Pattern of International Climate Politics and China's Strategic Options in Post-Kyoto Age

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Introduction

In recent decades, 'Climate Politics' has become a hot issue and focus of international politics because of international society concerns intensively to climate change and its consequence. In order to deal with this serious challenge and threat, an international climate change regime has been established after rounds of international negotiations. International negotiation on climate change has been lasting near 20 years from 1990 when UN initiated the international negotiation on Framework Convention on Climate Change. 2009, culminating in the Copenhagen conference, is a crucial year for the battle against climate change. Climate change has become a fundamental factor to influence international relations. Numerous social scientists have analyzed the impact of global warming and the great challenges which international negotiation on climate change has confronted with (See four Assessment Reports which released by the Intergovernmental Penal on Climate Change in 1990, 1995, 2001 and 2007; EEA Report 2004 and 2008; Oberthür and Ott 1999; Yamin and Depledge 2004; Michaelowa, Tangen and Hasselknippe 2005). Then, what characteristic is the pattern of international climate politics? Under such pattern, what position will specific nation state or state group take? What factors are there to influence the negotiation position of special nation state or group?

The pattern and structure of international climate politics is one very important factor to influence the position of country or group. Since the UN has initiated international negotiation on climate change in 1990, there become three groups, the European Union, the so-called Umbrella Group (including the United States, Australia, Canada and Japan) and the developing countries (77 Group plus China). With the change of situation of international economy and politics, these groups have taken place some changes. In post-Kyoto age, among the international actors who participate in global governance of climate change, there are three key players in the structure of current climate politics, the United States, European Union and China, to dominate the global climate change governance. The United States is the first largest emitter of carbon dioxide and the only superpower after the cold war. China ranks the second largest emitter and is largest developing country which is also one of greatest emerging countries. And, EU is the main pusher of international climate negotiations and serves as the leader in the international climate regime. This pattern is at the centre of this article. From a perspective of structural realism in international relation theory, the structure and pattern of international system is the most important factor which decides the foreign behavior of nation state. As Kenneth N. Waltz, one of the most famous scholars in the field of international relations theory, has pointed out that the structure of the international system is the most important factor which influences the foreign behavior of given country. The structure of international system is distribution of power in the international system (Waltz 1979). Based on this theory, I will first illustrate the serious impacts of global climate change and brief process of international negotiation on climate change. Secondly, I will analyze the structure of the international system and characteristic of pattern of international climate politics and the influence of this pattern of international climate politics and the positions of different country under this pattern. Thirdly, I will analyze the transatlantic relationship between EU and the United States in the triple polar structure of international climate politics. Following this, I would like to analyze the strategic option which China could choice in post-Kyoto age. Finally, I will draw a brief conclusion.

Increasing serious impacts of global climate change and process of international negotiation on climate change

Nowadays, climate change has become a moral and ethical issue. With IPCC had released its four assessment reports from 1990 to 2007, the climate change has become scientifically more and more certain. Climate change is happening. The overwhelming scientific consensus is that the cause is emissions of GHG from human activity. Climate change has been described by the UN Secretary-General Ban Ki-moon as the defining challenge of our age and our generation. International society must take decisive action to mitigate it. As the European Environment Agency's report, Impacts of Europe's Changing Climate——An indicator-based assessment in 2004 has pointed out that "Earth's history has been characterized by many changes in climate conditions. But the extent and rate of current climate change most likely exceeds all natural variation in the last thousand years and possibly further back in history. There is strong evidence that most of the observed recent warming is attributable to human activities, in particular to emissions of greenhouse gases (GHGs) from burning fossil fuels and land-use changes. ... Climate change already has considerable impacts on the environment, human health and society which are expected to become more severe in the future." The same type of assessment report in 2008 has also stressed that "climate change and its associated impacts require immediate action in order to safeguard the economy and environment of Europe and the rest of the world. ... temperature is increasing, sea levels are rising, glaciers, ice sheets and sea ice are melting, precipitation is changing, and the intensity and frequency of weather extremes in many regions is increasing. "the cascade of consequences including an increased risk of floods and droughts, losses of biodiversity(marine, freshwater and terrestrial), threats to human heath, and damage to economic sectors such as energy, transport, forestry, agriculture and tourism." In all,

