

LINKAGE EU AND CHINA CARBON MARKETS IN TWO LEVEL GAMES

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Overview

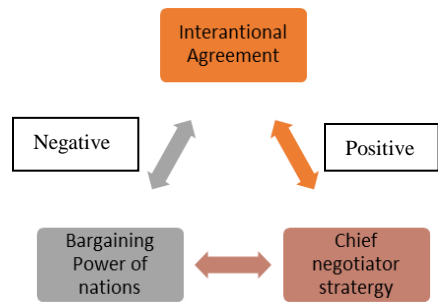
In the absence of a coordinated global commitment to curtail greenhouse gas emissions, regional or national emission trading system initiatives are emerging. In 2015, COP 21 Paris agreement for global climate treaty establishment introduced new concept of 'cooperative approaches' in paragraph 6, which involved mitigation outcomes being transferred internationally on voluntary basis (Paris agreement article 6, 2015). The context of 'cooperation' refers to two mixed interpretations based on earlier version: i) actual cooperation taking place between Parties and ii) Parties acting jointly in regional economic integration such as 'EU provision' (Andrei Marcu, 2016). In previous study, considering bottom-up linkage could be more applicable than top-down process (Ranson and Stavins, 2013). The development of linkage carbon emission trading mechanisms between EU and China is of great interest to many. The empirical research revealed benefits of linkage outweigh expected costs (Ranson and Stavins, 2013). Short-term efficiency gains, dynamic efficiency gains and distributional effects could be viewed as economics implication for motivation (Flachsland et al, 2009). Linking also considers for increasing market liquidity, reducing volatility of carbon price and removing competitive distortions (Zetterberg, 2012). Linkage China carbon market with EU ETS is a role in success of global climate mitigation effort. This paper first section identifies key stakeholders in EU and China and data collection from interviews carried out. Second section is content analysis for factors which could impact for linkage policy decision-making both in EU and China. This paper extends two-level game theory developed by Putnam (1988) in international climate change negotiation in the case of EU and China.

Methods

This paper is based on case study in EU and China carbon market linkage aims to catch complexity of particular situation exploring commonality from uniqueness. When it refers to understand experiences and explore research questions of 'what', how, or 'why' under special circumstance, case study methods could provide the answers. Intrinsic study refers to study specific case while the instrumental case study is standing for developing general understanding problem or puzzlement through a particular case. The semi-structured interviews were carried out for identified key stakeholders in EU and China carbon market linkage policy decision-making process, including Commission, Council, larger bargain power member states, Parliament, NGO, NDRC (National development and Reform Commission). Then content analysis applied after interviews into different themes including factors influenced market linkage decision, recognizations of benefits after linkage both in political and economics aspects. The analysis extends Putnam (1988) two level game theory to identify win-sets between the two and seeks for potential policy window for linkage.

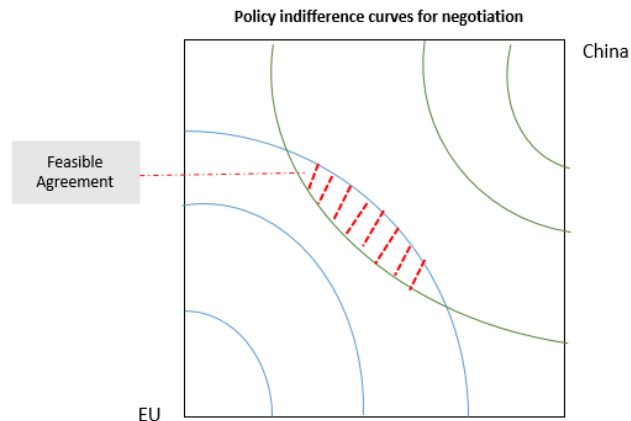
Results

After initial data analysis, the both sides of stakeholders viewed cooperation in climate change is critical and all of the stakeholders essential for decision-making process appeared strongly policy preference for co-production of mitigation efforts in the future. As China has different decision process comparing to EU, the stakeholders in NDRC (National Development and Reform Commission) has more political power for decision making than other stakeholders in climate change agreement. Thus, the factors to determinate of 'win-set' in two-level of theory extension under this situation. Although China and EU stakeholders both admits strong interests in co-production for emission mitigation especially in technologies development for efficiency energy consumption, there are few concerns about carbon leakage and policy uncertainties as obstacles in further international climate change cooperation between these two.



Conclusions

In two level game theory, EU has more complicated domestic bargains between different actors in decision-making procedure while China has more concentrated policy-decision procedure. This paper extended the two level game theory and re-determined factors for win-sets in China and EU international climate change negotiation, which the Putnam (1988) determined factors could not apply for this case. Meanwhile, EU is lead in climate change negotiation however the position could change when it refers to China due to concern of political economy and larger size of carbon markets. This could also reflects in the size of win-sets and potential policital window for international carbon market linkage.



References

- Andrei Marcu, (2016). "Carbon Market Provisions in the Paris Agreement." CEPS Special Report, No.128.
- Flachsland.C, (2009). "Global Trading Versus Linking: Architectures for international emissions trading." Energy Policy 37(5): 1637-1647.
- Rober D. Putnam, (1988). "Diplomacy and Domestic Politics: The Logic of Two-Level Games". International Organization, Vol.42, No.3, pp427-460
- Ranson, M., Stavins, R. N., (2013). "Linkage of Greenhouse Gas Emissions Trading Systems: Learning from Experience. Discussion Paper ES 2013-2." Cambridge, Mass.: Harvard Project on Climate Agreements, November, 2013.
- UNFCCC, (2015). "Paris Agreement Article 6".
- Zetterberg L, (2012). "Linking the Emissions Trading Systems in EU and California." Swedish Environmental Research Institute working paper.