

## **Which is More Important: Allocating Reduction of Greenhouse Gases Emission among the Countries or Developing and Transferring Technology Globally? ---- Review on current focus of the International Negotiations on Combating Climate Change**

**Ma Zhongfa**

**Mou Pengfei**

School of Law, Fudan University

2005 Songhu Road, Shanghai, China

E-mail: zfma@fudan.edu.cn, Phone :(+86)13916697998

### **Abstract**

*Nowadays the strategies for combating global climate change for most countries in the relative international negotiations are focusing on apportion of greenhouse gases (GHG) emission reduction, and this leads to different countries holding different opinions on the allocation of GHG emission reduction, which has been revolved around in all 16 Conferences of the Parties of the United Nations Framework Convention on Climate Change. As a matter of fact, the furiously debating on this issue only touches the surface instead of grasping the essence of the problem. A more fundamental strategy on combating climate change shall be the development and transfer of environmentally sound technologies. Since GHG emission is a result of inappropriate utilization of technologies, not the causes of the climate change, the global society should rectify the current strategies for combating the climate change and enhance cooperation among them on the development and transfer of environmental friendly technologies.*

**Key words:** combating climate change; greenhouse gases emission reduction; development and transfer of environmentally sound technology

### **1. Introduction**

The ancient Chinese poet *Du Fu* said in his poem *The Song of the Frontier* in 1245AD: "To shoot a man, first shoot his horse; Capture the chief to beat his force." Before the end of the World War II, the war, as a normal form of means to solve international conflicts, had explicitly destroyed human civilization for many times and hence brought great damages or loss to human beings each time. With the proceeding of human civilization, peace has been the common and permanent pursuit of human society and it is gradually accepted that the way of peacefully settling the disputes, instead of war to solve the conflicts, shall be much better choice. More and more international treaties or agreements have been reached in this field and the frequency of war has grown less and less in the past 60 years. Although the local battles and terrorist activities arise on occasions, they have made much less threat to the worldwide peace than that of war in any previous period in the history. At the time being when the sanguinary war is going away, however, an unprecedented conflict caused by climate change and greenhouse gases emission has come into the earth throughout the world. Without any effective counter-measures, it would be more disastrous and destructive than any war. The conflict caused by such a problem is changing slightly and has brought in much global instability as well as local battles, for example, the lack of water resources, which has close relations with the environment destroying and climate change, was the cause of the battle in Darfur District in Sudan.

### **2. Different strategies for combating climate change adopted by policy makers in different countries**

In the past, the focus of negotiations to combat the climate change has always been on GHG emissions, and on who bears responsibility for cutting them, by how much and when. In pursuit of more clean energetic resources and more allocation of GHG emission, at the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) held in Cancun, Mexico, most members tried to get rid of old track and spent most time in negotiating to reach an agreement on greenhouse gases emission reduction issues, such as emission reduction targets allocation the issues technology development and transfer, and financial support, in the hope of controlling the GHG emission amount. However, such an agreement failed to be reached and some countries never concede and throw the blame back and forth for their own interests, and although the members at the 16<sup>th</sup> Conference agreed to pass two decisions (e.g. *Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention* and *Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol*) which contained the many contents on development and transfer of technology, such as, establishing a technology mechanism with forming a Technology Executive Committee and constructing a Climate Technology Centre and Network as its kernel, <sup>1</sup>it did not have legal bindings to the members, just describing a great blueprint for developing countries.

The symbolically political agreement achieved at the Copenhagen conference, which had ever been placed great expectation before and ended on December 19<sup>th</sup>, 2009, together with the two resolutions formed at Cancun conference, which ended on December 11<sup>th</sup>, 2010, seems to have made people feel pessimistic about the schedule on solving the conflict. The focus of disputes, being attached most importance to by majority countries, is the allocation of emission reduction targets as well as the relevant promises. The contradiction between developed countries and developing countries is comparatively acute in this respect. Accordingly, we can image that GHG emission reduction amount will continue to go far from what the developed countries have promised in related international treaties, especially in Kyoto Protocol. On most occasions, developed countries claim that developing countries should bear the responsibility of GHG emission reduction, for a tremendous amount of greenhouse gases are being emitted on their land, due to their fast proceeding of industrialization and urbanization on the basis of under-developed technologies as well as their huge population. While developing countries hold that to most degree, the global current climate state and change is the result of the industrialization of developed countries in the past over 200 years, and 80% of the greenhouse gases now in the sky were emitted by developed countries.

