

The Transformation of China's Climate Change Policy: the Role of Epistemic Community

Edward Xuedong Wang , Associate Professor

School of International Relations

Institute of advanced International Studies

SUN YAT-SEN UNIVERSITY

GUANGZHOU, CHINA

ABSTRACT

- China's climate policy has changed deeply. What is the dynamics of transformation?
- This paper argues that China had to make some change or take some responsibility when facing the high international pressure during the climate negotiations for decades.
- To reduce that kind of pressure, the state decision makers would consult with the experts on that issue. Those experts who participated in the decision making process are really influential, not marginal.
- The transformation of climate change in China would be a kind of active adjustment and adaptation rather than a passive acceptance.

The first section: transformation

As the leading Green House Gases emission countries, China is playing the most important role in the world climate mitigation and adaptation issue.

- Since 1990s, China's climate change policy has been transformed completely:
- From the symbolic participation to substantial cooperation,
- From the refusing to take any quantified emission cut to taking the carbon intensity reduction way, and to take the quantified emission cut (emission peak) in the near future.

More information about China's Climate Change policy

- Please visit the: China Climate Change Info-Net
- At : <http://en.ccchina.gov.cn/>

Primer Wen before Copenhagen

- In 2009, China announced internationally that:
- by 2020 it will lower carbon dioxide emissions per unit of GDP by 40% to 45% from the 2005 level,
- To increase the share of non-fossil fuels in primary energy consumption to about 15% ;
- And to increase the forested area by 40 million hectares and the forest stock volume by 1.3 billion cubic meters compared to the 2005 levels.

World financial crisis interrupted the trajectory in 2008

- Actually, China released its first national climate change plan(NCCCP, 2007) before the world financial crisis in 2008-2009, composed of measures being taken across the economy that may help slow China's greenhouse gas emissions growth.
- Under that circumstance, China policy circle had to take the same economic stimulus plan with other countries.

China-US Joint Announcement on Climate Change

Beijing, China, 12 November 2014

- *The China and the USA have a critical role to play in combating global climate change for the common good.*
- *To this end, President Xi Jinping and President Barack Obama reaffirmed the importance of strengthening bilateral cooperation on climate change and will work together, and with other countries, to adopt a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties at the United Nations Climate Conference in Paris in 2015.*

China reported its INDC before Paris

- China has nationally determined its actions by 2030:
- To achieve the peaking of carbon dioxide emissions around 2030 and making best efforts to peak early;
- To lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005 level;
- To increase the share of non-fossil fuels in primary energy consumption to around 20%;
- and to increase the forest stock volume by around 4.5 billion cubic meters on the 2005 level.

China-U.S. Joint Presidential Statement on Climate Change

Washington D.C., March 31, 2016

- The two Presidents announced that China and the United States will sign the Paris Agreement on April 22nd and take their respective domestic steps in order to join the Agreement as early as possible this year.
- They also encourage other Parties to the UNFCCC to do the same to bring the Paris Agreement into force.

The second section: dynamics analysis

Joanna I. Lewis is right in the paper *China's Strategic Priorities in International Climate Change Negotiations* (2007)

- *China's climate strategy remains centered on its energy development strategy as driven by its overall economic development goals.*
- *.....climate change has not surpassed economic development as a policy priority.*

Dynamics analysis

- Economic development (including energy security)
- International pressure (reputation, responsibility, *Elizabeth Economy, 2007*)
- Environmental protection (including sustainability, stability)

The third section: major actors and players

The spectrum of China's climate change policy

- Party leader's personality and preference (strong)
- Checks and balance of different Ministry players (major)
- The interests of different industries and local governments (major)
- The media and NGO (actually marginal)
- The scientists (seemed marginal)

国家应对气候变化领导小组

- The national leading group (first in 2007), headed by Chinese Premier, was set up and after that a National Climate Change Program was launched

Members of the national leading group

- 国家应对气候变化工作领导小组:
- 组 长: 李克强 国务院总理 (Premier)
 副组长: 张高丽 国务院副总理 (vice Premier)
 杨洁篪 国务委员 (Chinese State Councilor)
- 成 员:
- 王 毅 外交部部长 (MFA)
- 徐绍史 发展改革委主任 (NDRC)
- 周生贤 环境保护部部长 (MEP)
- 郑国光 气象局局长 (BMA)
-
• (具体工作由发展改革委承担 NDRC is the acting player)

NDRC (National Development and Reform Commission)

- FAGAIWEI is the acting player because FAGAIWEI is the first and foremost representative of that interest.
- NDRC is a powerful macroeconomic agency.

