





15th Conference on Energy Economics and Technology

ENERDAY 2021

Creative Destruction? - Disruptive innovation in times of Covid and an accelerated energy system transformation

Conference Programme Friday, 09 April 2021, 8:00 am online

- 8:00 Virtual Get Together (<u>https://spatial.chat/s/enerday</u>)
- 8:30 Opening Address (<u>https://tu-dresden.zoom.us/j/86212114942</u>)

Prof. Dr. Dominik Möst (TU Dresden), Prof. Dr. Christian von Hirschhausen (TU Berlin)

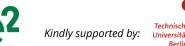
8:40 **Keynote Speech:** Windnode as a blueprint for a transition towards 100% renewables

Markus Graebig (50Hertz Transmission GmbH)

9:25 Mini-Break/Joining the Virtual Conference Rooms

9:30 - 10:45	Power-To-Gas/Hydrogen	Market Design & Congestion Management	P2P Energy	Decarbonization Pathways	Power Systems Modelling
	Virtual Room: Volt Chair: Hendrik Scharf	Virtual Room: Ampere Chair: Christina Wolff	Virtual Room: Joule Chair: Richard Weinhold	Virtual Room: Watt Chair: Steffi Misconel	Virtual Room: Coulomb Chair: Manuel Eising
9:30	Speaker: <i>Thomas Baldauf</i> <i>(DLR):</i> Stocks, Flows and Hydrogen: An Open- Economy Baseline Model	Speaker: <i>Tanja Mast (TH Ingolstadt</i>): Potential of Demand Side Management and Biogas Plants in regional market-based congestion management	Speaker: Shandelle Steadman (Loughborough University): Would You Like to Trade Your Energy? A Comparative Survey Experiment on Energy Trading Platforms	Speaker: Alexandra Krumm (TU Berlin): The energy transition in India: quantifying effects of the low-carbon transition on the Indian energy system	Speaker: <i>Maciej Raczyński (AGH University):</i> An integrated modelling approach to evaluate power system operation stability in decarbonization pathways
	Discussant: Philipp Hauser	Discussant: Lisa Lorenz	Discussant: Jens Weibezahn	Discussant: Björn Steigerwald	Discussant: Smaranda Sgarciu













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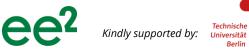




15th Conference on Energy Economics and Technology

9:55	Speaker: Leonard Göke (TU Berlin): Role of cogeneration and heating networks in renewable energy systems Discussant: Thomas Baldauf	Speaker: Alfredo Zamora (TU Berlin): Zonal pricing in Germany – A preferable tradeoff between nodal and uniform pricing? Discussant: Tanja Mast	Speaker: Theresia Perger (TU Wien): Optimal expansion and configuration of peer-to- peer electricity trading in local communities Discussant: Shandelle	Speaker: Karlo Hainsch (TU Berlin): European decarbonization pathways: comparison, robust findings and the European Green Deal Discussant: Alexandra	Speaker: Martin Kittel (TU Berlin): Renewable Energy Targets and the Storage Cycling Trap: Unintended Effects and Implications for Power Sector Modeling Discussant: Maciej Raczyński
			Steadman	Krumm	
10:20	Speaker: <i>Philipp Hauser</i> <i>(VNG):</i> Impact of Green Gas Imports on Infrastructure Investments	Speaker: <i>Lisa Lorenz (TU Dresden):</i> Market outcomes in Flow-based Market Coupling: a model-based impact analysis of the fundamental parameters	Speaker: Jens Weibezahn (TU Berlin): Prosumer Empowerment through Community-Power- Purchase-Agreements: A Market Design for Peer- to-Peer Swarm Grids	Speaker: <i>Björn Steigerwald</i> <i>(TU Berlin):</i> Production cost uncertainties of Small Modular Reactor concepts - A model-based Monte Carlo analysis	Speaker: <i>Smaranda Sgarciu</i> (<i>BTU Cottbus</i>): Discount factors and hurdle rates: the dark horses of capacity expansion planning
	Discussant: Leonard Göke	Discussant: Alfredo Zamora	Discussant: Theresia Perger	Discussant: Karlo Hainsch	Discussant: Martin Kittel
10:45	Break/Joining the Virtual Co	nference Rooms	J		
	Impacts of Carbon Pricing	Locational Incentives	Flow-based Market	Flexibility/Decentralized	E-Mobility
11:00 - 12:15	Virtual Room: Volt Chair: Matthew Schmidt	Virtual Room: Ampere Chair: Hannes Hobbie	Coupling Virtual Room: Joule Chair: Martin Lieberwirth	energy systems Virtual Room: Watt Chair: Christoph Zöphel	Virtual Room: Coulomb Chair: Julia Gutierrez
11:00	Speaker : <i>Christian</i> <i>Gambardella (PIK):</i> The Joint Impacts of Carbon Pricing and Renewable Generation on Fossil Generation Profits in Germany	Speaker: Anselm Eicke (Hertie School): Where to place new power generation? A methodology to design cost- reflective locational instruments	Speaker: Constantin Dierstein (TU Dresden): Update on Flow Based Market Coupling Parameters - From minRAM to Generation Shift Key	Speaker : <i>Steffi Misconel (TU Dresden):</i> Assessing the value of demand response in a decarbonized energy system - a large-scale model application	Speaker : <i>Carlos Gaete (TU Berlin):</i> Battery-electric vehicles: open-source modeling of time series data and their application in power system models
	Discussant: Michael Bucksteeg	Discussant: Susann Freitag	Discussant: Richard Weinhold	Discussant: Febin Kachirayil	Discussant: Carlo Corinaldesi















