

International carbon markets, linking and post-Brexit UK options

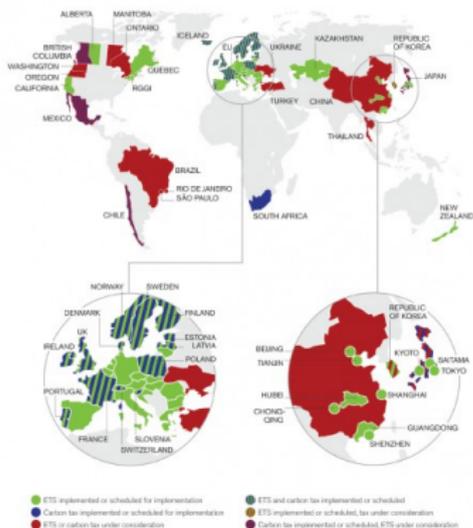
Luca Taschini

London School of Economics
Grantham Research Institute

30 March 2017

International carbon markets

Figure 2: Summary map of existing, emerging, and potential regional, national and subnational carbon pricing instruments (ETSs and tax)¹⁴



- As of 2016, ETSs were operating across four continents in 35 countries, 13 states or provinces, and seven cities.
- A bottom-up policy architecture where ETSs interact can be a significant element of the global climate change policy framework in the future.

¹⁴ Carbon pricing instruments are considered "implemented" or "scheduled for implementation" once they have been formally adopted through legislation.

Why linking?

- Economic motivations
 - Abatement costs being minimised across a larger pool of regulated firms;
 - Improved liquidity resulting in decreased transaction costs, and
 - Lower overall price variability and thus reduced price uncertainty (depending on who is the linking partner, more on this later).
- Political motivations
 - Linking locks-in ETS as (one of) the local regulatory choice(s) to control emissions
 - Thus the risk of regulatory capture (against ETS) is reduced;
 - Contributes to a level playing field that can facilitate international cooperation
 - Alleviates competitiveness concerns among economies;

Enter 'carbon dating'

- There is a missing opportunity when markets operate independently.
 - If companies in different markets were able to trade, they could make savings every time the price of allowances varied across markets.
- In a recent paper we analysed the potential cost savings when previously isolated markets are linked.
 - *Carbon dating: When is it beneficial to link ETSs?* Doda and Taschini 2017 JAERE.
- So, what does make a good carbon date?
 - ① Opposite attracts;
 - ② the market size of linking partners matter; and
 - ③ low linking costs (negotiation and implementation).

UK's options post Brexit

- 1 Maintain UK's participation in EU-ETS
 - Benefits of the world's largest carbon market
 - Less control of own and EU policy

UK's options post Brexit

- 1 Maintain UK's participation in EU-ETS
 - Benefits of the world's largest carbon market
 - Less control of own and EU policy
- 2 Institute a UK-ETS and ...
 - Go it alone
 - Complete control over UK policy
 - UK-ETS too small; forgone gains from trade

UK's options post Brexit

- 1 Maintain UK's participation in EU-ETS
 - Benefits of the world's largest carbon market
 - Less control of own and EU policy
- 2 Institute a UK-ETS and ...
 - Go it alone
 - Complete control over UK policy
 - UK-ETS too small; forgone gains from trade
 - Link east (China?) or west (WCI?)
 - Benefits of linking
 - Less control of own policy; sunk costs of linking

UK's options post Brexit

- ① Maintain UK's participation in EU-ETS
 - Benefits of the world's largest carbon market
 - Less control of own and EU policy
- ② Institute a UK-ETS and ...
 - Go it alone
 - Complete control over UK policy
 - UK-ETS too small; forgone gains from trade
 - Link east (China?) or west (WCI?)
 - Benefits of linking
 - Less control of own policy; sunk costs of linking
 - Link to EU-ETS

UK's options post Brexit

- ① Maintain UK's participation in EU-ETS
 - Benefits of the world's largest carbon market
 - Less control of own and EU policy
- ② Institute a UK-ETS and ...
 - Go it alone
 - Complete control over UK policy
 - UK-ETS too small; forgone gains from trade
 - Link east (China?) or west (WCI?)
 - Benefits of linking
 - Less control of own policy; sunk costs of linking
 - Link to EU-ETS
- ③ Institute a UK Carbon Tax
 - Complete control over UK policy
 - Politically difficult

To find out more...

- **Non-technical commentary:**
“Should the UK stay or should it go? The consequences of a divorce with the EU ETS”
with Baran Doda and Victoria Druce, 14 February 2017
- **Academic paper:**
“Carbon dating: when is it beneficial to link ETSs?”
with Baran Doda, December 2016