Who care more about the climate change issue?

- The Ministry of Environmental Protection (active?)
- The Ministry of Foreign Affair (hardliner?)
- Or the Meteorological Administration(proactive?)

The Ministry of Foreign Affairs

- “MFA is the hardliner” is a kind of misunderstanding the China’s politics. (most international scholars are wrong on that point)
- Good reputation vs. bad image
- To negotiate for buying time.
- Actually, MFA is no less active than MEP on the climate change issue because climate change is not so important as other issues (WP, acid rain, PM, etc.)in regular Chinese mind.

The fourth section: epistemic community

Epistemic Community

- An **epistemic community** is a transnational network of knowledge-based experts who help decision-makers to define the problems they face, identify various policy solutions and assess the policy outcomes. (Peter M. Haas 1992).

How could that be true?

- Scientists are seemed marginal in the policy because they are not in the decision-making process.
- My studies show that (Xuedong Wang, 2010, 2012,2014).
- Why?
- Who ?
- How?

CNKI (China National Knowledge Infrastructure)

- Key words: global warming, climate change
- 1970: global warming
- 1980: global warming is not bad
- 1990: climate change, CBDR
- 2000-2012: post-kyoto
- 2013-

CNKI (China National Knowledge Infrastructure)

- Among them:
- 1980-1993:6412 papers
- Reason: afterUNFCCC

Another Indicator: National Fund

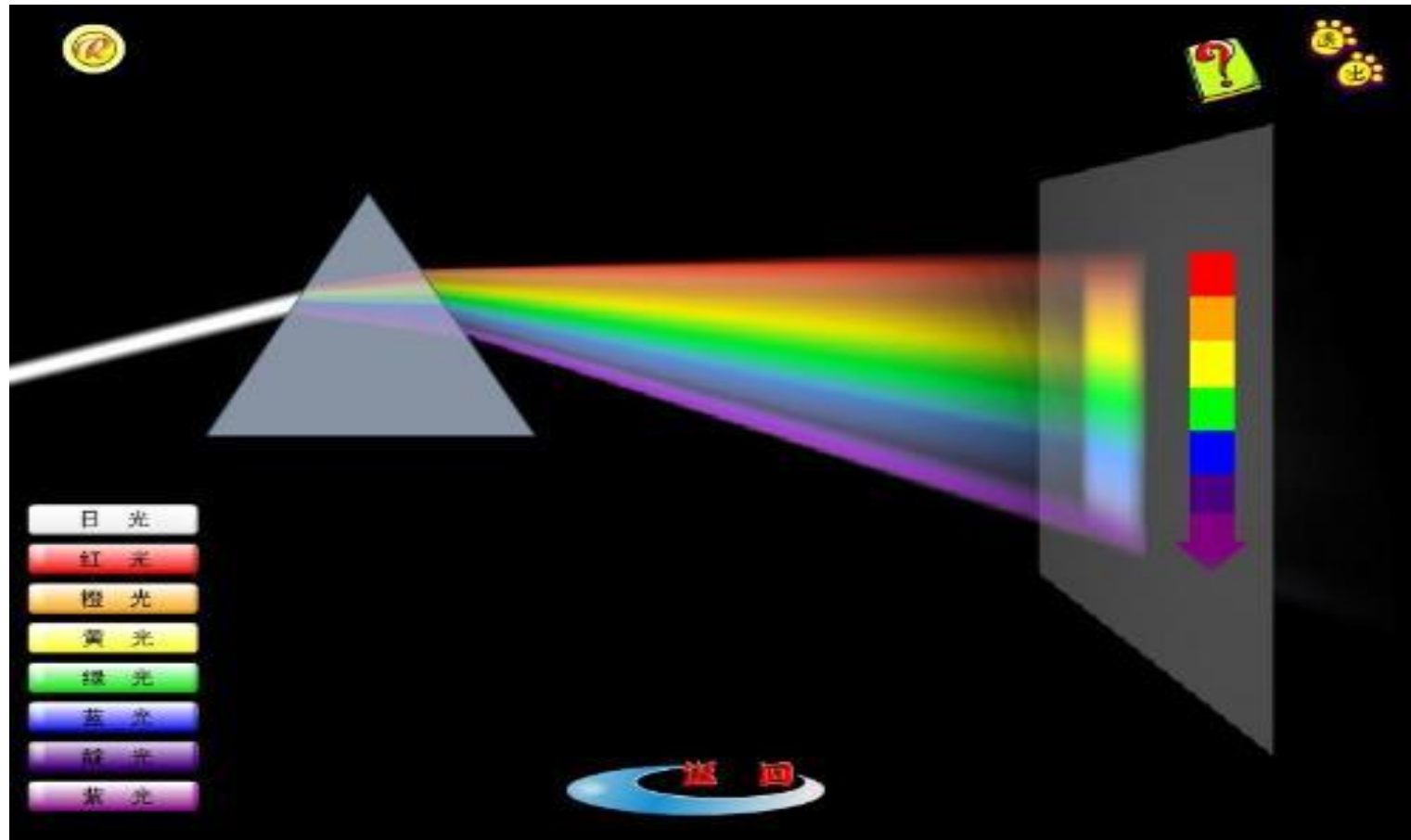
- National Planning Office of Philosophy and Social Science

