

Hanse-Wissenschaftskolleg
Institute for Advanced Study

Energy Systems Stability 2040 and Beyond – A Techno-Economic Forum



Delmenhorst, 15 – 16 June 2023

Program

Venue:

Hanse-Wissenschaftskolleg
Institute for Advanced Study

Lehmkuhlenbusch 4
27753 Delmenhorst
Tel: +49 4221 9160-100
www.hanse-ias.de

 @HWK_IAS
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Conference chair:

Prof. Dr. Carsten Agert
(DLR Institute of Networked Energy Systems,
Oldenburg)
Prof. Dr.-Ing. Johanna Myrzik
(University of Bremen)

Supported by:

Delmenhorster Universitätsgesellschaft e.V.
Verein der Freunde und Förderer des Hanse-
Wissenschaftskollegs e.V.

Thursday, 15 June 2023

8.30 **Arrivals at the Hanse-Wissenschaftskolleg (HWK)**

08.45 **Welcome**

Dr. Michael Kastner, HWK (host)
Prof. Dr. Carsten Agert, DLR (conference chair)
Prof. Dr. Johanna Myrzik, University of Bremen (conference chair)

09.00— 13.00

Session 1: „Energy Systems Stability 2040: Technical Challenges”

Chair: Prof. Dr. Carsten Agert, *DLR Institute of Networked Energy Systems*

“Fluctuating Generation: Challenges associated with having sufficient energy anytime anywhere”

Simon Müller, Agora Energiewende

“Energy Systems Reliability with Renewable Energies: The US Perspective”

Dr. Jaquelin Cochran, NREL, USA

“No Classical Inertia: Challenges in an inverter-based grid”

Dr. Stefan Geißendörfer, DLR Institute of Networked Energy Systems

Coffee Break

Discussion board / working groups

Presentation of the results

13.00 – 14.00

Lunch

14.00 – 17.30

Session 2: „Energy Systems Stability 2040: Technical Solutions“

Chair: Prof. Dr.-Ing. Johanna Myrzik, University of Bremen

“Solutions for resilient energy supply – sufficient energy anywhere anytime”

Prof. Dr.-Ing. Christian Rehtanz, Technical University of Dortmund

“No Classical Inertia: Solutions for an inverter-based grid”

Dr. Knut Styve Hornnes, Statnett, Oslo

“Automation in Distribution Grids”

Prof. Dr.-Ing. Johanna Myrzik, University of Bremen

Coffee Break

Discussion board / working groups

Presentation of the results

18.30 – 19.00	Arrival <i>Markthalle</i> in Delmenhorst with refreshments
19.00 – 19:15	Welcome
19:15 – 19:45	Keynote “Market Design and Systems Engineering for the National Energy Plan in Panama“ Rebeca Priscilla Ramirez Acosta, OFFIS, Oldenburg
19:45 – 22.30	Buffet with fingerfood and networking

Friday, 16 June 2023

09.00 – 13.00	<p>Session 3: “Economic Challenges and Market Design” Chair: Dr. Patrick Jochem, DLR Institute of Networked Energy Systems</p> <p>“Basic challenges in energy market design and concrete examples of the American market” <i>Prof. Dr. Shmuel S. Oren, University of California at Berkeley</i></p> <p>“General challenges in the German electricity market” <i>Dr. Patrick Jochem, DLR Institute of Networked Energy Systems</i></p> <p>“Current challenges in coordinating electricity market and grid operation” <i>Prof. Dr. Anke Weidlich, University of Freiburg</i></p> <p><i>Coffee Break</i></p> <p>Discussion board / working groups</p> <p>Presentation of the results</p>
13.00 – 14.00	<i>Lunch</i>
15.00 – 16.30	<p>Panel discussion Moderation: Volker Angres, Journalist</p> <p>Participants:</p> <ul style="list-style-type: none"> - Prof. Dr. Carsten Agert, <i>DLR Institute of Networked Energy Systems</i> - Prof Dr.-Ing. Johanna Myrzik, <i>University of Bremen</i> - Christian Meyer, <i>Minister for the Environment, Energy and Climate of Lower Saxony</i> - Roland Hentschel, <i>Oldenburger Energiecluster (OLEC)</i> - Dr.-Ing. Tim Meyer, <i>3Epunkt - Unternehmensberatung Strategie</i> - Hans-Ulrich Salmen, <i>Stadtwerke DelmenhorstGmbH</i>
16.30 – 17.30	Informal get-together