global climate change has brought serious impacts to both human heath and our survival environment and all kinds of animals and plants. It is urgent to take decisive measures to reduce emissions of greenhouse gases and mitigate the changes. The fourth assessment report of the Intergovernmental Panel on Climate Change has pointed out that available observational evidence indicates that regional change in climate, particularly increases in temperature, have already affected a diverse set of physical and biological systems in many parts of the world. Example of observed changes include shrinkage of glaciers, thawing of permafrost, later freezing and earlier break-up of ice on rivers and lakes, lengthening of mid-to high-latitude growing seasons, poleward and altitudinal shifts of plant and animal ranges, declines of some plant and animal populations, and earlier flowering of trees, emergence of insects, and egg-laying in birds.

Global climate change is a typical global common problem which needs the collective efforts coming from international community to resolve. Namely, solution of global climate change is a collective responsibility and needs collective action ultimately. The collective action needs the international coordination. For this significant goal, international society must take substantive and considerable actions in order to secure our sole homeland. So, UN has initiated international negotiations on climate change since 1990. Since then, the international negotiation has undergone three phases:

- In 1990, UN initiated Intergovernmental Negotiation Committee on Framework Convention on Climate Change. After six conferences the Intergovernmental Negotiation Committee established UN Framework Convention on Climate Change (UNFCCC) in New York in 1992. Then, the UNFCC enter into force in 1994.
- 2. In 1995, the first COP convened in Berlin and signed the Berlin Mandate. In 1997, COP3 passed the Kyoto Protocol of UNFCCC and till 2005 the Kyoto Protocol entered into force after international community hard efforts. Especially due to the United States refused to ratify the Kyoto Protocol in 2001 and the treaty faced the failure. Under such circumstances, EU and other countries took decisive measures actively to save the Kyoto Protocol. Despite the unwillingness of US to embrace the Kyoto Protocol, other Annex I countries continue down the road that was pointed out in Kyoto.
- 3. After the Kyoto Protocol entered into force, international community continued the challenging process in order to establish a new agreement to continue the reduction of greenhouse gases after 2012. In 2007, the international community described the Bali Road Map which appealed that a shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. In post-Kyoto age the international negotiations is an ongoing negotiation which aims at establishing institutional arrangement for further emission reduction after the first commitment

period in the Kyoto Protocol expires in 2012. Today, towards this goal still needs significant efforts coming from the international community. This is not going to be easy.

The pattern of international climate politics and its influence: from the perspective of structural realism

Generally speaking, there are a number of factors to influence the specific position and policy of given state in the international negotiation on climate change, such as domestic games of internal interests groups, international games of main international negotiators, ecological vulnerability and costs of emissions reduction of given state, scientific cognition and ideas on global climate change and process of international negotiation on climate change, etc. (see Figure 1)Among these indicators the structure

Structure of IS Economic interests Process of Ecological Costs of INCC ER Domestic Netgain PG т L Position State or Win set G Group Internati Ideas onal PG External I Internal I Identity

Figure 1 Factors which influence the position of given state or group

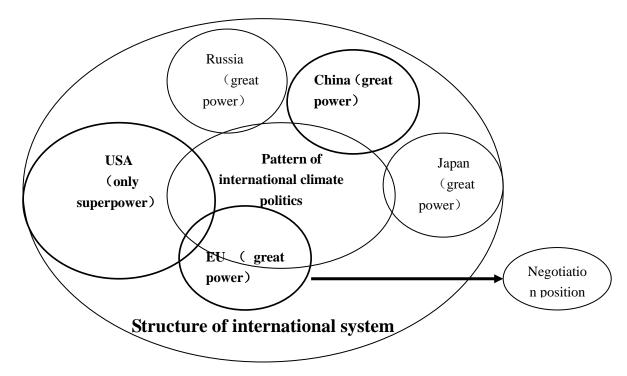
IS=International System; PG=Political Game; TLG=Two-Level Games; V=Vulnerability; I=Identity; INCC=International negotiation on Climate Change *Source: own compilation*

of international system and the pattern of international climate politics serve as the most important influencing forces to circumscribe the option of position and policy of given state or group behind international negotiation on climate change. In order to explain the special position and policy of given state or group, we must define the characteristic of the structure of the international system and the pattern of international climate politics under which the international negotiations on climate change develop.

