

Plenary Program

7th International Conference on
Smart Energy Systems

4th Generation District Heating, Electrification,
Electrofuels and Energy Efficiency

21-22 September 2021, Copenhagen

#SESAAU2021

 energy CLUSTER
DENMARK



09:00-11:00 1st plenary session chaired by Professor Poul Alberg Østergaard

ROOM: SQUARE 1

09:00-09:10 **Professor Henrik Lund:** Opening speech

09:10-09:30 **Keynote (online): Claudia Kemfert, Professor and Head of Department at DIW, Germany:** Corona crisis: Chance for decentralized energy system transformation with full supply from RE

09:30-09:40 Questions and debate

09:40-10:10 **Keynote: Anders Nordstrøm, Vice President of Hydrogen at Ørsted, Denmark:** PTX potential for 2050 net zero

10:10-10:40 **Keynote: Poul Skjærbæk, Chief Innovation Officer at Siemens Gamesa, Denmark:** Unlocking the Green Hydrogen revolution at the sea

10:40-11:00 Questions and debate

13:45-16:00 2nd plenary session chaired by Professor Brian Vad Mathiesen

ROOM: SQUARE 1

13:45-14:15 **Keynote: Liliana Proskuryakova, Deputy Head and leading researcher at HSE, Russia:** The future of renewable energy and renewable energy systems in Russia

14:15-14:30 Questions and debate

14:30-15:00 **Keynote: Rufus Gifford, former U.S. ambassador to Denmark and nominee for Chief of Protocol at the U.S. State Department:** The new climate policies under the Biden Administration and the global challenges for the Paris Agreement

15:00-15:40 Questions and debate

15:40-15:50 Best Presentation Award Ceremony by Professor Poul Alberg Østergaard

15:50-16:00 Closing by Professor Henrik Lund and CEO Glenda Napier



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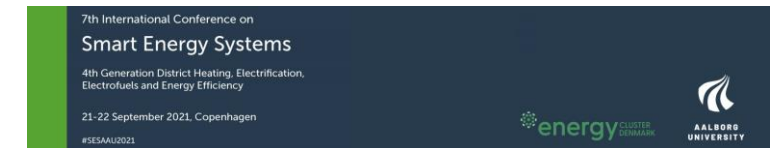
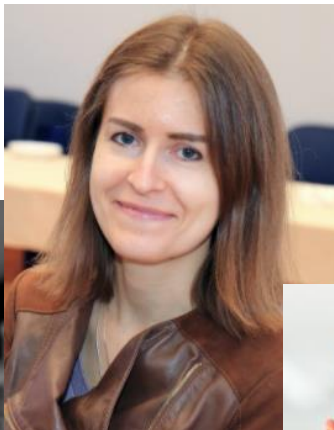
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Thank you to our Keynotes



09:00-11:00 1st plenary session chaired by Professor Poul Alberg Østergaard ROOM: SQUARE 1
09:00-09:10 Professor Henrik Lund: Opening speech

Online: Claudia Kemfert, Professor and Head of Department at DIW, Germany: Corona crisis: Chance for decentralized energy system: transformation with full supply from RE
and debate
Anders Nordstrøm, Vice President of Hydrogen at Ørsted, Denmark: PTX potential for 2050 net zero
Poul Skjærbæk, Chief Innovation Officer at Siemens Gamesa, Denmark: Unlocking the Green Hydrogen revolution at the sea
and debate

Session chaired by Professor Brian Vad Mathiesen ROOM: SQUARE 1
Roskuryakova, Deputy Head and leading researcher at HSE, Russia: The future of renewable energy and renewable energy systems in Russia
ate
Ford, former U.S. ambassador to Denmark and nominee for Chief of Protocol at the U.S. State Department: The new climate policies under the Biden Administration and the
or the Paris Agreement
ate
Award Ceremony by Professor Poul Alberg Østergaard
or Henrik Lund and CEO Glenda Napier

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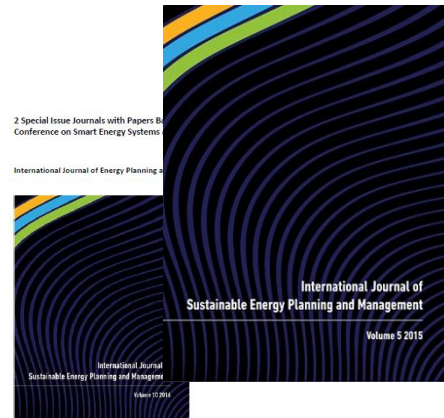
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Thank you to our journals:



