

Contents

1	Introduction.....	1
2	Grid, Transmission and Markets.....	5
2.1	Electrical Grid.....	5
2.2	The Organization of the European Electricity Market.....	14
2.3	Internal Market for Energy.....	15
3	Conventional Electricity Generation in Germany.....	23
3.1	Impairments on Conventional Generation Assets.....	26
3.2	The Future Role of Dispatchable Generation Capacities.....	30
4	Renewable Electricity Generation.....	39
4.1	The Physics of Intermittent Renewable Energy Sources.....	39
4.2	The Merit-Order Effect of Renewable Energy Sources.....	45
4.3	Promotion Schemes for Renewable Energy Sources in Germany.....	48
4.4	Promotion Schemes for Renewable Energy Sources in France, Belgium, and the Netherlands.....	54
4.5	Macroeconomic Impacts of Renewable Energy Sources for Electricity.....	60
5	Cross-Border Effects of Intermittent Renewable Energy Sources for Electricity.....	69
5.1	The Spillover Effect of Renewable Electricity Generation.....	72
5.2	Data.....	75
5.3	Toy Model for Cross-Border Impacts of Renewable Energy Sources for Elec- tricity.....	81
5.4	Econometric Model for Cross-Border Impacts of Renewable Energy Sources...	97
5.5	Results and Discussion.....	107
6	Conclusion and Outlook.....	111
6.1	Conclusion.....	111
6.2	Outlook.....	113
7	Appendix.....	115