In end of 1980s and early of 1990s, the international situation took place shocking change, namely the cold war ended. The structure of bi-polar system ended. It is common believed that the end of cold war indicates that the international system has taken place profound structural change. Kenneth N. Waltz ever pointed out that the emergence of new world order is ascribed to the decline and disappearance of the Soviet Union. Then, what is the characteristic of international system nowadays? How to define it? This is a debating question. The characteristic of today international system, however, has been defined by many scholars as "one superpower, several great powers", or more exactly to say that "one superpower, four great powers". Some scholars believed that this system would be less stable than it was in cold war times. This international system can be characterized by in transition and uncertainty. Under this special structure of international system, I think, there are two phenomena will be expected as following: One is that international competition will intensify despite it maybe reveal in different form in new historical condition. International power struggle will be more complex. The great powers would seek to more independence. Secondly, as Keohane and Nye has emphasized in Power and Interdependence (Keohane and Nye 2000)that we live in an era of interdependence and all kinds of international issues have no distinct rank (such as "high degree politics" and "low degree politics") again. The interconnections among various international issues are reinforcing in an interdependent age. Under such circumstances, we can expect that great powers will struggle to control and dominate special international issue such as international environmental governance.

According to some scholars (Pan 2008), the international arguments with respect to the global climate change undergo approximately three phases: scientific research and cognition, economic assessments and political game. Scientific cognition and economic assessments have been answered basically before 2005 when the Kyoto Protocol has entered into force which has become a turn point of international climate politics. Hereafter the international climate politics has become a political game among the geopolitical great powers. According to some statistics, among the international actors who participate in global governance of climate change, there are three key players in the structure of current climate politics, the United States, European Union and China, to dominate the climate change issue, because the three powers' population shares 32.4%, GDP takes 55.4% in the light of PPP and emission of carbon dioxide occupies 51.5% in the world in 2004 (Pan 2008). So, from a perspective of structural realism the pattern of international climate politics is factually tri-polar structure. (See Figure 2)

Figure 2 structure of international system and pattern of international climate politics



Source: own compilation

Based on this structure, transatlantic relations are both competitive and cooperative. Mostly, in the international process of climate governance the transatlantic relations are competitive due to their larger disagreement and divergence. Climate change has become one key variable which influences the transatlantic relations. Climate change is not only an environmental but one economic and political issue. In the post cold-war age, although traditional security issue such as military is still one important factor in the agenda of international relations, the non-traditional security issue such global climate change has in fact entered into 'the high degree politics'. The difference between high degree politics and low degree politics has become smaller. On the one hand, the country or country group which succeeds in dealing with GHG emissions will take advantageous position in the future international society. Low carbon economy has become future trend in the world with more growth and fewer emissions. Both EU and U.S. have advanced environmental science and technology. They will construct a 'New Transatlantic Economic Partnership' and form a 'Low-carbon Economic Circle' based on the cooperative regimes such as G8 and OECD. However, this is only one side of the story. On the other hand, there are several divergence and competition between EU and USA. If we carefully explore the process of the international negotiations on climate change we can find that the leader of international climate governance was the United States but not European Union before 1990s. In the 1970s US claimed itself as the environmental leader at the UN Conference on the Human Environment and in the multilateral efforts to establish international environmental treaties. With the end of the cold war, especially after the UN Conference on Environment and Development, the US were more reluctant to

play its role as a leader in global environmental governance while the EU gradually took this position. They began to compete for the power of deciding the rules of game of climate change. Especially, after America announced they withdrew from the Kyoto Protocol in 2001, EU becomes the leader of international climate change governance (Oberthür and Kellz 2008). As some scholars emphasized that "before the US withdrawal from the Kyoto agreement, the EU was not very successfully in providing an effective leadership role although its ambitions in this regard were evident throughout the process. The US exit provided a new opportunity for the EU leadership." (Hovi, Skodvin and Andresen 2003) But, Obama came to power and American climate policy may take place change in 2009. If the US changes its position, it may play more active role in international climate negotiation in the post-Kyoto negotiation process. Thus, America will struggle for the power to dominate the process with EU.

