literature, two major models are employed to explain how a country's position is shaped in international environmental negotiations. The first is the "interest-based" model developed by Detlef Sprinz and Tapani Vahtoranta. They argue that ecological vulnerability and the abatement cost are the two crucial factors that determine a country's position and policies. The more vulnerable a country is to environmental problems, the more willing it is to participate in international negotiations; the higher the cost a country is going to have to pay for solving its environmental problems, the less willing it is to participate in international negotiations. According to this model, the participants in international environmental negotiations can be divided into four types: pusher, laggard, bystander and in-between.<sup>xii</sup>

Concise in form and clear in logic, this analytical model is convincing to a certain degree. However, its applicability is limited due to the complexity of international environmental negotiations. For instance, some scholars openly question interest-based methodology as a means of explaining the European Union's (EU) support for the Kyoto Protocol even after the withdrawal of the United States. They point out that, rather than cost-benefit calculations, it is the internal institutional support and the desire to become the global leader in mitigating climate change that constitute the driving forces behind EU international climate policy. Jon Hovi, Tora Skodvin, and Steinar Andresen argue that economic and environmental concerns do not necessarily dictate a nation's stance in international environmental negotiations.<sup>xiii</sup> Such a model is also less compatible for the purposes of making comparisons across the North--South divide since developed and developing countries bear differentiated responsibility for international environmental problems.

The second model is based on the two-level game theory developed by Robert D. Putnam, in recognition that decision-makers are under pressure from both international negotiations and domestic politics. A synthesized research agenda that looks at the interactions between domestic and international politics can better explain a country's behavior in international negotiations.<sup>xiv</sup> But as useful as the two-level games theory may be, most decision-making theories, including the two-level game theory, were developed in the United States and, therefore, have greater relevance in the context of American politics. As noted by James Dougherty and Robert Pfaltzgraff, Jr., decision-making patterns in countries with different political institutions are markedly dissimilar and, therefore, applying a generic model is likely to lead to misleading conclusions.<sup>xv</sup> With China's unique circumstances in mind, the following analysis seeks to explain China's stance in ICCN on the basis of three key factors: abatement costs, ecological vulnerability, and the principle of equity.

**Table 1 Key tenets of China’s position in ICCN**

1991	<ol style="list-style-type: none"> <li>1. All the countries should accept common but differentiated responsibility for climate change.</li> <li>2. Each signatory country should develop comprehensive and effective cooperation based on the principle of equity, without infringing upon the sovereignty of the signatories.</li> <li>3. Economic development is a necessary precondition for taking measures to tackle climate change. Any measures should give thorough consideration to each country’s average per capita emissions, guaranteeing proper consumption for developing countries.</li> <li>4. Developed countries should provide developing countries with financing and technology transfer on an equal and preferential basis.<sup>xvi</sup></li> </ol>
1999	<ol style="list-style-type: none"> <li>1. Before it becomes a middle level developing country, China is unable to accept binding GHG emissions reduction targets. However, the Chinese government will make great effort to slow down the increase of GHG emissions. China will also continue to promote and participate in international cooperation.</li> <li>2. We urge the developed countries to provide China with technology transfer and financial assistance to enhance China’s ability to deal with climate change in accordance with the UNFCCC.</li> <li>3. The Conference of the Parties to the UNFCCC should address the following issues: (1) Encourage developed countries to fulfill their commitment to reduce GHGs emissions and provide technology transfer and financial assistance in accordance with UNFCCC Article 4. (2) Encourage developed countries to expedite the process of ratification of Kyoto Protocol in accordance with Article 25 in the Protocol. No additional prerequisites should be imposed. (3) Each signatory country should be open-minded in discussing the measures to be taken to address climate change under each country’s specific circumstance. (4) The Conference should initiate discussions on the Principle of Equity, which includes preventing the growing disparities in per capita GHG emissions and energy consumption levels between developed and developing countries. (5) Specific working rules of the Three Mechanisms<sup>xvii</sup> in the Protocol should be made in strict accordance with the Kyoto Protocol.<sup>xviii</sup></li> </ol>
2001	<ol style="list-style-type: none"> <li>1. Financial assistance and technology transfer are key for developing countries to enhance their ability to address climate change.</li> <li>2. The environmental effect of the Kyoto Protocol depends on carbon sinks. We need to take a cautious attitude on this issue for the sake of our offspring.</li> <li>3. The Three Flexible Mechanisms in the Protocol are helpful for the developed countries in cutting their emissions at a low cost. CDM will contribute to the sustainable development of developing countries. This session should be committed to building working rules of the Three Flexible Mechanisms. China endorses an early election and establishment of a CDM Executive Board and a prompt launch of CDM.</li> <li>4. Strict compliance of the rules is indispensable to the implementation of the Protocol.<sup>xix</sup></li> </ol>

