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EUROPEAN ENERGY  
LAW REPORT XI

*Edited by*  
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## European Energy Law Report XI

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## EDITORIAL

The editors are very pleased to present the *European Energy Law Report XI*. The *European Energy Law Report* is an initiative taken by the organizers of the European Energy Law Seminar which has taken place on a regular basis in the Netherlands since 1989. The aim of this seminar is to present an overview of the most important legal developments in the field of international, European Union (EU) and national energy and climate law. Whereas the first seminars concentrated on the developments at European Community (EC) level, which were the results of the establishment of an Internal Energy Market, the focus has now gradually switched to the developments at the national level following the implementation of the EU Directives with regard to the internal electricity and gas markets. This approach can also be found in these reports.

Similar to the *European Energy Law Reports I, II, III, IV, V, VI, VII, VIII, IX* and *X*, this Report includes chapters based on papers presented at the European Energy Law Seminar, in this case, the 27th seminar which was organized on 25 and 26 January 2016. It contains five Parts representing the following topics: 'EU Energy and Climate Law: Policy and Jurisprudence', 'Energy and Climate Treaty Developments', 'Energy Infrastructure Developments: Offshore Electricity Systems and Network Investments', 'Heat Supply Legislation in the EU', and 'Security of Energy Supply and Safety'. Where necessary, the chapters have been updated as to 1 March 2017.

We are grateful for the support of the speakers at the seminar and their cooperation in rewriting their papers for the purpose of this book. We also would like to thank the authors and co-authors who were not speaking at the seminar but were willing to participate in this project so that we are able to provide you with as complete a picture as possible of all topics discussed. Finally, we would like to acknowledge the help and support of the publisher in publishing this book. We are confident that these reports will be part of an important and long-lasting tradition in this field.

Martha M Roggenkamp and Catherine Banet  
Groningen/Oslo, 21 April 2017



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## LIST OF ABBREVIATIONS

|        |  |
|--------|--|
| ACER   | Agency for the Cooperation of Energy Regulators  |
| ACM    | Authority for Consumers and Markets (Dutch NRA)  |
| ADP    | Durban Platform for Enhanced Action  |
| APA    | Ad hoc working group on the Paris Agreement  |
| APEC   | Asia-Pacific Economic Cooperation  |
| APX    | Amsterdam Power Exchange   |
| AR     | Assessment Report  |
| AREI   | Africa Renewable Energy Initiative   |
| ARIAE  | <i>Asociación Iberoamericana de Entidades Reguladoras de la Energía</i> (Latin American Association of Energy Regulatory Entities) |
| BAT    | Best Available Technique   |
| Bcm    | Billion cubic meters   |
| BGT    | British Gas Trading  |
| BIS    | Bureau of Industry and Security in the US Department of Commerce   |
| BREF   | Best Available Technique Reference Document  |
| BRUGEL | BRUxelles Gaz Electricité – BRUssel Gas ELEktriciteit (Brussels energy regulator, Belgium)   |
| Capex  | Capital costs  |
| CBA    | Cost–benefit analysis  |
| CBS    | Statistics Bureau of the Netherlands   |
| CDM    | Clean Development Mechanism  |
| CEER   | Council of European Energy Regulators  |
| CEF    | Connecting Europe Facility   |
| CEM    | Clean Energy Ministerial   |
| CESEC  | Central and South Eastern European Gas Connectivity initiative   |
| CETA   | Comprehensive Economic Trade Agreement   |
| CHP    | Combined Heat and Power  |
| CITL   | Community Independent Transaction Log  |
| CJEU   | Court of Justice of the European Union   |
| CMA    | Competition and Market Authority (UK)  |
| CMA    | Conference of the parties serving as the meeting of the Parties to the Paris Agreement   |
| COP    | Conference of the parties  |

|        |   |
|--------|---|
| CRE    | <i>Commission de régulation de l'énergie</i> (French NRA)                             |
| CREG   | <i>Commission de Régulation de l'Electricité et du Gaz</i><br>(Belgium NRA)           |
| CTCN   | Climate Technology Centre and Network   |
| CUSC   | Connection and Use of System Code   |
| CVW    | <i>Centrum voor Veilig Wonen</i> (Centre for Safe Living)                             |
| CWaPE  | <i>Commission wallonne pour l'Energie</i> (Walloon energy<br>regulator)               |
| DCFTA  | Deep and Comprehensive Free Trade Agreement   |
| DECC   | Department of Energy and Climate Change (UK)  |
| DERA   | Danish Energy Regulatory Authority  |
| DH     | District heating  |
| DNO    | Distribution Network Operators  |
| DSO    | Distribution system operator  |
| EAC    | East African Community  |
| EEAS   | European External Action Service  |
| EBN    | <i>Energiebeheer Nederland</i> (Dutch State Participant in the Oil<br>and Gas Sector) |
| EC     | European Commission   |
| ECCAS  | Economic Community of Central African States  |
| ECJ    | European Court of Justice   |
| ECOWAS | Economic Community of West African States   |
| ECT    | Energy Charter Treaty   |
| EEA    | European Economic Area  |
| EED    | Energy Efficiency Directive   |
| EIA    | Energy Information Administration in the US   |
| EIA    | Environmental Impact Assessment   |
| EITI   | Extractive Industry Transparency Initiative   |
| ENC    | European Network Codes  |
| ENP    | European Neighbourhood Policy   |
| ENTSO  | European Network of Transmission System Operators                                     |
| EnWG   | <i>Energiewirtschaftsgesetz</i> (German Energy Industry Act)                          |
| EPBD   | European Performance of Buildings Directive   |
| EPCA   | Energy Policy and Conservation Act of 1975 (US)                                       |
| ETS    | Emissions Trading System  |
| EU     | European Union  |
| EnU    | Energy Union  |
| ESD    | Effort Sharing Decision   |
| ESWG   | Energy Sustainability Working Group   |
| EU-EnU | European Energy Union   |
| EU ETS | European Union Emissions Trading System   |
| FDI    | Foreign direct investment   |
| FMR    | Final Modification Report   |