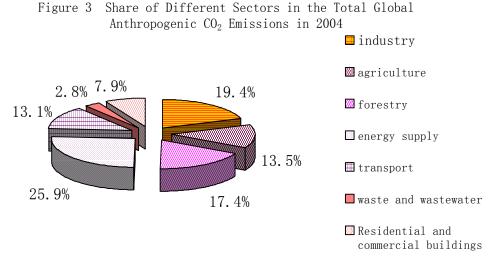
At the same time, with the rapid development of its economy, China has played a more and more important role in climate issue. According to some assessments, China's GHG emissions will exceed the United States by 2025 and become the first in the world. From the late 1980s and the early 1990s, there was a remarkably change in China's interactions with the international community on environmental issues, which has generated profound impacts on China's participation in international environmental governance such as ozone depletion, biodiversity, and climate change (Economy 1997). Since 1990s China has been increasing active in accessing to and implementing international agreements, which reflects the Chinese leaders' increasing self-confidence and as well as their recognition that China's international responsibilities in the global arena are growing along with their nation's rising power and influence (Shambaugh 2005). In the post-Kyoto age, China's influence on climate change governance will increase. China's position on international negotiations on climate change will generate more important effect. Under such circumstances, how to coordinate the relations of the three powers has become the key factor that influences the process of international negotiation on climate change.

The significant impact of global climate change to state or group's international status in the future

Since 1970s, environmental issues become gradually one concern focus of international community, which generates twofold significant effects to both domestic and international politics: on the one hand, environmental problems and crises have increasing become one hotspot and focus of public concern, which change greatly the agendas of traditional politics. "Environmentally friendly development" and "ecological modernization" have become a first-line principle of social development. On the other hand, environmental problems become gradually the important agenda of international politics due to per se its transnational and complicated feature.

Environmental issues have become a "high degree politics" concerning human development, peace and security. The internationalization and generalization of environmental problems make it become not only one environmental and scientific issue but one important agenda of international politics involving international morality and ethic, international institutions and norms and international cooperation and discord. Therefore, with environmental issues become increasingly important, the pioneering countries which hold advanced environmental technologies will increase their competitiveness. In addition, controlling the dominance and going ahead in international environmental issues have been becoming one "soft power" (Brande 2008; Nye 2004)).

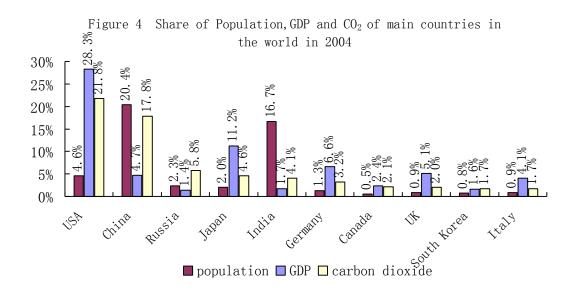
Global climate change is the most complicated challenge that human being ever has been confronted with. Global climate change will affect fundamentally one country's economic development which would ultimately influence the distribution of power in the international system. As we all know, carbon dioxide is the most greenhouse gas which involves many economic sectors such as energy, industry, transport and agriculture etc. (See Figure 3). From 1970 to 2004, the quantity of carbon dioxide



Source: Climate Change 2007, the **Fourth Assessment Report** (AR4) of the **United Nations Intergovernmental Panel on Climate Change**), see http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_cn.pdf.

has increased 17 billion ton from 27 billion to 38 billion ton, which increases about 80 percent. From the figure 2 we can find that emissions reduction of GHG implies that given state must restructure strategically its energy structure and the method of economic growth and production, which would affect fundamentally one country's development in the future. In addition, most energy sustaining the economic growth in the world is not renewable energy which indicates that our development would most perhaps be confronted with the limits to growth. The fossil fuel would be exhausted someday in the future. Under such circumstances, climate change has become one of the most important factors which affect almost every government to plan its economic and social development.