2007	<ol style="list-style-type: none"> <li>1. What is most important now is how to strengthen international cooperation on climate change and what is most urgent is how to fully implement UNFCCC and the Kyoto Protocol.</li> <li>2. The UNFCCC and the Kyoto Protocol are the major legal frameworks for the international community to address climate change, which do not close the door to regional cooperation on climate change. Regional cooperation on climate change, in any form, should function as a helpful complement to the UNFCCC and the Kyoto Protocol rather than replacing or weakening them.</li> <li>3. Fundamental to the implementation of UNFCCC is a commitment towards turning mitigation, adaptation, technology, and financing under the Convention into actions.</li> <li>4. Fundamental to the implementation of the Kyoto Protocol is a resolve by developed countries to reach their binding targets for the first commitment period and set new binding targets for the second commitment period.</li> <li>5. China agrees to take measurable, reportable, and verifiable nationally appropriate mitigation commitments or actions on the condition that it is supported and enabled by technology, financing, and capacity-building, in a measurable, reportable, and verifiable manner.<sup>xx</sup></li> </ol>
2010	<ol style="list-style-type: none"> <li>1. As a developing country China is also a victim of global climate change, consequently it strongly supports the needs of least developed countries, African countries, and small island states.</li> <li>2. The Chinese government has announced mitigation action to reduce CO<sub>2</sub> emissions per unit of GDP by 40-45% by 2020 from 2005 levels. This is an obligatory target incorporated into China's medium to long-term plan for national and economic development.</li> <li>3. Developed countries should accomplish their ongoing commitments towards emissions reduction and set new binding targets for the second commitment period. Non-Kyoto Protocol developed parties should undertake comparable emission reduction targets under the Convention. And developing countries should take effective and voluntary adaptation actions according to their national conditions and capacity and join global efforts in tackling climate change.</li> <li>4. Developed countries are expected to provide finance, technologies, and capacity building support to developing countries through international cooperation. China will continue to provide assistance within its ability to other developing countries through south-south cooperation.<sup>xxi</sup></li> </ol>

**Table 2: Continuities and changes in China's stance in ICCN**

Key Questions	1991	1999	2001	2007	2010
Whether to accept a binding target to reduce GHG emissions?	No	No	No	No, but no longer insists on a binding target after 2050 and agrees to take measurable, reportable, and verifiable nationally appropriate mitigation commitments or actions.	No, but agrees to take voluntary action to reduce CO2 emissions per unit of GDP by 40-45% by 2020 from 2005 levels. Reports will be made every two years on the effects of mitigation action through national communications and reports on greenhouse gas emissions will be provided for international consultations and analysis. <sup>xxii</sup>
Should developed countries take the lead in cutting GHG emissions?	Unclear <sup>xxiii</sup>	Yes	Yes	Yes	Yes
Should developed countries provide developing countries with technology and financial assistance?	Yes	Yes	Yes	In respect of technology, emphasis switched to reciprocal technology cooperation and technology proliferation mechanism which takes into account both the market mechanism and the overall global climate situation. Emphasis shifted to discussion on new approaches to enlarge the scale of financing.	New direction in supporting south-south cooperation.
Whether to support the flexible mechanism?	No	Hesitant	Yes	Yes	Yes
Support other climate cooperation mechanisms in addition to UNFCCC and Kyoto Protocol?	Unclear	Unclear	Unclear	Yes	Yes
Use per capita emissions as a benchmark?	Yes	Yes	Yes	Yes	Unclear

