

The Challenges of Global Warming and China-US Response

Professor Jiang Xiaoyan
Shanghai Institutes for International Studies

As the home to 1/3 of the world's population and 1/4 of the global GDP, China and the United States might most likely become the origin of 60% of the global carbon emissions in next 30 years. For the most part, they are central to preserving the Earth for this and future generations. The United States is the biggest polluter with 5.8 billion tonnes, followed by China with 5.1 billion tonnes. Global maps, produced by risk specialists Maplecroft, show the United States and China to bear about 90% of this burden and be the countries most susceptible to economic losses.¹ Thus, as the two largest economic powerhouse and carbon emitters in the world, China and the US are both confronted by both a huge challenge and a large risk in global climate change action. International climate change system cannot be successful founded without the proactive participation and leadership of them. The leadership and participation of China and the US is vital if developing countries are to participate in a new agreement².

I Divergence between China and the US in Combating Climate Challenges during Bush Administration

Firstly, EU and other Conference parties have taken the United Nations Framework Convention on Climate Change and its Kyoto Protocol the legal basis of international climate change system. The US denounced Kyoto-style international mechanisms as bad and unfair, and seeks alternatives to replace them. In 2007 Bali Conference, the US was confronting with quite a lot pressures to push it to accept Bali-roadmap or ratify Kyoto protocol.

Secondly, The US also try to avoid the mandatory caps(carbon emission reduction timetable and goal), and emphasis voluntary approaches to tackling climate change. Further more, the US is reluctant to pay necessary regard to China's economic and technological backwardness while it urges China to take meaningful and concrete responsibilities to cut energy consumption at first and instead of taking the first step by itself. China's fast growing carbon emission has been the excuse for the US to avoid the moderate mandatory requirements in Kyoto for rich countries.

II the Pro-Environmental Position of Obama Administration

As the Obama Administration came into force, Obama Makes Climate Change a National Priority the US began to play an pro-active role in global environmental problems. Firstly, the US connected the climate change with US energy independence, and Climate change will bring dramatic changes in US leadership the international economic system, and national competition advantages will be built on the basis of clean and alternative energy. Obama has already committed to enacting a US cap-and-trade scheme and to reducing US greenhouse gas emissions to 1990 levels by

¹ [http://maplecroft.com/Maplecroft_Natural_Disasters_2009.pdf]

² DINA CAPPIELLO Europe, US to work together on global warming Associated Press 2009 年 3 月 18 日

2020 and by 80% by 2050³. Obama promised that the United States would lead the world on climate change, as he emphatically stated that cleaner energy would be at the heart of his domestic policy agenda. Secondly, the US will make concrete measures on climate change instead of rhetoric words. The Obama Administration make the international community believe that the US will accept the mid term and long term carbon emission reductions,⁴ and will take the lead in negotiating a treaty that will produce better results in December Copenhagen congress. Thirdly, Obama will pursuit multilateralism, persuade the developing countries, particularly new emerging powers, share much more responsibilities. Obama argued , "To protect our climate and our collective security, we must call together a truly global coalition. I've made it clear that we will act, but so too must the world. China and India they would not be excused from global efforts to tackle climate change."⁵

III Win-Win Endeavors for Climate and Economic Crisis

The Energy Policy for Europe calls for a new industrial revolution. Like all industrial revolutions, this one is going to be technology driven and it is high time to transform our political vision into concrete actions. The United States, Europe and other nations will spend about \$100 billion on projects to fight climate change under economic stimulus plans,

The US New Energy for America plan provides for an investment of \$150 billion over ten years to fuel private endeavors in clean energy, generate five million green jobs, do away with imports from the Middle East and Venezuela, generate 10% electricity from renewable by 2012, deploy 1 million US-made plug-in hybrids by 2015, and reduce greenhouse gas emissions 80% by 2050 with the help of a cap-and-trade programme and make the US a leader on climate change. Economic stimulus package must be used to launch long-term "green" revolution Five millions new green jobs are sought to be created by not only generating 10% of electricity from renewable by 2012, and 25% by 2025, but also by focusing on energy efficiency, weather rising one million homes annually and developing and deploying clean coal technology. Mr Obama also urged Congress to pass his \$825 billion (pounds 600 billion) economic stimulus plan, which includes \$90 billion of spending on clean energy. He said it would create 460,000 "green" jobs over the next three years. He said he intended to double capacity to generate energy from renewable sources and to renovate the nation's electricity grid. Key targets for Washington mentioned by the two included the stimulus package, with proposals to renovate US power generation and incentives for home energy saving, federal legislation on carbon emissions, a move to end US isolation from a global climate change treaty, and federal attitudes to nature conservation and biodiversity⁶.

IV The new Impasses in front of China-US lean Parternship

Firstly is measurable, verifiable and reportable legal binding target for developing countries. Bearing in mind of current global financial crisis and the impasse of Bali Roadmap, there are quite lot difficulties for the forth coming of Copenhagen Climate Change Conference.