Moreover, quite a number of natural resources have been predatorily destructed or destroyed in the western colonial period, which would never be restored to their original state. Since the developed countries have developed and most people from them now enjoy a high-quality life with rich materials and products and high technologies which have been accumulated in the past, they may undoubtedly be in less need of energies; whereas developing countries with poor wealth and underdeveloped technologies need much more energies for their development. Additionally, per capita emissions in developed countries are much higher than those in developing countries (20 tons in America compared with 5 in China and 2 in India, respectively).<sup>ii</sup> Therefore they insist that developed countries should assume more responsibilities of cutting GHG emission in terms of either historical or realistic fairness. Under the principle of common but differentiated responsibilities, developed countries are supposed to not only mitigate the GHG emissions in the lead, but also to supply financial support for and transfer environmentally friendly technologies to developing countries as well; or developing countries would not make any promise with regards to reducing GHG emission. Both developed countries and developing ones stick firmly to their own positions and highlight their own arguments, thus the end of the debating for combating climate change has been put off time and again.

However, it has been demonstrated that in the process of human civilization, an endless arguing and blaming each other never makes contributions to settling international disputes. As a matter of fact, it only touches the surface instead of grasping the essence of combating climate change to put focus on allocation of GHG emission reduction with respect to climate change solutions. Greenhouse gases emissions, which are produced and emitted by consuming energies originally, are not the roots or fundamental causes or final sources of the problem on climate change but a state: traditionally people would never pay for GHG emissions, and what they pay for is energies, ways of using energies or services of energies, which have close relationship with technologies and naturally affect the amount of GHG emissions. Therefore, the key of the problem lies in how to cut or avoid the GHG emissions with the help of clean technologies. Furthermore, in most developing countries, billions of people living in rural areas and towns are cooking with burning woods, cultivating with original tools (without tractors) and going to work on foot or by bicycle (without cars).

<sup>iii</sup>The amount of GHG emissions by them is very small and there is little possibility for them to reduce GHG emissions on such a base, the amount of which is even not worth mentioning when being compared to the GHG emissions from quite a large quantity of fossil energies consumed in order to maintain the high-quality life with planes, cars and air-conditioners in developed countries. We could not deny a fact that most of greenhouse gases in developing countries are emitted because of their under-developed technologies which are utilized to manufacture high energy-consuming products which may be supplied to the people who enjoy the long-lasting of the luxurious life in developed countries; and these technologies may be replaced by the more advanced technologies held by the transnational corporations in developing countries who are unwilling to transfer them to developing countries because either developing countries could not offer high price for the technologies or they want to maintain their perpetual comparative advantages in competition. If only developed countries could fairly or selflessly help developing countries accomplish their industrialization process and manufacture the products by advanced or clean technologies, the GHG emissions would surely be reduced on large scale.

### ***3. Reasons for the inappropriate measures for combating climate change and countermeasures adjusted***

Why have developed countries concentrated their attention of the disputes on the allocation of GHG emission reduction targets instead of the development and transfer of technologies at all the conferences of the parties to UNFCCC?

Why have they spent so much time and strength on the former while having neglected the latter? In my opinion, their attitudes and positions have rooted in their political, economic and legal systems and been bound to their political and legal structures, which may be represented by the individual politicians or politician groups. In developed countries, most environmentally friendly technologies are held by and in the control of international companies or other private sectors, which are born in pursuit of profits without limitation. The technologies are protected in kinds of legal forms, such as patents, know-how, copyrights, trademarks etc., which may be called intellectual property as a whole. It is provided in Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) that intellectual property rights are private rights,<sup>iv</sup> and developed countries traditionally attached much importance to protecting private properties and have established relative comprehensive legal systems to protect private properties, including intellectual property protecting system. Most environmentally sound technologies exist in certain forms of intellectual property and no government has the power to force private sectors who hold technologies to transfer their technologies to developing countries.

Furthermore, according to their political system, the so-called election in the western countries is no more than a power competition among different interest groups. A majority of votes are dominated by those who possess a huge quantity of wealth; and in the context of the functions of the theory on private sectors' wills disguised into national wills to realize their own interests.<sup>v</sup> Hence, the so-called politicians in the western countries rarely behave themselves in copying with international affairs beyond the needs their domestic interest cliques. Their promises would not take into effect if the promises violate the interests of the domestic dominant groups or private sectors. As a result, they are unwilling to and also dare not to make promises in terms of the technology transfer and cooperation, and thus they have to make a big fanfare of the allocation of emission reduction targets, through which they not only could contain the competitive capacities of the rivals for their international corporations, but also could get initiatives in the field of negotiating greenhouse gases emission reduction.

