





13th Conference on Energy Economics and Technology

ENERDAY 2019

Low-Carbon Energy System Transformation: Setting the Course for the Next Decade

Thursday, 11 April 2019, 6 pm **Pre-Conference-Dinner**

Informal Get Together

Restaurant Campus, Hübnerstraße 13, 01069 Dresden

Friday, 12 April 2019, 8:30 am Conference

Messe Dresden, Via Mobile 7 (see Venue Information)

8:30	Registration, Coffee & Tea		
9:00	Opening Address (Room: Hamburg Conference Hall)		
	Prof. Dr. Dominik Möst, TU Dresden		
	Prof. Dr. Christian von Hirschhausen, TU Berlin		
9:30	Keynote Speech (Room: Hamburg Conference Hall, Chair: Prof. Dr. Christian von Hirschhausen)		
	The Energy Transformation in Europe and Beyond – The Big Picture and Some Details Prof. Dr. Manfred Hafner, Johns Hopkins University SAIS-Europe, SciencesPo PSIA, Fondazione Eni Enrico Mattei		

10:15 Coffee & Tea

10:45	Low-Carbon Energy System Transformation I/III	Gas Markets	Local energy markets	Economics of consumer behavior
11:45	Room: Hamburg Hall Chair: Constantin Dierstein	Room: Rotterdam Hall Chair: Philipp Hauser	Room: St. Petersburg Hall Chair: Thomas Walther	Room: Florenz Hall Chair: Samarth Kumar
10:45	Ways to a low-emission energy system - repercussions of a German coal phase-out	Implementing new capacity booking regimes for gas transmission networks – How will gas storages be affected?	capacity booking regimes or gas transmission generation capacities networks – How will gas	
	Michael Wiesmeth,	Dominic Lencz,	Andreas Fleischhacker,	Dr. Uta Burghard,
	Universität Stuttgart	ewi Energy Research & Scenarios	TU Wien	Fraunhofer-Institut für System- und Innovations- forschung ISI
11:05	Short-term effectiveness of electrolytic hydrogen production for energy system decarbonisation	Drivers and barriers of future gas demand - A meta analysis	Pricing mechanisms and market designs in peer-to-peer electricity trading: fostering energy access and self-sufficiency	Households' Dynamic Investment Choice in Energy Efficient Technology
	Kai Klöckner,	Hendrik Scharf,	Jens Weibezahn,	Sebastian Mertesacker,
	RWTH Aachen University	TU Dresden	TU Berlin	University of Cologne
11:25	Scenarios for decarbonizing an integrated energy system	Gas Flows and Gas Prices in Europe: What is the Impact of Nord Stream 2	Techno-economic evaluation of combined micro power and heat generation assets: Implications for the multi- tenant building market in Germany	Photovoltaic self- consumption after the support period: Will it pay off in a cross-sector perspective?
	Leonard Göke,	Dr. Maik Günther,	Prof. Dr.Reinhard Madlener,	Jonas Klamka,
	TU Berlin	Stadtwerke München GmbH	RWTH Aachen University	University of Siegen

