



Chinese energy and climate policies after Durban: Save the Kyoto Protocol

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ABSTRACT

Nowadays, one of the urgent issues regarding global climate change is to discuss the future of the second period of the Kyoto Protocol. However, the divergence of views and opinions among parties in the last Conference of the Parties of the United Nations Framework Convention on Climate Change, held in Durban in December 2011, is still large. One of the bones of contention is whether the emerging developing countries, like China, should make commitments and legally bind themselves to a Green House Gas (GHG) reduction target in near future. As the largest GHG emitting country, China and its energy and climate policies will play an important role in global climate change and will also significantly influence the other countries' policies and the global climate negotiation. In this paper, we review the current differences among parties in the Durban Conference, and we analyze the recent situation, barriers, and future policies in China. Finally we highlight the impact and potential effect of Clean Development Mechanisms in avoiding China's barriers regarding climate change. Results show that China is making a great effort to mitigate climate change by establishing and reforming its energy and climate policies in order to achieve a low-carbon development. At the same time, more innovation and international collaboration is needed in China to achieve this goal.

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1. Introduction

To deal with the rising problem regarding climate change, the United Nations issued the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 [1], which is considered to be the first international climate treaty. The UNFCCC became legally effective in 1994. Three years later in 1997, the Kyoto

Protocol [2] was adopted on December 11, 1997 in Kyoto, Japan, and entered into force on February 16, 2005. Under the Kyoto Protocol, industrialized countries (Annex I countries) agreed and committed to reduce the collective greenhouse gas (GHG) emissions by 5.2% from the 1990 level. The first period of the Kyoto Protocol is from 2008 to 2012, and the corresponding GHG emission reduction commitments by the Annex I countries expire at the end of 2012. Because of this reason, it becomes urgent to discuss and set a new global regulation about reduction of GHG emission between different parties in a second period of the Kyoto Protocol. However, currently the divergence of views and opinions among nations and parties is still largely shown in the international conference and

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the negotiation process about the second commitment period of the Kyoto Protocol is still not successful. In 2009, the 15th Conference of the Parties (COP15) of the UNFCCC was held at Copenhagen, Denmark. The Copenhagen Accord [3] was approved in the conference and the parties decided to postpone the negotiation about legally binding commitment and extension of the Kyoto Protocol to later conferences in Cancun, México, in Durban, South Africa, and in Qatar. In 2011 the 17th Conference of the Parties (COP17), was held in Durban, where different issues were discussed, such as the Green Climate Fund [4] and a new Roadmap [5] for GHG reduction after 2020. The key issue, the future of the Kyoto Protocol, remains unclear since no further detailed commitment was made. After the meeting, Canada has formally withdrawn from the Kyoto Protocol. This was considered to be a large setback of global climate cooperation. Recent analysis report by the Instituto Español de Estudios Estratégicos (IEEE) [6] states that the result of Durban Conference was a compromised result that could be accepted by the EU, China and the US, and it also intends to set up a legally binding scheme fighting climate change to deal with the problems of energy security and food security.

One of the bones of contention in the Durban Conference is whether the emerging developing countries should make commitments and legally bind themselves to a GHG reduction target in the second period of the Kyoto Protocol. Without doubt, China, as the largest developing country and the largest GHG emitting country, stood in the center of this controversy. China and its energy and climate policies will play an important role in global climate change and will also significantly influence the other countries' policies and the global climate negotiation. In this paper, we review the current differences among parties in the Durban Conference, and we analyze the recent situation and barriers in the Chinese energy sector regarding GHG emission reduction. Additionally, we analyze the Chinese energy and climate policies based on the current information. Finally, we highlight the impact and potential effect of Clean Development Mechanisms (CDM) in avoiding China's barriers regarding GHG reduction.

2. Differences among parties

Although a package of agreements and compromise was achieved in Durban, it is a clear fact that serious differences exist among the parties. The main perspective contradiction is mainly between the developed countries and the emerging developing countries such as China, India, Brazil, and South Africa.