What is much worse is that developed countries are currently playing a fairly dominant role in making international rules; therefore they are capable of making their own national views and wills become international rules, which would surely be imposed on other countries; and they would put those that they do not like or that are not in compliance with their domestic interests aside or just scratch the surface of the problem to be perfunctory to developing countries without any further action. Against this background, the transfer and development of technology could never top the issues at any conference of the parties to UNFCCC, and any agreement about technology transfer and development would be hard to achieve. In other words, developed countries have craftily intended to mislead the global society in negotiating to combat climate change and tried to evade bearing their own responsibilities of mitigating GHG emissions with purpose by placing the focus of disputes on the allocation of greenhouse gases emission reduction targets, which is an irresponsible choice and would never be an effective solution to combat climate change.

Allocation of GHG emission reduction targets, which reflects only static data, shall not be the focus of the negotiations at conferences of the parties to UNFCCC, instead, the dynamic technology transfer and development shall. Seeing in the aspect of contentions on allotment of GHG emission reduction among countries; even if it were a correct solution, it would obviously not be a radical measure but a stopgap one. It is not a real solution or final way to climate change. We believe that advanced clean technologies are more than essential for ordinary people on the planet to enjoy all convenient servings in relation to energy, such as the secure, convenient and energy-saving household food and beverage, the convenient transportation, the pleasant indoor temperature, etc., which would be the most effective or decisive factor to reduce GHG emissions and slow down or even avoid climate change. Furthermore, we can hardly obtain development of low-carbon economy and cope with the climate change without help of technological advancement.

Therefore, technology development and transfer should take the place of GHG emission reduction apportionments as the center of negotiations on combating climate change. Instead of holding to the problem whether developing countries shall assume responsibilities of GHG emission reduction, developed countries ought to perform their obligations in UNFCCC and Kyoto protocol, and enhance international cooperation, develop the environmentally friendly technologies and transfer them to developing countries in fair and reasonable terms. And this may promote worldwide applications and dissemination of environmentally sound technologies, which may, therefore, make under-developed countries able to acquire and use them and afford to enjoy clean energies to reduce GHG emissions. If doing so, developing countries would develop in a sustainable way without increasingly emitting greenhouse gases to avoid what had ever happened to the earlier industrialized countries in the process of development; meanwhile, developed countries would get certain benefits in the process of technology development and transfer as well.

Although shortly, developed countries might not gain what they had expected if they transferred in the context of fully market conditions; in a long run, what they have done would be of much significance to the human beings, for what they had done would help to save the earth. This may be a fundamental way to solve the problem of climate change.

#### 4. Conclusion

We believe that, in the post-Copenhagen era, the technology development and transfer should become the focus of the solutions on combating climate change. Considering the long-term interests of our earth, the governments of different countries had better to enter into broad cooperation on the development and transfer of environmental friendly technologies to the best of their abilities under the principle of mutual benefit and win-win; and they shall not involve themselves too much in debating or arguing on the “quota” or allocation of GHG emission reduction. If more and more clean technologies could be developed and transferred and most countries could acquire and apply them, the limited resources on the earth would get protected and the greenhouse gases emission would be under control, and accordingly the climate change would be contained on a scale and the earth would be most suitable for human living. If so, it will be in accordance with the rules and requirements for combating climate change and consequently get the human society out of the predicament in which we are now being put.

For this reason, all governments on the earth shall halt the meaningless debating at the negotiation table. We can compare the planet we are living on to a floating ship on the vast ocean and now we are in great dangers. What shall we do? Perhaps, there is no way but to unite together to save the boat and there is no time for arguing. So is it to the earth. None hopes that this war without powder smoke shall bring in much more horrible consequences than any real war in the history. Provided that the problem could be solved fundamentally through a peaceful and cooperative way, that is, technology development and transfer, why do we still make the blame for each other and put off time and again in allocating GHG emission reduction targets? Read between the lines “If an invasion is repelled, Why shed more blood unless compelled?” from the same poem of Du Fu, we can still learn something profound in the field of COMBATING climate change in these days.

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<sup>i</sup> See para. 117 of *Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention*, at <http://www.UNFCCC.int>.

<sup>ii</sup> Nancy Birdsall and Arvind Subramanian, *Forget emissions, focus on research*, **Financial Times**. November 17, 2009.

<sup>iii</sup> Id.

<sup>iv</sup> See Para.4 of Preamble of Agreement on Trade-Related Aspects of Intellectual Property Rights.

<sup>v</sup> See more details of the theory in *Ma Zhongfa: Research of International Technology Transfer Legal System in Practice and Theory*, Law Press, 2007, page 35-39.