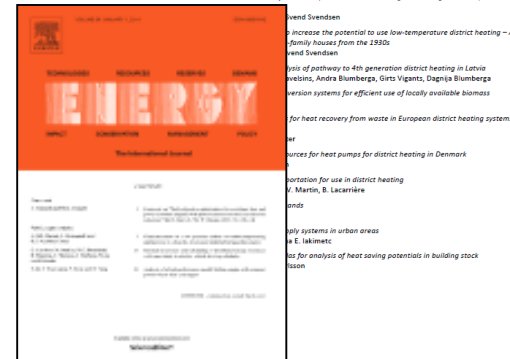
Smart energy systems and 4th generation district heating
Paul Alberg Østergaard, Henrik Lund, Brian Vad Mathiesen

Comprehensive Assessment of the Potential for Efficient District Heating and Cooling and for
High-Efficient Cogeneration in Austria
Richard Büchel, Lukas Kranz, Andreas Müller, Marcus Hummel, Michael Hartner, Yvonne Deng,
Marian Bone

A genetic algorithm technique to optimize the configuration of heat storage in DH networks
Amr Rital Razani, Ingo Weidlich

Smart energy systems applied at urban level: the case of the municipality of Bressanone-Brixen
Matteo Giacomo Prina, Marco Cocchi, Giulia Garegnani, David Moser, Ulrich Filippi Oberegger,
Roberto Vaccaro, Wolfram Sparber

Energy, Volume 110 (1 September 2016)
Special issue on Smart Energy Systems and 4th Generation District Heating
Edited by Henrik Lund, Neven Djui, Paul Alberg Østergaard and Brian Vad Mathiesen
Smart energy systems and 4th generation district heating
Henrik Lund, Neven Djui, Paul Alberg Østergaard, Brian Vad Mathiesen
Hydrogen to link heat and electricity in the transition towards future Smart Energy Systems
Benedetto Nastasi, Gianluigi Lo Basso
The potential of grid-orientated distributed cogeneration on the minutes reserve market and
how changing the operating mode impacts on CO₂ emissions
Dietmar Schüwer, Christine Krüger, Frank Merten, Arjuna Nabel
A methodology for designing flexible multi-generation systems
Christoffer Lythcke-Jørgensen, Adriano Viana Encinas, Marie Munster, Fredrik Haglund
Case study of the constraints and potential contributions regarding wind curtailment in
Northeast China
Weiming Xiong, Yu Wang, Brian Vad Mathiesen, Xiliang Zhang
Decentralized substations for low-temperature district heating with no Legionella risk, and low



Special Issue "4th International
and 4th Generation District Heat

- Print Special Issue Flyer
- Special Issue Editors
- Special Issue Information
- Keywords
- Published Papers

A special issue of Energies (ISSN 1996-1073).

Deadline for manuscript submissions: 15 January 2019

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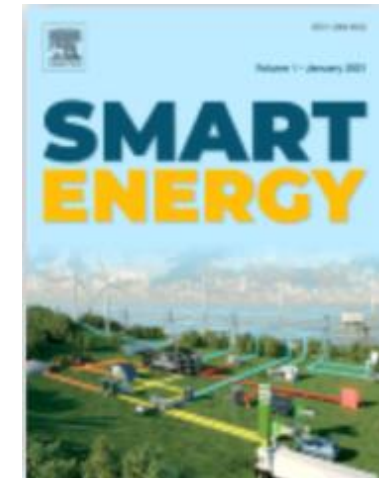
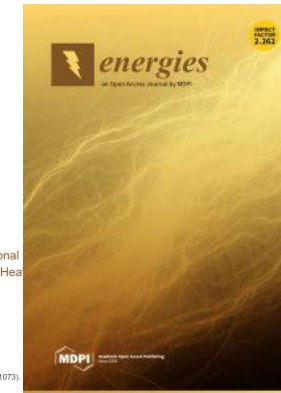


Special Issue Editor

Guest Editor

Assoc. Prof. Karl Sperling
The Technical Faculty of IT and Design, Department of Planning, Sustainable Energy Planning Research
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Interests: public regulation; community energy; smart energy systems; district heating; renewable energy
sources



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Thank you to

- Marko Ban and the SDEWES team for providing the Conference platform and to
- Jakob Zinck Thellufsen for taking care of Zoom and other IT issues



VIRTUAL CONFERENCE PLATFORM



Smart Energy Systems
INTERNATIONAL CONFERENCE



in 3 days, 14 hours, 35 minutes and 2 seconds

AND sessions for easier navigation
on title to collapse / expand individually



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Thank you to our “registration desk” and organising team:

Mette Reiche Sørensen

Pernille Sylvest Andersen

Marianne Nyborg

Phuong Thao Nguyen and
Stéphane Le Borne

(Book of abstracts and homepage)