Which approach to go?

- Upside-down?
- Inside-out ?
- Bottom-up?

The fifth section: to sum up

Dispersive Effect



Conclusion

- China's climate change policy has transformed greatly since 1990.
- China's climate change policy is the dispersive effect through the triangular prism: economic development, international pressure, and environmental protection.
- Chinese experts are actually very influential in the policy decision making process once they have successfully connected the three strategic priorities together.

Thanks for your attention!

- Your questions and comments are very welcomed.

- China's installed photovoltaic solar capacity stood at 43.18 gigawatts (GW) at the end of 2015, the last year of its 12th Five-Year Plan. That statistic marks the first time that China has overtaken Germany to top the world in photovoltaic capacity. This is another important accomplishment of China's new energy sector, after becoming the country with the most installed wind power capacity.

- By the end of 2020 and 2030, China plans to increase photovoltaic energy generation to 200 billion kWh and 500 billion kWh respectively. Doing so would save 85 million tons of coal and 160 million tons of carbon dioxide emissions by 2020; the numbers would increase to 210 million tons of coal and 390 million tons of carbon dioxide emissions by 2030.

Overcapacity Leads Innumerable Turbines to Go Wasted or Curbed in China's Wind Power Plants

- China has installed half of world's wind power capacity in 2015, overtaking EU to become the global wind power leader at 145.1 gigawatts (GW). However, there are traces showing that the country's booming wind power industry is facing challenges with grid constraints and shrinking electricity demand.

- One may suggest that Gansu could export the power to other provinces. This is no less likely, as the neighboring provinces have already had their own painstaking problems of “abandoned and curbed wind power”, and farther provinces are not connected to Gansu within the grid net. The turbines had to be stopped. State Grid Corporation of China defends itself by saying that the transmission lines have already been planned and submitted to National Energy Administration, but the latter takes forever to get it approved.

- National Energy Administration has another story to tell. “State Grid wants a nation-wide network, so it desperately wanted to get more provinces connected. I think this is reasonable, but Rome is not built in one day,”
- “From the perspective of energy management, we would wish that the power generated can be absorbed and consumed locally.”

- The major reason for the idleness is a shrinking electricity demand. Take Gansu as an example. The data released by the provincial grid company showed that the total amount of electricity consumption in Gansu last year was 13 GW, whereas the installed new energy power capacity has reached 17.8 GW. The huge margin almost certainly led to a massive amount of turbines go wasted.

2009 World Financial Crisis

- Historically, such crises have had a large negative impact on economic development and resulted in reduced energy consumption and pollution.
- Since the Industrial Revolution, economic expansion and the burning of fossil fuels have caused massive increases in pollution. But economic cycles and crises cause fluctuations in that economic growth, and hence in energy use and pollution.
- First, a recession leads to a large fall in energy demand and thus greenhouse-gas emissions.

- Fourth, per capita emissions are almost in direct correlation with development. As the level of development increases, so do emissions per head. Europe and the United States have higher per capita emissions than developing nations, such as China and India.

- A successful international agreement should not just address immediate challenges but more importantly, it should also present a vision for the future.
- The Paris agreement should help meet the goals of the UNFCCC and chart the course for green development. The agreement should follow the principles and rules set out in the UNFCCC and contribute to its full and effective implementation. The agreement should put effective control on the increase of atmospheric concentration of greenhouse gases and set up incentive mechanisms to encourage countries to pursue green, circular and low-carbon development featuring both economic growth and an effective response to climate change.