Besides, when it comes to explore GHG emissions in the global dimension, we can find that carbon dioxide emission involves mainly the great powers (See Figure 4). According to statistics of international energy agency, twenty countries whose carbon dioxide emission is in the front rank in the world share 80.61 percent of total world emissions. GDP of the countries which are in the first 10 rank among these takes 67.1 percent shares of total global GDP and their carbon dioxide emission shares 67.18 percent of total global emission. Based on what has been mentioned above, we can find that GHG (mostly carbon dioxide) reduction involves mainly the great powers in the world. Those who holds advanced technology and deals with successfully the emissions problem would hold more advantageous international status in the increasingly competitive future.



Source: Yihui Ding ed. Climate Change in China: science, impacts, adaptation and countermeasures, Peking: China Environmental Science Publisher, 2009, p.307.

The main challenges in global climate governance and China's strategic option in post-Kyoto age

Dilemma of international collective in climate governance

Climate change has been described as one of the greatest challenges to international cooperation that the world has faced. The Stern Review stated that "two countries will face exactly the same situation in terms of impacts or the costs and benefits of action, and no country can take effective action to control the risks that they face alone. International collective action to tackle the problem is required because climate... is a

global public good — and because co-operative action will greatly reduce the costs of both mitigation and adaption. The international collective response to the climate change problem required is therefore unique, both in terms of its complexity and depth" (Stern 2007). Global climate governance is confronted with many challenges in post-Kyoto. In my opinion, these challenges can be defined as the following:

Firstly, how to coordinate human common interest and individual national interest and then get political consensus are still a difficult task. Although lots of scientific findings and researches have proved that climate change is indeed happening and ignoring the scientific warnings will lead to unprecedented, costly and potentially unmanageable consequences, every nation still concerns its own national interest in an anarchic international society. Dilemma of collective action which Mancur Olsen (Olsen 1971)has been pointed out correctly still serves to the international climate governance. Collective actions are still in a dilemma. In order to cope with this dilemma the effective international climate regimes need to improve.

Secondly, how to create a relatively fair and equal emissions reduction program between north and south in the light of principle of 'common but differentiated responsibility'? Developing countries emphasize historical responsibility and development space while developed countries stress current responsibility. Developed countries have advanced science and technology and huge amounts of money. But because of many special reasons technology transfer and financial aid is still unable to meet the needs of global climate governance. In international climate regimes the mechanism of financial aid and technological transfer play key role for developing countries can efficiently implement their emission reduction action. After all, to sustain people's basic survival needs is the first task for developing countries. If only improving their technology can they advance energy efficiency and the proportion of renewable energy. Thus, global carbon dioxide emission can reduce ultimately. However, there are many restrictive conditions to obstruct the technology transfer road.

Thirdly, how to tackle 'America problem'? If the United States does not return the pattern of Kyoto, whether is there 'the third road' or not? What is 'the third road'? If the United States can return the Kyoto Model, how does the climate negotiation continue to form new climate regimes? What positions will American take? To some extent, America is still the key factor to decide the success or failure of climate negotiation in post-Kyoto not only because the United States is the biggest emitter of carbon dioxide but also because it holds advanced technology and strong economic strength. As the only superpower in the world the United States is still the most important player not only in the traditional politics such as military and security but in the new politics such environmental problems, nuclear proliferation and terrorism.

China's role in an international climate change solution is increasing important. With the rapid development of China's economy, China's influence is increasing in the international negotiation on climate change. The causes of climate change, namely greenhouse gas emissions from fossil fuels and land use, are inherently linked to economic development. As a developing country with a large population, a relatively low level of economic development, a complex climate and a fragile co-environment, China is vulnerable to the adverse effects of climate change, which has brought substantial threats to the natural ecosystems as well as the economic and social development of the country. These threats are particularly pressing in the fields of agriculture and livestock breeding, forestry, natural ecosystems and water resources, and in coastal and eco-fragile zones. Therefore, China's priority task at present is to adapt itself to climate change. The multiple pressures of developing the economy, eliminating poverty and mitigating the emissions of greenhouse gases constitute difficulties for China in its efforts to cope with climate change, since the country is undergoing rapid economic development. As one developing country, although China's urgent task is still economic development so that they can satisfy the increasing population's needs and climate change has not surpassed economic development as a policy priority, China's attention to climate change has recently increased among China's leadership. In early of 1990, Chinese government had set up the National Climate Change Coordination Committee to coordinate and formulate policies and measures related to climate change. Since 1990 China participate actively in the international negotiation on climate change. China has signed the United Nations Framework Convention on Climate Change in 1992 and ratified it in 1993. China signed the Kyoto Protocol in 1998 and ratified it in 2002. The government released its first "National Assessment Report on Climate Change" in late 2006, conducted as a collaborative effort among more than 20 government departments and taking four years to complete. China released its first national climate change plan in 2007, composed of measures being taken across the economy that may help slow China's greenhouse gas emissions growth. Although China has not accepted the binding goals of emission reduction under the Kyoto Protocol, many efficient measures have been taken to implement its commitments in this regime and deal with climate change. China's climate change negation position can be described as following: Every country has a common but differentiated responsibility in climate change issue; every party of convention should conduct comprehensive and effective cooperation on the basis of fairness while avoiding damaging any country's sovereignty; an appropriate level of economic development should be the prerequisite for adopting concrete control measure to address climate change—therefore, any measures of controlling emissions should take into account per capita emission level of every country and guarantee the appropriate level of energy consumption in developing country; and developed countries should provide necessary funds to developing countries and transfer technology with fair and favorable conditions. China was concerned on sovereignty, economic development, the relatively fair

