# EE SOLUTIONS SUMMIT PROGRAM

9 JUNE 2022 SØNDERBORG





## **PROGRAM**

7.30-8.15	A hybrid crew transfer vessel will be available to taxi summit attendees over the harbour basin from Alsik hotel to Alsion. Departure by the shore at Alsion
8.00	Check-in
8.30	Opening remarks:
	Lars Sandahl Sørensen, CEO, Confederation of Danish Industry
8.40	Opening remarks:
	Dr. Brian Motherway, Head of Energy Efficiency, IEA
8.50	Panel: A Conversation on Public-Private Partnerships Driving
	Decarbonization through Energy Efficiency
	• Jürgen Fischer, President, Danfoss Climate Solutions
	• Monica Frassoni, President, European Alliance to Save Energy
	Patty Monahan, Commissioner, California Energy Commission
	• Christian Heine, CEO, Hamburger Energiewerke GmbH; Member of the
	Board, National Association Of Municipal Utilities, Germany
	• Niels Fuglsang, Member of the European Parliament, Rapporteur on the Energy
	Efficiency Directive
	Moderator: Connie Hedegaard, Chairman of the Board, CONCITO, former EU
	Commissioner for Climate Action
9.45	Coffee break
10.00	Sector sessions part 1
	Decarbonizing Buildings through Automation and Control (Room U109)

• Energy Efficiency in Urban Land Transport (Room M301)

Energy Efficiency in Industrial Processes and Manufacturing (Room M201)
Sector Integration through District Heating (Room "Red Box" 3rd floor)

#### 10.45 Coffee break

## 11.00 Sector sessions part 2

- Energy Efficiency in Buildings: Deep Renovation, People and Health (Room U109)
- Energy Efficiency in Maritime Transport (Room M301)
- Energy Efficiency in Heavy Industry (Room M201)
- Sector Integration through PtX and Symbiosis (Room "Red Box" 3rd floor)

## 11.45 Lunch

On stage during lunch

• Project Zero: Sønderborg's Plan for a Carbon Neutral Energy System in 2029

## 12.45 Site visits: Solutions in Action Workshops

Parallel to the site visits there will be a live recording of FORESIGHT Climate and Energy's WATT MATTERS podcast open for audience (Room U109)

## 14.15 Reception

- Dan Jørgensen, Minister for Climate, Energy and Utilities, Denmark
- Jesper Petersen, Minister for Higher Education and Science, Denmark

Entertainment by Jazzkollektivet

Musical happening by Sønderborg Female Choir



#### **PROGRAM**

## DECARBONIZING BUILDINGS THROUGH AUTOMATION AND CONTROL

The cheapest energy is the energy we don't use – energy use in buildings can be optimized by making buildings smart with automation and control, as well as installing the best available equipment both for heating, ventilation, and air conditioning (HVAC) and refrigeration. E.g., in supermarkets, sustainable data centers and smart buildings.

#### 10.00 Introductory remarks

· Moderator: Francesco Scuderi, Secretary General, Eurovent

#### 10.05 A Conversation on Automation and Control

- Frank Taaning Grundholm, Vice President, Global HVACR Sales, ABB Motion
- · Henning Højbjerg Kristensen, Managing Director, BITZER Electronics
- Dr. Niels Bidstrup, Chief Specialist, Regulatory & Technical Affairs, GRUNDFOS
- Stephane Nassau, President Global Sales, Danfoss Climate Solutions
- Tomas Brannemo, President Building Solutions, Johnson Controls

#### 10.40 Moderator wrap-up

· Francesco Scuderi, Secretary General, Eurovent

#### **PROGRAM**

## **ENERGY EFFICIENCY IN URBAN LAND TRANSPORT**

Transport is central to the world we live in. The future of urban land transport must act with ambition for the planet and effectively serve the needs of citizens and businesses who rely on transport for their deliveries and supply chains.