## **China's position in ICCN: continuities and changes**

To address the first key research question, the evolution of China's position on climate change is examined at five critical junctures (1991, 1999, 2001, 2007, and 2010). These five junctures have been selected because they correspond with major turning points in China's participation in ICCN. For the convenience of comparison, China's stance at different periods of time is listed in Table 1 and a summary of the major continuities and changes is given in Table 2. What becomes clear is that China's refusal to accept a binding reduction in GHG emissions remains unchanged. But it has become increasingly flexible and cooperative in its attitude towards participation. To be more specific, China's view on the Three Flexible Mechanisms, especially the CDM, has changed from suspicion to support. Second, in respect to financing and technology, it is more willing to pursue a win-win technology transfer mechanism and reciprocal technological cooperation with an additional focus upon south-south cooperation. Third, having concentrated on the UNFCCC and the Kyoto Protocol in the past, China now holds a more open attitude towards other types of international climate change cooperation. Fourth, it has shifted from a focus on domestic voluntary mitigation activities to measurable, reportable and verifiable nationally appropriate mitigation commitments or actions. And fifth, commitments have now been made to reduce carbon intensity – the amount of carbon dioxide emitted per unit of GDP – by between 40-45% by 2020 from 2005 levels and to increase levels of transparency in the reporting of domestic actions. In sum, China's current position on climate change can be characterized as “the hard is getting harder, the soft is getting softer.”

## **Understanding China's stance: abatement cost, ecological vulnerability, and the principle of equity**

How can the continuities and changes in China's position on climate change best be explained? This chapter puts forward three hypotheses.

*Hypothesis 1: The higher the abatement cost is, the less willing China is to accept a binding commitment to reduce GHG emissions, and the less likely it is to participate in ICCN in the absence of international financial and technological transfers*

Abatement costs refers to the cost a country will have to pay for solving an environmental problem, mostly the economic cost. Cost-benefit calculations are a common feature of decision-making in general. Environmental decision-making is no exception. Indeed, from the beginning of its participation in the negotiations the Chinese government realized that “addressing climate change is far tougher than addressing ozone depletion because it is so complex and costly.”<sup>xxiv</sup>

From the Chinese perspective, the abatement costs incurred by GHG mitigation are based upon two key assumptions. First, that the opportunity to develop could be

seriously curtailed. China is now undergoing rapid industrialization and urbanization and the future potential for development is huge. To mitigate GHG emissions means restructuring the energy industry leading to a decrease in per capita energy consumption that is critically important to economic development. However, China relies heavily on coal for its energy supply. The share of coal in the primary energy mix accounted for 76.2 per cent in 1990 and still took up 68.7 per cent in 2010.<sup>xxv</sup> In the short to medium term the potential to cut carbon dioxide emissions by adjusting the energy structure is limited. In addition, China's energy technology is lagging behind developed countries and its consumption efficiency is rather low. As noted by Liu Jiang, Vice-Director of the National Development and Reform Commission:

The history and trend of different countries' development has shown that to approach the development level of industrialized countries necessarily means higher per capita energy consumption under China's current technology and consumption pattern. So far there is no historic precedent for achieving high per capita GDP with low per capita energy consumption.<sup>xxvi</sup>

A commitment to reduce GHG emissions under these conditions will undoubtedly lead to a deceleration of China's economic growth and weaken its potential for future development. This is detrimental to the "Three Stage Development Strategy," which is the overriding priority of the Chinese government.

Second, it is generally assumed that abatement costs will slow down economic growth. From the outset of the negotiations, the Chinese government realized, though not on the basis of concrete research, that "the fundamental problem will not be solved with international financing and technology assistance as only a drop in the bucket."<sup>xxvii</sup> Existing research has shown that as the reduction of GHG emissions increases, the marginal cost of abatement is likely to rise. In 2020, the annual cost of abatement is likely to reach 50 billion RMB if China fulfills its promise to cut emissions by 10 per cent.<sup>xxviii</sup> If a 20 per cent reduction is made by 2030, GDP is likely to decrease by 0.351 per cent.<sup>xxix</sup> These statistics show that the earlier China promises to cut its emissions, the greater the impact is on development. In addition, analysis undertaken by some foreign scholars on the huge costs incurred in implementing the Kyoto Protocol carries some worrisome implications for China. For example, one report projects that the full implementation of the Kyoto Protocol is likely to cost as much as US\$700 billion.<sup>xxx</sup>