Some developed countries reached a consensus that they refuse to extend their commitment in the second period of the Kyoto Protocol unless other countries, or at least the main developing countries, accept binding GHG emission reduction obligations equally. Due to the rapid economic growth GHG emissions produced by emerging developing countries are taking more and more a significant part of the total global emissions. However, developing countries claim that developed countries should be responsible for the largest share of historical and current global GHG emissions and are not willing to accept a commitment to reduce their own GHG emissions. They argue that among other issues they still need to fight poverty which affects a high percentage of the population.

As the second largest GHG emitting country, the US supports the "road map" plan proposed by the European Union (EU). However, it shows a negative attitude towards the negotiation about legally binding carbon emissions and the global climate fund at the Durban Conference. Japan, Canada, and Russia, also oppose the second commitment period of the Kyoto Protocol. Studies show that "If these three countries abandon the Kyoto Protocol, the GHG emissions of the countries that are still obliged to observe the Kyoto emissions targets will account for only about 16% of the total", and

that the "Kyoto Protocol will further lose its effectiveness" [7]. Russia [8] proposes to redefine the standards under the Kyoto Protocol to re-distinguish between developing and developed countries, and revise this distinction periodically. Canada formally abandoned the Kyoto Protocol after the Durban Conference and was blamed by many countries and NGOs.

The EU proposes the EU "road map" plan, and emphasizes that a "legally binding emission reduction framework" among the major GHG emitting countries, including industrialized countries and also emerging developing countries, must be issued before 2018. The EU claims that the second commitment period of the Kyoto Protocol should be aligned with the road map. In their proposal, a new regime following the Kyoto Protocol framework should be established by 2015 and finally enter into force by the year of 2020 [5]. This proposal was also supported by many other parties like the Alliance of Small Islands States (AOSIS) and the Least Developed Countries (LDC). They claim that even though they have been making great effort on GHG reduction under the Kyoto Protocol, EU's GHG emissions accounts for only 11% of global emissions. Without the participation the remaining countries and an international framework and global cooperation, the problem of global warming cannot be possibly resolved [5].

In contrast, both China and India are emphasizing that their GHG emission are mainly because of their developing process and their huge population. Moreover, they argue that developed countries should achieve the commitment on the first period of the Kyoto Protocol, especially to reach the target of GHG reduction and provide financial and technical support to developing countries [9]. China declared that it has achieved its energy intensity reduction target for the "Eleventh Five-Year Plan" (2006–2010), and is also adopting a positive attitude and various actions currently to deal with the climate change problem. Furthermore, China has set a target of reducing energy intensity by 17% during the "Twelfth Five-Year Plan" period from 2011 to 2015 [10]. China stated that all these actions and targets have been approved and legalized by its National People's Congress. Regarding the issue of legally binding GHG emission reduction obligations, China proposed five conditions for joining a legally binding global climate change treaty after 2020 [11]. Firstly, the Kyoto Protocol and its second commitment period must be confirmed and legally binding. Secondly, the Green Climate Fund must be established. Thirdly, the mechanism agreed in the former conferences in the areas of technology transfer, reforestation, transparency, and capability building should be established. Fourthly, the situation of developed countries fulfilling their commitments during the first period of the Kyoto Protocol must be evaluated. Lastly, the principle of "common but differentiated responsibilities" must be adopted. China claimed that it would take the responsibilities and obligations corresponding to its level of economic development.

The outcome, because of the differences among parties, of the Durban Conference was considered to be not very significant. However, the agreements achieved regarding the second period of the Kyoto Protocol were criticized by many NGOs as unclear, and not specific. There is no applicable evaluation and sanction mechanism in place. The Green Climate Fund is still in the paperwork stage, there is still a long process ahead and many negotiations are needed, such as the source and the administrative scheme, to finally set the fund into practice.

Due to its large economic dimension and impact on climate change, the changes in Chinese energy and climate policy will be one with the highest impact in the global negotiation. China was blamed for the fact that its current energy intensity reduction target in the current Five-Year Plan was only a relative target, since there was no limitation on the absolute value of GHG emission. In the Durban Conference, China has shown a positive attitude in changing its policy to adapt to the new climate situation. And China also offers

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