11:45 Short 5-Minute-Break



















13th Conference on Energy Economics and Technology

44.50	Low-Carbon Energy System Transformation	Energy transition on a	Flexibility in energy	Alternative fuels for transportation	
11:50		local level systems		transportation	
12:50	Room: Hamburg Hall Chair: Matthew Schmidt	Room: Rotterdam Hall Chair: Jens Maiwald	Room: St. Petersburg Hall Chair: Steffi Schreiber	Room: Florenz Hall Chair: Hendrik Scharf	
11:50	Decarbonization of the European energy system with strong sector couplings	A Generic Evaluation Process for Power-to-X Business Cases in an Urban Setting	How to Estimate the Balancing Capability of Hydropower? – A Proposed Method that Reveals Insights in Factors Affecting Flexibility	LNG from renewable sources as an alternative fuel for maritime shipping?	
	Prof. Dr. Martin Greiner,	Stefan Scharl,	Dr. Richard Scharff,	Prof. Dr. Andreas Seeliger,	
	Aarhus University	RWTH Aachen University	Vattenfall	Hochschule Niederrhein	
12:10	Analyzing Potential Stranded Assets – A Challenge for the European Low-Carbon Transition?	The transition of the energy system towards (almost) complete decarbonization from an utility perspective	The impact of sector coupling options on electricity systems – An evaluation of different flexibility options	Application-side merit- order-curves for synthetic fuels in the german energy system	
	Konstantin Löffler,	Dr. Holger Wiechmann,	Mario Kendziorski,	Tobias Hübner,	
	TU Berlin	Energie Baden- Württemberg AG	TU Berlin	Forschungsgesellschaft für Energiewirtschaft mbH	
12:30	Modelling of the European Union's Long-Term Strategy towards a carbon-neutral energy system	Sustainability assessment of the energy transition: Insights from Saxon municipalities, Germany	Find your way around the various flexibility mechanisms under the European burden-sharing	Economic comparison of electric fuels produced at excellent sites for renewable energies: A Scenario for 2035	
	Alessia De Vita,	Kendisha Soekardjo Hintz	Marc Vielle,	Philipp Runge,	
	National Technical University of Athens	TU Dresden	École Polytechnique Fédérale de Lausanne	Friedrich-Alexander- Universität Erlangen- Nürnberg	
12:50	50 Lunch				
13:50	Market design Carbon mitigation and EU ETS		Modelling and Simulation of Energy Markets	Renewable energies	
14:50	Room: Hamburg Hall Chair: Constantin Dierstein	Room: Rotterdam Hall Chair: Carl-Philipp Anke	Room: St. Petersburg Hall Chair: Dirk Hladik	Room: Florenz Hall Chair: Matthew Schmidt	
13:50	Strategic reserve for Switzerland: Is it needed and (how) would it work?	The amendment of the EU ETS: decomposition of effects and dynamic efficiency	Is the more complex model always the better one? Evidence from the assessment of security of electricity supply	Paradoxa, anomalies and limits – the collective dynamics of energy systems	
	Prof. Dr. Hannes Weigt,	Theresa Wildgrube,	Lars Nolting,	Prof. Dr. Marc Timme,	
	University of Basel	ewi Energy Research & Scenarios	RWTH Aachen University	TU Dresden - cfaed	
14:10	Incentive-based Subsidy and Tax for Efficient Generation Investment	CO2 mitigation costs of smart space heating systems for private households in Germany	Reliability constrained generation expansion planning: Case study for different system sizes and characteristic renewable profiles	The impact of multi-year weather variability on the security of supply in highly renewable power systems: a case study for Germany	
	Lamia Varawala,	Dr. Dominik Schäuble,	Markus Groissböck,	Fridolin Pflugmann,	
	KTH Royal Institute of Technology	Institute for Advanced Sustainability Studies	University of Innsbruck	TU München	



















13th Conference on Energy Economics and Technology

14:30	Low-carbon energy system transformation: the role of markets	Carbon avoided costs for the low-carbon technologies in Russia and EU	Modelling of imports and exports for the German electricity system	Interaction of sector coupling technologies with further flexibility options in energy systems with different PV-Wind shares
	Mike Bostan,	Andrey Khorshev,	Timona Ghosh,	Christoph Zöphel,
	European Federation of Energy Traders	Russian Academy of Sciences	TU Berlin	TU Dresden
14:50	Short 10-Minute-Break			
15:00	Keynote Speech (Room: Hamburg Conference Hall, Chair: Prof. Dr. Dominik Möst) Impulses for a new heat market design			
	Florian Weiser, MVV Energie AG			

15:45 Coffee & Tea

16:15 -	Modelling of the heating sector	Low-Carbon Energy System Transformation	Modelling Aspects of Energy Markets	Transition of the transport sector
17:15	Room: Hamburg Hall Chair: Philipp Hauser	Room: Rotterdam Hall Chair: Christoph Zöphel	Room: St. Petersburg Hall Chair: David Schönheit	Room: Florenz Hall Chair: Michael Burkhardt
16:15	Bottom-up modelling of heating investment using clustered time series data	Survey and classification of business models for the energy transformation	Impact of Different Generation Shift Key Strategies on the Flow- based Market Coupling Domain in Germany	Charging infrastructure business models and policies for electric vehicles in Karnataka
	Berit Hanna Czock,	Johannes Giehl,	Richard Weinhold,	Prof. A.M. Nagaraj,
	ewi Energy Research & Scenarios	TU Berlin	TU Berlin	Dayananda Sagar College of Engineering
16:35	Nearly Zero Energy Cities: Scalability of energy self- consumption from buildings to large urban areas	Cost and Metal Savings through a Second-Life for Electric Vehicle Batteries	Acceleration strategies of the Generation Expansion Problem by Bender Decomposition	The effect of digitalization on the energy consumption of the EU passenger transport
	Manuel Villa,	Anika Regett,	Matthias Zech,	Dr. Michel Noussan,
	FUNSEAM	Forschungsstelle für Energiewirtschaft e.V.	TU Dresden	Fondazione Eni Enrico Mattei
16:55	Active retrofitting for multi-apartment buildings: use case analysis with a special focus on photovoltaics and different heating systems	Pathways for Germany's energy transition towards 2050	Forecasting negative market prices at power exchanges using transformation approaches	Decarbonizing Public Transport: Implementing the Transition to Zero Emissions
	Bernadette Fina,	Frederik Seehaus,	Benjamin Aust,	Elisa Claus,
	TU Wien	TU Berlin	TU Bergakademie Freiberg	KCW GmbH

17:15 Closing Words in the Foyer of the Via Mobile 7, Messe Dresden

Gala Dinner Official Closing Event Friday, 12 April 2019, ~6:30 pm

Restaurant CHIAVERI Bernhard-von-Lindenau-Platz 1 01067 Dresden