Due to the huge abatement costs, China repeatedly stresses that it is beyond its capacity to commit to a binding reduction in GHG emissions. In 1998, the Chinese government set up the National Coordination Committee on Climate Change to replace a Coordination Committee on Climate Change which was established under the State Council in 1990. At the same time, the administration of daily work was transferred from the China Meteorological Administration to the NDRC. This was a strong signal that climate change was seen as a development problem and not simply an environment

issue. In 1999, under huge pressure from developed countries to cut its GHG emissions, China made it very clear that it would not make a binding commitment before reaching the level of a middle developing country.

On the positive side, however, if participation in ICCN helps to reduce abatement costs or makes the reduction possible, China is more likely to adopt a cooperative attitude. Initially the Chinese government was skeptical of the “Three Flexible Mechanisms,” fearing that this would result in rich countries circumventing their responsibility to reduce their own emissions.<sup>xxxix</sup> However, the Chinese response began to change after following COP 6 negotiations conducted in Bonn in 2001 leading to positive support for Joint Implementation and Emissions Trading as well as the CDM. The latter was viewed as “a creative mechanism of the international community to address global climate change, conducive to the sustainable development of developing countries as well as the achievement of an emissions reduction target by developed countries.”<sup>xxxix</sup>

CDM was initiated by developed countries to achieve their binding GHG emissions reduction targets by way of cooperation with developing countries. The core of CDM is to allow developed countries to obtain Certified Emissions Reductions (CERs) from joint projects in cooperation with developing countries. The CDM made it possible for China to lower its abatement costs by introducing more advanced energy technology and partial financing from developed countries.

After 2000, to make the best use of the opportunities offered by CDM which was stipulated in the Protocol, the Chinese government set up the CDM Assessment Council consisting of all relevant ministries concerned. Temporary Regulations on the Administration of CDM Projects was issued on in 2004. In 2005, an International Conference on CDM was held in Beijing. Key parts of the CDM are fixed in relation to the enhancement of energy efficiency, the development of new and renewable energy, and the recycling of methane and coal stream gases.<sup>xxxix</sup> By November 2007, the Chinese NDRC had ratified 998 CDM projects at a total cost of US\$15 billion awaiting registration by the CDM Executive Board.<sup>xxxix</sup> Up until August 2008, the NDRC had ratified 1598 CDM projects.<sup>xxxv</sup> Among them, 301 projects had been registered by the CDM Executive Board, accounting for 24.65 per cent of the world total.<sup>xxxvi</sup>

*Hypothesis 2: The greater ecological vulnerability caused by climate change, the more willing China is to reduce its GHG emissions, and the more cooperative it is likely to be in ICCN.*

Ecological vulnerability refers to an ecological system’s ability to cope with and recover from an environmental problem. The basic logic in this hypothesis works like this: the greater the vulnerability incurred by climate change, the greater the damage is inflicted on China by climate change, and as a consequence the more pressing is China’s demand for promoting cooperation in ICCN. In order to push forward the

negotiations, China is likely to adopt a more flexible and cooperative stance to the extent that it is even willing to make an earlier commitment to cut GHG emissions.

The “pollution first, treatment second” pattern of development that prevailed during the early stages of industrialization as experienced by developed countries is still dominant in China. Environmental protection is not fully implemented in practice. And from a broader environmental perspective climate change is not the most pressing problem for China in the short term.<sup>xxxvii</sup> Nevertheless, it is worth noting that as the ecological vulnerability caused by climate change becomes more apparent, China is much more likely to attach greater importance to the problem and adopt a more cooperative attitude at the international level.

From the outset of China’s entry into ICCN, ecological vulnerability has been an important factor in influencing its position on climate change. The Chinese leadership has always been concerned about the impacts of climate change on China.<sup>xxxviii</sup> At the beginning, China knew very little about the potential impacts and, therefore, acted prudently during negotiations. As the negotiations developed, the relevant ministries concerned initiated research programs. Studies emerged in large numbers on the impacts of climate change on China’s politics, economy, and ecological system, such as the Study on Forecasting, Impact and Countermeasures of Global Climate Change, and the Study on Global Climate Change and Environmental Policies.<sup>xxxix</sup> More recent examples include “The National Assessment Report on Climate Change,” published in late 2006, and “China’s National Climate Change Programme,” published in mid-2007.<sup>xl</sup> On the basis of this research, the Chinese government gradually realized that climate change would impact negatively on China in the future.