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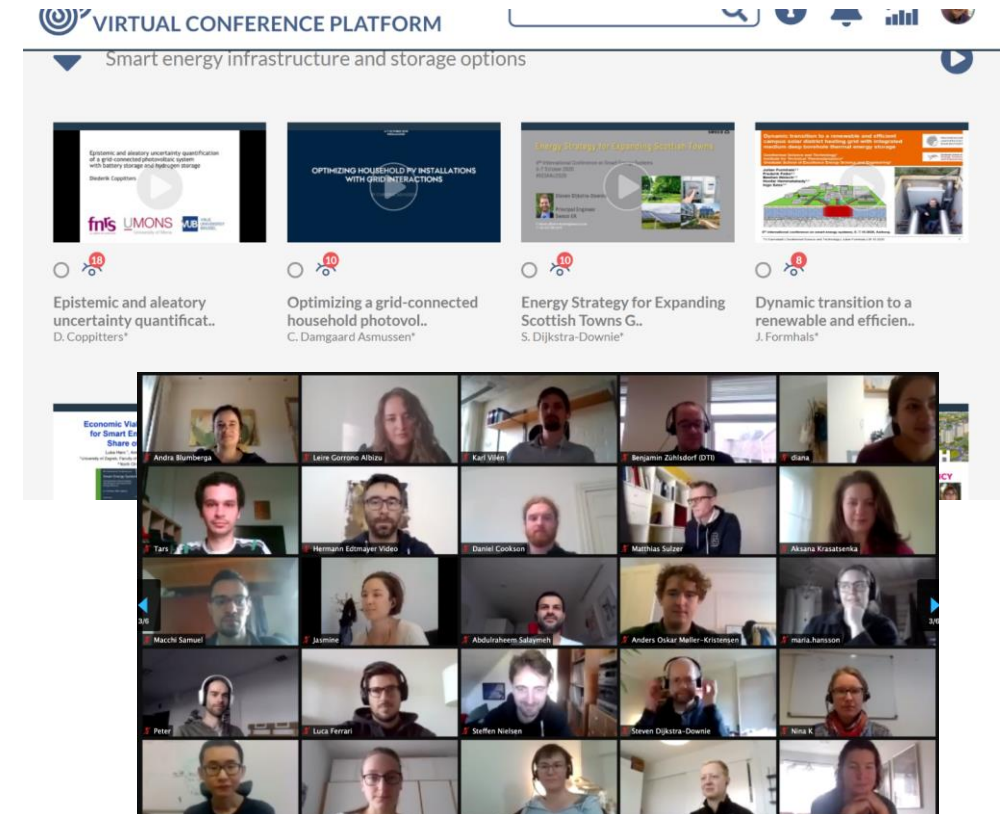
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Thank you to all
participants for
joining us onsite
and online



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160+70 Participants



22 different countries



124 presentations



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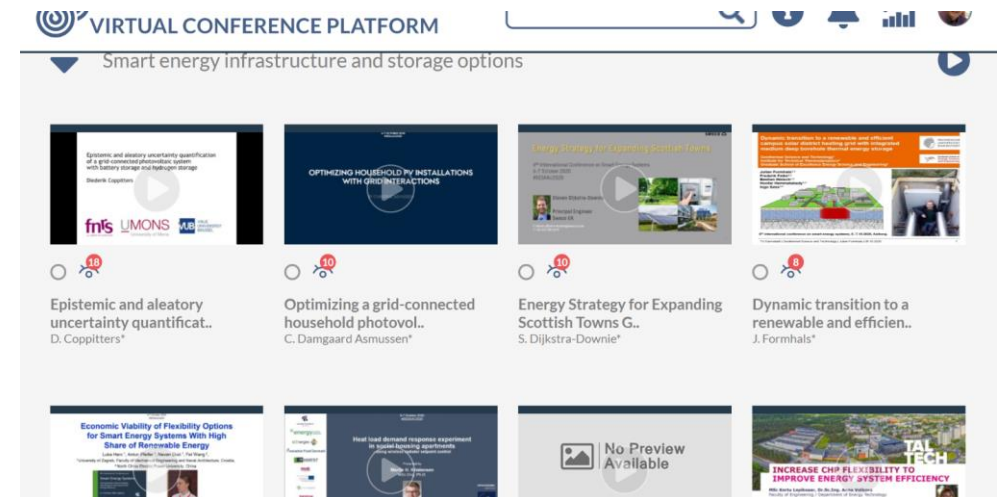
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- The forum for discussion will be open until the end of 23 September
- The platform will be open for all participants until next year's conference



13-14 September 2022 in Aalborg

sEnergies



4DH
4th Generation District Heating
Technologies and Systems

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Save the date!



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See you next year!



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