³ EU/US/CLIMATE CHANGE : WASHINGTON URGING CLEAN TECHNOLOGY REVOLUTION AT POZNAN CONFERENCE Europolitics2008 年 12 月 5 日

⁴ EU confident Obama will follow its lead on climate change Agence France Presse2009 年 3 月 3 日

⁵ US 'ready to lead' on climate change

By Andrew Ward and Daniel Dombey in Washington and John Reed in Detroit Financial Times

⁶ Alex Spillius, "Obama promises to lead world on climate change,"The Daily Telegraph, January 27, 2009.

The new emerging economies, particularly China, India, Brazil, and South Africa, is becoming key stakeholders central to global efforts against global warming, particularly in the post-Kyoto climate negotiations. Western countries always use the fast growing carbon emissions in new emerging economies as a strong explanation for global warming.

"We have historically been the largest emitter of greenhouse gas emissions, but China has now surpassed us in that. So we've got to bring in China and India and Indonesia and other developing countries," Secretary of State Hillary Clinton told a town hall meeting of young European leaders in Brussels yesterday.⁷

Secondly is about carbon Tax. U.S. Energy Secretary Steven Chu earlier this week told a congressional panel that once the nation establishes a system to limit carbon emissions, if other countries do not follow suit by imposing a cost for carbon emissions, the United States will be at a disadvantage. Admittedly, there exist some differences between China and the developed countries on the issue of climate change. In China's view, it is unfair to neglect China's development needs and ask China for excessive energy consumption cutting and mandatory commitments. On Mar 19, China's top climate change officials rejected yesterday a U.S. idea to impose tariffs on imports from countries that do not have a fixed price for carbon, calling the move protectionist and chiding the U.S. to do more to cut its own greenhouse gas emissions.

Thirdly is about international aid to developing world. Friends of the EarthWorld leaders from rich countries must commit to reducing their own emissions by at least 40 per cent by 2020 at home - without offsetting abroad - and provide developing countries with at least \$200 billion annually so they can grow their economies using clean technologies and adapt to the impacts of climate change⁸.

V The Potential Cooperation for China and the US

With the new president coming into the White House soon, China and the United States have three common tasks, namely "ABC" - global Accountability, win-win Business, and Co-progressive collaboration - to fulfill in terms of fighting against climate change. The United States and China are both prioritizing the issue of climate change. They are looking to energy efficiency as a primary means to reduce carbon emissions and as an area for new jobs and economic growth.

Task A: Global Accountability. China and the United States can use their dual roles - the largest energy producers and biggest carbon emitters- to advocate the post-Kyoto negotiations deadlock for a breakthrough: Firstly, the reduction of carbon emissions is at the core of collective action against climate change, particularly burden sharing for China and the United States. Secondly, common and all-round diplomatic efforts should be undertaken by China and the United States for achieving a global consensus in Copenhagen Climate Change Conference. To begin with, the United States together with China can – and most environmentalists argue should – work out the unequivocal commitments on Copenhagen Framework. Thirdly, the United States agrees with China that adaptation measures – cope with climate change by technology and market measures – are the preferred ways to address climate-induced social

⁷ United States/China/India: Need to involve India, China on climate change: US

213 字 Thai News Service 2009 年 3 月 9 日

⁸ Obama must keep pledge on climate change leadership M2 Presswire, January 19, 2009.

economic impacts. Thus, each country hopes to shift the climate negotiation focus from mitigation (i.e., reduce carbon emission) to adaptation.

Task B: Win-Win Business. The burgeoning new energy and low carbon business will induce thousands of billion USD market argued by *Stern Review Report on the Economics of Climate Change*. A carbon-trading system sets a cap on the amount of pollutants companies can emit and then forces heavy polluters to buy credits from companies that pollute less -- creating financial incentives to fight global warming. Carbon trade will also get a boost if an international agreement on gradual but planned reduction targets for large emitting countries is achieved during the next round of climate change negotiations at Copenhagen by 2009-end. It will open up an international market for carbon credits, accelerating clean tech investment and financial flows to such countries. China will spend \$293 billion in clean and alternative energy before 2020, and the clean energy market will amount to \$555 billion in 2020. In the United States, production of renewable fuels is expected to exceed 136 billion liters annually by 2022. Generally speaking, the United States is at a knowledge-intensity and energy leveling-off stage, while China is at the energy-intensive development stage. Thus, both countries will enjoy complementary business advantages, namely eco-partnership advocated by American Secretary of Treasury Henry Paulson in June 2008. For example, 66% of China's energy mix is coal which produces ten times carbon emissions as gas. The American coal industry can help Chinese counterparts in coal gasification and carbon capture under the CDM.

Task C: Co-progressive Collaboration. At the governmental level, both should struggle for the upshot of concerted transition to low carbon society. As the most advanced country leading in energy know-how, the United States can assist China in improving fossil fuel efficiency, developing renewable energy, and building carbon credit market. Through Asia-Pacific Partnership on Clean Development and Climate, China and the United States can work at the regional level to invest in clean projects, technology innovation and green education on climate change. It also seems very likely that bilateral dialogues can improve China-US understandings on energy policy, and help both restructuring energy and industrial development model. In June 2008, China and the United States signed *the 10-Year Energy and Environment Cooperation Framework* during the fourth round of their Strategic Economic Dialogue (SED).