According to the above-mentioned two reports, climate change has already had negative impacts on agriculture, livestock industry, forests, water resources, coastal zones, and other natural ecosystems. For example, in recent years, China has experienced extreme weather patterns consistent with predictions of global warming by climate scientists. Floods have become more frequent in the south. Droughts have become more frequent in the north, with the attendant risk of accelerated desertification. Glaciers in northwestern China have shrunk by 21 per cent and the thickness of frozen earth on the Qinghai-Tibet Plateau has been reduced by up to 4 to 5 meters in the past 50 years.<sup>xli</sup> This shrinkage is negatively affecting the water supply in areas fed by the Himalayan Hindu Kush ice mass glacier melt, on which hundreds of millions of Chinese depend. The past 50 years saw the accelerating trend of sea level rise along the Chinese coast, which resulted in coastal erosion and seawater intrusion, as well as mangrove and coral reef degradation.<sup>xlii</sup> In the decades ahead, sea level rise could threaten hundreds of millions of people on China’s coasts. By 2030, sea levels along Chinese coastal areas could rise by up to 0.16 meters, and in the decades ahead even more, increasing the possibility of flooding and intensified storm surges. The Yellow River Delta, the Yangtze River Delta, and the Pearl River Delta are the most vulnerable coastal regions in China.<sup>xliii</sup> Experts also anticipate serious impacts on agriculture as a consequence of

climate change. The production of wheat, rice, and corn could decline by as much as 37 per cent by the end of the century.<sup>xliv</sup>

Under increasing domestic pressure to address this issue, Xie Zhenhua, Vice Director of the NDRC, reiterated recently that “climate change posed a realistic threat to China’s natural eco-system and economic and social development.”<sup>xlv</sup> Obviously, China’s increasingly flexible and cooperative stance in ICCN is consistent with a growing awareness of China’s vulnerability to climate change.

*Hypothesis 3: The more equal responsibility each country is willing to accept, the more likely it is that China will commit to cutting its GHG emissions, and take a more cooperative attitude towards ICCN.*

Across a broad spectrum of global issues, efficiency and equity are recurrent themes in international cooperation. Obtaining the proper balance between the two is often a precondition for success. The first principle of UNFCCC is that the parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the Annex 1 (developed country) Parties should take the lead in combating climate change and mitigating the adverse effects thereof. But there is huge controversy over the specific meaning of the principle of equity as articulated in ICCN.<sup>xlvi</sup> From the Chinese perspective, it includes the following three sub-principles.

First, is the principle of common but differentiated responsibility. China considers that developing and developed countries have different responsibilities in relation to international cooperation to combat global warming. Countries should go beyond the rhetoric of common responsibility to assume differentiated responsibility. As argued by Song Jian in 1992:

The population in developed countries that make up only 25 per cent of the world’s population consumes 80 per cent of the world’s resources. Since the 1760s, a 60 per cent increase in the carbon dioxide amount in the air was contributed by the oil and coal burnt by developed countries during their industrialization. Currently, the carbon dioxide emissions of developed countries make up 75 per cent of the world total, with their per capita emissions as high as 3.12 tons, which is eight times more than that of the developing countries. Therefore, the principle of common but differentiated responsibility must be followed.<sup>xlvii</sup>

Based on convincing scientific research, China’s perspective claims a moral advantage. Moreover, its claim is legitimized by the stance of the UNFCCC that recognizes “that

the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, and that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs.”<sup>xlviii</sup> Greater responsibility calls for a greater contribution. On this basis, developed countries have a moral obligation to make larger and earlier contributions to the international effort to combat global warming.

