

China's climate change policy: the interplay between political sentiments and external commitments

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Overview

China's stance on climate policy is one of the most attention-grabbing issues regarding energy and climate future. The Chinese government has pursued a climate policy with three pillars: energy conversion, conversion of industrial structure, and energy conservation. However, climate policy and actions relate to all fields of economics, industry, and environment so, considering the international and social circumstances, political decisions could be adopted.

This article surveys the current political and economic policies in China and assesses their impact on climate policy. Particularly focusing on the year of the Cancun Agreements in 2010 and Paris Agreement in 2015, the article describes relationship of political sentiments and external commitment in international negotiations and future perspectives of China's climate policy. This article reconfirms the effects of social pressure on climate policy sentiments and international commitments by showing the contribution of energy conversion, using sector-based energy data.

Methods

By reviewing annual policy documents and the performance of energy and CO₂ targets disseminated by the Chinese government, changes in political sentiments in response to international and social pressure are considered. In addition, Chinese government statements to international fora is also surveyed.

Sub-sector based energy consumption and CO₂ emission data from 2006-2015 were reviewed, to evaluate the relationship of energy and CO₂ performance and contributions of energy conversion, and energy saving, in order to consolidate the social impact of energy conversion in policy stance.

Results

Regarding the relationship between energy policy and international negotiation, the first point in the negotiation process was the Copenhagen Accord of 2009, where the Chinese government fostered a negative attitude towards the new agreement, considered to stem from China's lack of confidence in mitigating climate change. From 2006-2010, China's eleventh five-year plan came an end with substantial progress and partly disappointing results in spite of its binding targets (ex. Prince et al, 2011). China could not be sure of future trends in energy consumption. However, the government rushed to introduce additional policy to mitigate climate change. The year of the Copenhagen Accord, 2009, marked a turning point toward further reduction of energy and carbon emission. From 2009, the Chinese government emphasized that it is crucial to use reliable data, in response to requests of many developed countries that China ensure the reliability and transparency of its CO₂ emissions and energy data in order to ensure the effectiveness of international accords.

The second point was in 2015, year of the Paris Agreement. In 2011, the US embassy in Beijing had announced a concentration of PM_{2.5}, and air pollution became the gravest issue in Chinese society. Due to coal's significant impact on China, reduction of coal use and conversion to gas have been stressed in a series of documents beginning in 2013. This has contributed to the Chinese government's positive stance toward the 2015 agreement.

Although economic growth rate affects energy consumption, namely GDP, CO₂ emission can be also controlled through energy conversion. Contrary to previous decomposition analysis (ex. Liu et al, 2015) showing reduction in energy intensity in major energy-consuming industries as a major reason for CO₂ improvement, from 2014 China's reduction in carbon intensity has been facilitated by coal replacement, particularly on power sector. The decline of coal consumption starting in 2014 contributed to the achievement of target CO₂ emission levels.

Conclusions

China's climate policy has been strengthened in response to international negotiation, as well as the air pollution problem, which has become a serious social and political issue in China. International negotiations provide an effective incentive, not only for creating international rules, but for making domestic regulations that contribute to the ultimate goal of mitigating climate change.

References

- Liu N., Z.Ma, J.Kang, 2015. Changes in carbon intensity in China's industrial sector: Decomposition and attribution analysis, *Energy Policy*, 87, 28-38.
- Price L., M.D.Levine, N.Zhou, D.Fridly, N.Aden, H.Lu, M.McNeil, N.Zhen, Y.Qin, P.Yowargana, 2011. Assessment of China's energy-saving and emission-reduction accomplishments and opportunities during the 11th Five Year Plan, *Energy Policy* 39,2165-2178.