distribution of responsibilities and reduction-costs. Generally speaking, these are the fundamental factors to influence one given country's position. But, based on what has been discussed above, in my opinion I think that there are still three factors to affect China's strategic options in post-Kyoto age:

- 1. Climate politics has become one moral issue like human right and every country must take effective and active measures to deal with it. Global climate change involves the whole human interests. It is common believed that protecting global climate is human common interest. It has become non-negotiable to reduce GHG emission and develop low carbon economy. China will insist its position that it does not accept the binding quantified emissions task at present. But since climate change has become a focus of global concern, China will take more active measures to participate the battle against the global climate change. China also emphasize that it will make active contribution to global sustainable development. On the one hand, global climate change has affected seriously China's social development due to extreme weather such as drought, flooding and typhoon. Ecological vulnerability in China is relatively high. On the other hand, constructing a responsible great power is China's strategic option to rise peacefully. Undertaking corresponding international responsibilities of global climate governance is indispensable for China. Under such circumstances, in this case GHG emission reduction to prevent our sole planet has become international consensus and every country must take more actively and efficient countermeasures to win the battle against global climate change. So, China will undertake more international responsibilities of climate change governance.
- 2. The present pattern of international climate politics. As one great power, China is playing a crucial role in the formation and future development of international climate regimes. In the triangular structure China should take a more prudent position. China should insist three principles: 1) China maintains the basic framework of UNFCCC and Kyoto Protocol as the basis of international negotiation on climate change. Many global challenges including climate change need multilateral action and multilateral solution. Any country can not cope with the global challenges by itself even if undertaken by a country as powerful as USA. Multilateral solution is more effective and lasting, more comprehensive and legitimate, than unilateral alternative. UNFCC and Kyoto Protocol are resulted from international community's hard works and efforts despite there are still some forthcomings and defects. 2) China insists common but differentiated responsibility principle and emphasizes the identity of developing country. Actors from the South strive for the early acceptance of one, some, or all of the following principles: a. the principle of equal entitlement of all human beings to equal emissions (allocation of emission rights to countries based on their current population); b. the principle of historic responsibility (allocation of current emission rights in negative correlation to the amount of past emissions); c. the principle of basic or survival emissions (relief of countries from reduction obligations below a certain flat rate basic emission) d. the principle of economic acceptability within the context of poverty reduction (relief from reduction commitments if the level of development is below certain levels). For China, as a

developing country there are still hard works to do to reduce poverty and satisfy basic or survival needs of large populations. Per capita emission is lower in China than it is in most developed countries. According to statistics of international energy agency, carbon dioxide emission in China is equal to 87 percent of world average level and 33 percent of it in OECD countries in 2004. 3) China insists relying on the advancement and innovation of science and technology to reduce emission. Technological advancement and innovation are the basis and support for tackling climate change. While promoting their own technological development and application, developed countries are obligated to promote international technological cooperation and transfer, and concretely materialize their promises to provide financial and technological support to developing countries, so that the latter can get the funds needed, apply climate-friendly technologies, and build up their capacity to decelerate and adapt to climate change.