#### 10.00 Introductory remarks

 Moderator: David Hunt, Chair of Decentralised Energy Forum, REA & Energy Storage Alliance

#### 10.05 A Conversation on Urban Land Transport

- · Lasse Altmann, Head of E-mobility, ABB; Member of the Board, Danish E-Mobility
- Nicolai Fåborg Andresen, VP Grid and Construction, Better Energy
- Kimmo Rauma, Vice President, Danfoss Editron
- Peter Westergaard, Managing Director, Bitzer
- Rune Noack, Director, Transport Policy, Confederation of Danish Industry

#### 10.40 Moderator wrap-up

• David Hunt, Chair of Decentralised Energy Forum, REA & Energy Storage Alliance

#### **PROGRAM**

## ENERGY EFFICIENCY IN INDUSTRIAL PROCESSES AND MANUFACTURING

Industrial processes and manufacturing are some of the hardest sectors to decarbonize. Optimizing heating, ventilation, and air conditioning (HVAC), refrigerant and hydraulic balancing is critical to help ensure decarbonization. Ensuring reliability, uptime, efficiency, and reuse of heat between processes in industry is critical to meet energy efficiency targets.

## 10.00 Introductory remarks: Efficiently Transitioning German Industry – Learnings and Takeaways

· Christian Noll, Managing Director, DENEFF

#### 10.10 Panel: Decarbonizing Production - Solutions of Tomorrow are Ready Today

- · Lars Knaack, CEO, NOVENCO Building & Industry
- Søren Kvorning, Senior Vice President Global Sales, Marketing and Services, Danfoss Drives
- · Christian Noll, Managing Director, DENEFF

#### 10.40 Moderator wrap-up

· Katrine Bjerre M. Eriksen, Managing Director, SYNERGI

### **PROGRAM**

## SECTOR INTEGRATION THROUGH DISTRICT HEATING

District Energy is an energy system integrating several energy carriers, energy sources, and energy consumers in an intelligent and flexible interplay, achieving efficient and optimal energy solutions. This session explores the perspective in a much wider expansion of district energy systems to achieve energy efficiency benefits across a range of sectors.

#### 10.00 - 10.45 A European Perspective on District Energy

• Brian Vad Mathiesen, Professor, University of Aalborg

## The Role of District Energy towards Carbon Neutrality - in Sønderborg and Beyond

• Lars Tveen, CEO, Bitten & Mads Clausen's Foundation; Chairman of Project Zero

## Panel: Optimizing Sector Integration in District Energy

- Henrik Bjerregaard, Vice President, Corporate Relations, Logstor / Kingspan
- Martin B. Petersen, Sales Director, ABB Northern Europe
- Steen Schelle Jensen, Head of Business Development Heat/Cooling Division, Kamstrup
- · Carsten Østergaard Pedersen, Business Development Director, District Energy, Grundfos

#### **PROGRAM**

## ENERGY EFFICIENCY IN BUILDINGS: DEEP RENOVATION, PEOPLE AND HEALTH

There are many benefits to reducing energy – not least when it comes to the climate, the economy, and our welfare: Three areas that must go hand in hand with a green transition. E.g., in schools, nurseries, and offices.

#### 11.00 Introductory remarks

• Moderator: Francesco Scuderi, Secretary General, Eurovent

#### 11.05 A Conversation on Deep Renovation

- Tina Mayn, Senior Vice President for Products, Velux
- · Lars Knaack, CEO, Novenco Building & Industry
- Monica Frassoni, President, European Alliance to Save Energy

#### 11.40 Moderator wrap-up

· Francesco Scuderi, Secretary General, Eurovent

#### **PROGRAM**

# ENERGY EFFICIENCY IN MARITIME TRANSPORT

All industries are looking to becoming cleaner, greener, and more energy efficient – and the maritime sector is no exception. Improved energy efficiency means less fuel is used, and that means less harmful emissions and better economy.