|       |  |
|-------|--|
| FPA   | Final Project Assessment   |
| GB    | Great Britain  |
| GCCSI | Global Carbon Capture and Storage Institute GCCSI                                |
| GEF   | Global Environment Facility  |
| GEMA  | Gas and Electricity Markets Authority (UK)                                       |
| GGA   | Global Geothermal Alliance   |
| GHG   | Greenhouse gases   |
| GTS   | <i>Gasunie</i> Transport Services (Dutch gas TSO)                                |
| GW    | Giga watt  |
| HVDC  | High-voltage direct current  |
| ICS   | Investment Court System  |
| ICSID | International Centre for Settlement of Investment Disputes                       |
| IEA   | International Energy Agency  |
| IEC   | International Energy Charter   |
| IEF   | International Energy Forum   |
| IFA   | <i>Interconnexion France Angleterre</i>  |
| INDC  | Intended Nationally Determined Contribution                                      |
| IPA   | Initial Project Assessment   |
| IPCC  | Intergovernmental Panel on Climate Change  |
| IPEEC | International Partnership for Energy Efficiency Cooperation                      |
| IRENA | International Renewable Energy Agency  |
| ISA   | International Solar Alliance   |
| ISDS  | Investor–state dispute settlement  |
| JI    | Joint Implementation   |
| LCNF  | Low Carbon Network Fund  |
| LDCF  | Least Developed Countries Fund   |
| LNG   | Liquefied Natural Gas  |
| LPAA  | Lima–Paris Action Agenda   |
| MENA  | Middle East and North Africa countries   |
| MEP   | Members of the European Parliament   |
| MOP   | Meeting of the Parties   |
| MoU   | Memorandum of Understanding  |
| NAFTA | North-American Free Trade Agreement  |
| NAZCA | Non-State Actor Zone for Climate Action  |
| NCG   | National Coordinator Groningen   |
| NDC   | Nationally Determined Contribution   |
| NEN   | <i>Nederlands Normalisatie Instituut</i> (Netherlands Standardisation Institute) |
| NGET  | National Grid Electricity Transmission (UK)                                      |
| NGIH  | National Grid Interconnector Holdings  |
| NGO   | Non-governmental organization  |
| NMDA  | <i>Niet Meer Dan Anders</i> (No More Than Otherwise)                             |
| NPg   | Limited and Northern Powergrid   |

|          |  |
|----------|--|
| NRA      | National regulatory authority  |
| NSCOGI   | Northern Seas Countries Offshore Grid Initiative                                   |
| NSL      | North Sea Link   |
| Ofgem    | Office of Gas and Electricity Markets (UK)   |
| ÖMAG     | <i>Abwicklungstelle für Ökostrom</i> (Austria)                                     |
| OPEC     | Organization of Petroleum Exporting Countries                                      |
| Opex     | Operational costs  |
| PCI      | Projects of common interest  |
| PCR      | Post Construction Review   |
| PPA      | Power purchase agreement   |
| PPP      | Public–private partnership   |
| RAB      | Regulatory asset base  |
| RES      | Renewable energy sources   |
| RIIO     | Revenue using Incentives to deliver Innovation and Outputs                         |
| RTE      | <i>Réseau de Transport d'Electricité</i> (French TSO)                              |
| SADC     | Southern African Development Community   |
| SBI      | Subsidiary Body for Implementation   |
| SCCF     | Special Climate Change Fund  |
| SBSTA    | Subsidiary Body for Scientific and Technological Advice                            |
| SEA      | Strategic Environmental Assessment   |
| SGB      | Smart grid benefits  |
| SCC      | Stockholm Chamber of Commerce  |
| SCF      | Standing Committee on Finance  |
| SEM      | Single Electricity Market (Ireland)  |
| SER      | Special or Exclusive Rights  |
| SOE      | State Owned Enterprise   |
| SoLR     | Supplier of Last Resort  |
| Tcbb     | <i>Technische Commissie Bodembeweging</i> (Technical Committee on Earth Movements) |
| TEC      | Technology Executive Committee   |
| TICAD    | Tokyo International Conference for Africa Development                              |
| TFEU     | Treaty on the Functioning of the European Union                                    |
| TNA      | Technology needs assessment  |
| TNUoS    | Transmission Network Use of System   |
| Totex    | Total expenditure  |
| TPA      | Third Party Access   |
| TSO      | Transmission system operator   |
| TTIP     | Transatlantic Trade and Investment Partnership                                     |
| TPP      | Trans-Pacific Partnership  |
| TYNDP    | Ten-Year Network Development Program   |
| UAE      | United Arab Emirates   |
| UN       | United Nations   |
| UNCITRAL | United Nations Commission for International Trade Law                              |

|        |  |
|--------|--|
| UNCLOS | United Nations Law of the Sea  |
| UNEP   | United Nations Environmental Programme   |
| UNFCCC | United Nations Framework Convention on Climate Change                                  |
| USD    | US dollar  |
| VREG   | <i>Vlaamse regulator van de elektriciteits- en gasmarkt</i> (Flemish energy regulator) |
| WACC   | Weighted average cost of capital   |
| WACM   | CUSC modifications or Workgroup Alternatives   |
| WEC    | World Energy Council   |
| WTO    | World Trade Organization   |





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