

When is a carbon price floor desirable?

EPRG Working Paper 1816

Cambridge Working Paper in Economics 1833

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Abstract The EU carbon price lies well below estimates of the social cost of carbon and “target-consistent” carbon prices needed to deliver ambitious targets such as the 40% reduction target for 2030. In light of this, the UK introduced a carbon price floor (CPF) for its electricity sector in 2013 and the new Dutch Government has recently made a similar commitment, while successive French Governments have called for an EU-wide CPF. This paper analyzes the impacts and design of a power-sector CPF, both at the EU and national level, using a political-economy approach. We find a good case for introducing such a price-based instrument into the EU ETS. We suggest that a CPF should be designed to “top up” the EUA price to €25–30/tCO₂, rising annually at 3–5% above inflation, at least until 2030. We argue that the new EU Market Stability Reserve enhances the value of a CPF in terms of delivering climate benefits, and discuss the potential for a regional CPF in North-West Europe. We also review international experience with price floors (and ceilings).

Keywords Carbon pricing, electricity markets, market failure, policy failure, political economy, price floor, price corridor

JEL Classification H23, L94, Q48, Q54

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Publication June 2018
Financial Support Iberdrola