



The private and social value of British electrical interconnectors

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Abstract

Interconnectors have value for Britain, providing access to cheaper Continental power, security of supply, and managing increased renewables, prompting proposals for substantial new interconnectors. The EU Target Electricity Model requires interconnector market coupling via Day Ahead and IntraDay Markets. We examine the efficiency and value of uncoupled and coupled trading for the four DC interconnectors to GB, over different timescales from year ahead to intraday, and the social costs and benefits not reflected in the private benefits. IFA and BritNed have a commercial value of about €500 million/yr and create additional surplus of €25 m./yr. The island of Ireland coupled on 1 Oct 2018, dramatically reducing trading inefficiency. Because the GB carbon tax is not replicated abroad it transfers some €40 m./yr to the foreign share of IFA and BritNed as well as adding distortionary costs when trade flows change. The policy implication is that while further investment in interconnectors appears socially profitable, it is important to harmonise carbon taxes across the EU. If GB leaves the EU and is uncoupled, some of these trading gains would be sacrificed, but other financial markets may alleviate the cost of Brexit, making policies to enhance liquidity desirable.

Keywords Interconnectors, market coupling, hedging, social value

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