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11:25	Speaker: <i>Nicolas Fuchs</i> (<i>Fraunhofer ISE</i>): Food Industry case study on the influence of CO2 certificate and internal CO2 pricing on the decarbonization and investment strategies into energy supply technologies	Speaker: Siamak Sheykhha (RWTH Aachen): Policy Implications of Spatially Differentiated Renewable Energy Promotion: Multi-Level Scenario-Based Analysis of Regional Onshore Wind Auctioning in Germany	Speaker: <i>Lucas Lang (FAU Erlangen-Nürnberg)</i> : Flow- based market coupling in multi-level electricity market models	Speaker : Alexander Roth (TU Berlin): Modelling Electricity Storage Needs in Europe: A Separation of Drivers	Speaker : Anya Heider (Reiner Lemoine Institute): Evaluating policy instruments for the balancing of renewable energies using electric vehicles: On the interplay between distribution and transmission grids
	Discussant: Christian Gambardella	Discussant: Anselm Eicke	Discussant: Constantin Dierstein	Discussant: Steffi Misconel	Discussant: Carlos Gaete
11:50	Speaker: Michael Bucksteeg (Univ. Duisburg-Essen): Market integration of Power- to-Gas during the energy transition – Assessing the role of carbon pricing	Speaker : <i>Susann Freitag</i> (<i>TenneT</i>): Local Incentives and Sector Coupling: Friends or foes?	Speaker: Richard Weinhold (TU Berlin): Flow Based Market Coupling in Fundamental Electricity Market Models: Methods and Parametrization for Renewable-Dominant Power Systems	Speaker : <i>Febin Kachirayil</i> (<i>Univ. of Aberdeen</i>): Exploring the trade-off between cost and security of supply for decentralized autonomous energy systems	Speaker : <i>Carlo Corinaldesi (TU Wien)</i> : Cost-benefit Analysis of Residential On-Site E-Car-Sharing
12:15	Discussant: Nicolas Fuchs Lunch Break	Discussant: Siamak Sheykhha	Discussant: Lukas Lang	Discussant: Alexander Roth	Discussant: Anya Heider
13:15 - 14:30	Environmental Policy Instruments Virtual Room: Volt Chair: Michael Bucksteeg	Load, efficiency & solar forecasting Virtual Room: Ampere Chair: Wolf Peter-Schill	TSOs/Grid Operation Virtual Room: Joule Chair: Constantin Dierstein	Energy behaviour Virtual Room: Watt Chair: Jens Weibezahn	Gas Infrastructure Virtual Room: Coulomb Chair: Hendrik Scharf
13:15	Speaker: Andreas Schröder (ICIS): EU Emissions Trading at Crossroads	Speaker: <i>Stephan Seim (TU Berlin)</i> : Development of subsector electricity load profiles	Speaker: <i>Christian Dobelke</i> <i>(TenneT):</i> What a Transmission system operator (TSO) can do and needs for Green Europe in 2050	Speaker: <i>Citlali Rodriguez del</i> <i>Angel (TU Berlin):</i> The potential of sufficiency measures to achieve a fully renewable energy system – a case study of Germany	Speaker: <i>Matthew Schmidt</i> (<i>TU Dresden</i>): Assessing the Impact of Uncertainties on Infrastructure in the European Natural Gas Market: A robust optimization approach
	Discussant: Oliver Ruhnau	Discussant: Kevin Forbes	Discussant: Manuel Eising	Discussant: Tarun Khanna	Discussant: Johannes Ruf
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13:40	Speaker: <i>Reinhard Madlener</i> <i>(RWTH Aachen):</i> The European Market for Guarantees of Origin for Green Electricity: A Model-Based Evaluation of Future Price Scenarios	Speaker: <i>Hélene Godin (Univ.</i> <i>Stuttgart):</i> Analysis of energy- efficiency measures in multi- cylinder paper drying	Speaker: <i>Erika Kämpf (Univ.</i> <i>Kassel)</i> : Efficient concertation of reactive power resources	Speaker: Fissha Marye (Univ. Vilnius): The Effect of Descriptive Information Provision on Electricity Consumption: Experimental Evidence from Lithuania	Speaker: Johannes Giehl (TU Berlin): Modelling the impact of the energy transition on gas distribution networks in Germany	
	Discussant: Andreas Schröder	Discussant: Stephan Seim	Discussant: Christian Dobelke	Discussant: Citlali Rodriguez del Angel	Discussant: Matthew Schmidt	
14:05	Speaker: Oliver Ruhnau (Hertie School): The impact of carbon prices on power sector emissions: insights from a model-comparison experiment Discussant: Reinhard	Speaker: Kevin Forbes (UC Dublin): Methodology to Improve the Predictability of Solar Energy Generation with Confirmatory Evidence from Germany Discussant: Hélene Godin	Speaker: Manuel Eising (EIFER): Contrasting countertrading mechanisms: market effects between Germany and Denmark West Discussant: Erika Kämpf	Speaker: Tarun Khanna (MCC Berlin): Reducing energy consumption and carbon emissions of residential buildings through behavioral change Discussant: Fissha Marye	Speaker: Johannes Ruf (DVGW): Trial of Basic Control Strategies of Gas Supply and Distribution Networks to Allow Integration of Renewable Gases from Distributed Production Discussant: Johannes Giehl	
	Madlener		Discussulit. Enka Kampj	,	-	
14:30	Break					
14:45	Keynote Speech: Covid-19 - Merely an interruption or the death blow for the international coal market? Prof. Dr. Pao-Yu Oei (Prof. Economics of Sustainable Energy Transition at Europa-Universität Flensburg) Paola Parra (Research Associate at the Workgroup for Economic and Infrastructure Policy (WIP), TU Berlin)					
15:30	Spatial chat (https://spatial.chat/s/enerday)					
15:50	Award ceremony / Closing remarks (https://spatial.chat/s/enerday)					





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