Second is the principle of differentiated capabilities for different countries. China holds the view that an emphasis on historical responsibility is not enough to solve the problem of climate change. Each party to the Protocol should adopt appropriate measures to cut down and adapt to the negative impacts of climate change based on their respective capacity. Capable countries, especially in terms of financing and technology, should contribute more to the campaign against global warming. This is also an essential component of the principle of equity. At present, the developed countries, with their enormous technological and financial capacity, are capable of making a greater contribution. Thus, developed countries have an obligation to provide developing countries with financial and technological assistance to help enhance their capability to slow down and adapt to climate change.<sup>xlix</sup> As developing countries carry a disproportionate burden of the negative impacts of climate change, there also exists a moral obligation for richer countries to help enhance resilience and build adaptive capacity.

Third is the principle of per capita distributed rights to emissions. On this basis, a country’s right to emissions is contingent upon the size of its population. In ICCN, China stresses that per capita energy consumption and emissions should determine GHG emissions targets.<sup>1</sup> In other words, the survival emissions of developing countries should not be equated with the luxury emissions of developed countries.<sup>li</sup>

Since the initiation of ICCN, the principle of equity has not been implemented and as a consequence, the Chinese government has voiced its disappointment and dissatisfaction.<sup>lii</sup> As long as the United States refuses to ratify the Kyoto Protocol, China is under no moral obligation to make any commitment to reduce its emissions. As one report issued by the World Resource Institute points out: “Their [developing countries] current reluctance to take on legally binding emission targets is based in part on the lack of leadership evidenced by richer, developed countries in tackling climate change.”<sup>liii</sup>

The dilemma for the Chinese government is that as a consequence of population growth, rapid economic development and a coal-based energy structure, China’s carbon dioxide emissions have been on the rise. Aggregate GHG emissions in 1994 totaled 4,060 million tons of CO<sub>2</sub> equivalent (3,650 million tons of net emissions) rising to about 6,100 million tons CO<sub>2</sub> equivalent (5,600 million tons of net emissions) in 2004. Between 1994 and 2004, the annual average growth rate of GHG emissions was around

4 per cent. Per capita CO<sub>2</sub> emissions from fossil fuel combustion were 3.65 tons in 2004 equivalent to 87 per cent of the world average and 33 per cent of the average amongst OECD countries.<sup>liv</sup> By 2008 aggregate emissions stood at 6, 550 million tons CO<sub>2</sub> equivalent and per capita emissions had risen to 4.92 tons, higher than the world average.<sup>lv</sup> Obviously, China is losing the advantage of low per capita emissions. Confronted with mounting international and domestic pressure, it will therefore need to be more flexible and active in ICCN in the future.

## **Future Directions**

The world is getting warmer, and international concern over China's position and policies in ICCN is increasing. Interpretations of China's response differ widely and tend to be either overly optimistic or overly pessimistic. We have argued in this chapter that since China entered into ICCN in 1990, there have been both continuities and changes in its position: what has remained unchanged is that China still refuses to endorse a binding GHG emissions reduction target, however its attitude towards international climate negotiations has become more flexible and cooperative. China's recent domestic actions against climate change suggest that taking action is now perceived to be in the national interest. In 2006 the Chinese government set an ambitious target of a 20 per cent reduction in energy consumption per unit of GDP by 2010. In order to strengthen leadership, the State Council established the National Leading Group to Address Climate Change headed by Premier Wen Jiabao in 2007. For the first time, the Political Bureau of the Central Committee of the Communist Party of China focused on the climate change issue in a group study in June 2008 and called for a nationwide campaign to address the problem. Abatement costs, ecological vulnerability, and the principle of equity are the major factors contributing to the continuities and changes in China's position.

Taking a historical perspective, it would seem that on balance the principle of equity has had the strongest influence over the Chinese government's willingness to share responsibility for tackling global climate change. The prospect of technological and financial support has provided an important incentive to participate more fully in the negotiations, and further contributions are likely to be driven by China's growing sense of vulnerability to climate impacts.

There now exists a strong connection between China's national interest and global climate change. Indeed, China's adoption of a more cooperative attitude in ICCN is driven increasingly by mounting internal pressures. China's contribution to tackling global warming will need to correspond with its rise in both per capita and aggregate carbon emissions. To relieve the international pressure to respond, China will need to be more flexible and active in ICCN in the future.

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