3. Developing low carbon economy and strategically restructuring economic growth model have become times tide. Fossil fuels such as coal and oil are the most traditional energy to maintain economic development. Although development and growth may be continued to improve human living standard, traditional economic development model also brings serious environmental problems such as air and water pollution, greenhouse gases emission contributing to global climate change. This model cannot be continued in new era. On the one hand, fossil fuels are limited naturally and these nature resources will be depleted one day. On the other hand, what is more important is that the cause of global warming is emissions of greenhouse gases from human activity such as using these fuels. Reducing emissions of these greenhouse gases means that we must cut down and phase out these fossil fuels in the process of economic growth. Low carbon economy road is China's strategic option of future development.

Based on what has been discussed above, as a great power in the international and an important polar in the pattern of international climate politics, China will face increasing international pressure in the coming months to devote more attention to climate change, both due to its emergence as the largest global emitter and as international attention to climate change is elevated by government leaders and heads of state in high-profile forums around the world (Lewis 2007/2008). China's strategic priority in the international climate governance should be as following:

Firstly, China should actively undertake international responsibilities compatible with its national capacity as a developing country to deal with global warming. As a responsible developing country, China is fully aware of the importance and urgency of addressing climate change and takes into overall consideration of economic development and ecological construction, domestic situation and international situation, and present and future. Taking economic development as the core objective, and placing emphasis on energy conservation, optimization of the energy mix,

reinforcement of ecological protection and construction, and scientific and technological progress as backup, China strives to control and mitigate the emission of greenhouse gases and continuously enhance the capability of adapting itself to climate change. On the one hand, these measures will promote restructuring China's economic structure and enhance China's competitiveness. On the other hand, undertaking suitable international responsibilities will also construct the image of responsible great power, which will reinforce international influence and "soft power".

Secondly, China should actively take part in the international negotiation on climate change and maintain the solidarity of developing countries. Only actively participating in the international negotiation can China take part in establishing the international climate game rules and regimes and affect the negotiation process, which would minimize the negative impacts of international pressure and maximize the positive aspects of international climate regimes. Since China participates in the international climate negotiation it actively coordinates position and policy with developing countries via the "77 Group plus China". Although there are some different interests and different economic development level among many developing countries, only if they insist each other to take unanimous position would developing countries enhance their negotiation capacity and promote their collective interests. China has great influence in the "77 Group plus China" through coordinating position with other countries. As the largest developing country China is in special status in the international community. But it is first a developing country despite its economic rapid growth over past 30 year has already greatly promoted China's international status. China should still play the core role in the "77 Group plus China" to maintain developing countries' interests.

Thirdly, China should actively enhance its own R&D to promote its technology level while actively cooperate with advanced technological countries through technology transfer and diffusion mechanism. Technology has already and will play key role in the GHG emission reduction campaign. Technological advancement and innovation is the core and support for tackling climate change. While promoting its own technological development and application, China emphasizes that developed countries are obligated to promote international technological cooperation and transfer, and concretely materialize their promises to provide financial and technological support to developing countries, so that the latter can get the funds needed, apply climate-friendly technologies, and build up their capacity to mitigate and adapt to climate change.

Conclusion

Global climate change and its adverse impacts are a common concern of mankind. Ever since the industrial revolution, human activities, especially the massive consumption of energy and resources by developed countries in the process of industrialization, have increased the atmospheric concentrations of greenhouse gases, produced conspicuous impacts on the natural ecosystems of the Earth, and posed

severe challenges to the survival and development of human society. Climate change has become a moral or ethical issue. Any country which would like to maintain 'political correct' does not ignore this problem. In the macro-situation of post cold war and under the pattern of international climate politics, three great powers, the United States, European Union and China, dominate the climate issue in post-Kyoto. Under such circumstances, every great power including the EU would like to enhance its influence in the international climate change negotiation to maximize its national interests, which will intensify the international competition in the international climate politics. In the process of global climate governance in the post-Kyoto, the transatlantic relationship between US and EU will be still competitive. While China will be confronted with increasing challenges and pressure it also faces some rare opportunities in this process. China should take active measures to undertake corresponding international responsibility of global climate governance. China should cooperate actively with both EU and the United States to protect global climate.

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