

EnergyLab Nordhavn's recommendations for Future Sustainable Energy Systems

Day 1

08:30 - 09:00 **Coffee and registration**

09:00 - 09:30 **Welcome**

Lykke Friis, Moderator
Former Minister of Climate and Energy and former prorector at University of Copenhagen

Anders Bjarklev, President, Technical University of Denmark
- Partnerships will support the green transformation

09:30 - 09:50 **Introducing EnergyLab Nordhavn**

Christoffer Greisen, Project manager, EnergyLab Nordhavn
- A short introduction to EnergyLab Nordhavn

09:50 - 12:00 **Sector coupling and smart energy systems – results and possibilities**

Integration of energy infrastructure
- Kristian Honoré, Energy Planner HOFOR and Poul Brath, Lead Strategy Consultant Radius

Coffee break

The future homes are automated
- Allan Andreassen, VP ABB and Rongling Li, Assistant Professor DTU Civil Engineering

Field experience with the heat booster substation in Havnehuset
- Jan Eric Thorsen, Director Danfoss DH Application and Torben Ommen, Researcher DTU Mechanical Engineering

12:00 - 12:45 **Lunch**

12:45 - 13:30 **It is all about partnerships**

An interview with project participants focusing on challenges and successes from a four year partnership.

Jane Hegner Mortensen, By & Havn
Benny S. Hansen, ABB
Poul Brath, Radius
Carsten Rode, DTU BYG
Christoffer Greisen, EnergyLab Nordhavn, DTU

The interview is hosted by Lykke Friis and the audience is welcome to participate with additional questions.

13:30 - 14:20 **Panel discussion: Digitalization, Sector coupling and new markets - what is holding us back?**

The panel will represent the triple helix of EnergyLab Nordhavn, showcasing how industries, authorities and universities must work together in order to accomplish a successful green transition.

Panel
Claus Madsen, CEO ABB
Katrine Krogh Andersen, SVP and Dean of Research DTU
Kristoffer Böttzauw, Director General Danish Energy Agency
Anne Skovbro, CEO By & Havn

14:20 - 14:40 **Coffee break**

14:40 - 15:30 **What will take us to the next step?**

Jacob Østergaard Professor and Head of Center for Electric Power and Energy, DTU Elektro
- The future digital energy reality

Lawrence Orsini, CEO and founder, LO3 Energy
- Are the future energy markets local?

15:30 - 16:00

Recommendations

After 4½ year of research and demonstrations under real life conditions in Nordhavn the partners of EnergyLab Nordhavn have a lot of experiences to share. From these experiences we will present a few main points and recommendations for Danish as well as international authorities, regulators, consultants and industrial players on how to efficiently drive the next steps of the green transition of cities.

Christoffer Greisen, Project Manager in EnergyLab Nordhavn will hand over recommendations to Kristoffer Böttzauw, Director, Danish Energy Agency.

16:00 - 18:00

Reception and networking

Cava and canapés are served after the conference.

Day 2

09:30 - 09:45

Opening session

Jacob Østergaard, Professor and Head of Center for Electric Power and Energy, DTU
EnergyLab Nordhavn - aims and relevance

09:45 - 09:55

Overview of research in EnergyLab Nordhavn

Christoffer Greisen, Project Manager EnergyLab Nordhavn

10:00 - 10:40

Energy in buildings

10.00 - 10.20 Palle Holdt, COW
- A perspective on smart energy buildings

10.20 - 10.40 Rongling Li, DTU BYG
- Energy flexibility in buildings

10:40 - 11:00

Coffee

11:00 - 11:35

Fuel shift and load profiles

11:40 - 12.00 Kasper Korsholm Østergaard, Metro Therm
- Fuel shift and electrical heater storage - new tools for energy network operators?

12.00 - 12.20 Hanmin Cai, DTU CEE
- Flexibility in integrated heat and electricity system - experimental insights from EnergyLab Nordhavn

11:35 - 12:20

Energy communities and data analytics

11.00 - 11.20 Ulrik Jørgensen, STS-Research
- Local energy communities in the energy transition, external case from Energy Forum South Harbour

11.20 - 11.40 Guillaume Le Ray, DTU CEE
- Analytics in the field of energy: A data story

12:20 - 13:10

Lunch

13:10 - 13:50

District heating infrastructure

13.10 - 13.30 Tore Gad Kjeld, HOFOR
- Intelligent control and optimization of future flexible heat pumps

13.30 - 13.50 Wiebke Meesenburg, DTU MEK
- Technical feasibility and limitations of flexibly operated large-scale heat pumps

13:50 - 14:20

Cross-sectoral questions to speakers

14:20 - 15:30

Guided tour in Nordhavn

Open invitation for guided tour of Nordhavn
e.g.
Lüders konditæg
Havnehuset
Menyi riffelsyndikatet
Smart chargers portland
