

Tying Europe Together – Long-Term Effects on Green Electricity Production in the Nordic Countries from Cross-Border Trade

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The European Union as well as the Nordic countries have adopted various policies for increasing the share of electricity production from renewable energy sources. At the same time, the EU is moving toward a deregulation of the electricity market and increasing cross-border trade between member states. Increasing electricity trade between the Nordic countries and Germany/Poland might change investment patterns for new electricity production and the effectiveness of policies. In this work, developments of an extended MARKAL_Nordic model to better consider cross-border trade between regions with large differences in load profile and production mix are presented. Furthermore, the improved model is used for investigating long-term effects from increasing cross-border trade with Germany/Poland on the share of renewable electricity production in the Nordic countries.

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