#### 11.00 Introductory remarks

• Moderator: David Hunt, Chair of Decentralised Energy Forum, REA & Energy Storage Alliance

#### 11.05 A Conversation on Maritime Transport

- Jacob Lundholm, Sales Specialist, Marine & Ports, ABB
- · Jens Ole Hansen, COO, ForSea
- Kimmo Rauma, Vice President, Danfoss Editron
- Johan Inden, President of the Marine Business, Volvo Penta

#### 11.40 Moderator wrap-up

• David Hunt, Chair of Decentralised Energy Forum, REA & Energy Storage Alliance

#### **PROGRAM**

## ENERGY EFFICIENCY IN HEAVY INDUSTRY

Industry is one of the hardest sectors to decarbonize – not least when it comes to heavy industry processes. Optimizing heating, ventilation, and air conditioning (HVAC), refrigerant and hydraulic balancing is critical to help ensure decarbonization. Ensuring reliability, uptime, efficiency, and reuse of heat between processes in industry is critical to meet energy efficiency targets.

#### 11.00 Introductory remarks: Accelerating Industry Decarbonization through Energy Efficiency

• Lisbeth Randers, Head of Secretariat, Kalundborg Symbiose

### 11.10 Panel: Decarbonizing Heavy Industry - Challenges and Opportunities

- · Søren Kvorning, Senior Vice President, Global Sales, Marketing and Services, Danfoss
- Lisbeth Randers, Head of Secretariat, Kalundborg Symbiosis
- Burcin Temel McKenna, Global Director of Green Cement Solutions R&D, FLSmidth; Member of the Board, EIT Raw Materials

#### 11.40 Moderator wrap-up

· Katrine Bjerre M. Eriksen, Managing Director, SYNERGI

### **PROGRAM**

## SECTOR INTEGRATION THROUGH POWER-TO-X AND SYMBIOSIS

District Energy is an energy system integrating several energy carriers, energy sources, and energy consumers in an intelligent and flexible interplay, achieving efficient and optimal energy solutions. This session explores the perspective in a much wider expansion of district energy systems to achieve energy efficiency benefits across a range of sectors.

## 11.00 - 11.45 Our Vision and Results in Sector Integration in Esbjerg - Denmark's Energy Metropolis

Claus A. Nielsen, Head of Business Development, Din Forsyning

#### Collaborative and Commercial Energy - in Pursuit of Symbiosis

Christopher Sorensen, CEO, GreenLab Skive

## PtX - Integrating Wind and Solar - Electricity and Heating

Rene Alcaraz Frederiksen, Head of PtX Project Execution, European Energy

#### PtX - Important Contribution for the German Energiewende in Industry and Transport

Tara Sabbagh Amirkhizi, Team Leader, Consulate General of Denmark in Hamburg

## Dialogue: Optimizing Efficiency through Power-to-X and Symbiosis

Panelists: The above speakers

#### SITE VISITS

## **SOLUTIONS IN ACTION WORKSHOPS**

#### **BUILDINGS:**

## Stop 1) Linde Haven - a New Sustainable City Area

As the world grows, new city areas are added all over the world. How they are constructed is an important factor in the green transition. The new city area of Linde Haven in Sønderborg is built to meet the highest sustainability standards, not least regarding energy efficiency. Examples of the active energy efficiency measures include heat supply through a local district energy system, heat control with model-predictive control systems, and heat distribution and room controls that allow for lower temperatures at night or over a holiday period for further energy savings.

## Stop 2) Vocational Education Centre South - Renovations with an Eye for the Future

Vocational Education Centre South is South Jutland's largest educational institution, educating the green workforce of the future – plumbing and heating engineers, electricians, and automation and process professionals to name a few. On the site visit we will see how the school itself is renovated with sustainability and energy efficiency principles in mind establishing a glass atrium to optimize day light and indoor climate amongst other interventions. The school also works actively to integrate sustainability in all its teaching.

## TRANSPORT:

## Stop 1) Ellen – the World's Longest Ranging Electric Ferry

With 4.27 billion passengers and 373 million vehicles transported by ferry each year, ferries are significant carbon emitters and often sail close to cities where they add to already critical air pollution levels. Ellen is the longest ranging fully electric ferry in the world. This medium-sized ferry does not emit carbon and operates at lower costs. In Europe alone 696 operating ferries can be replaced by an electric solution similar to Ellen.

## Stop 2) Better Energy - The Filling Station of the Future

A first look at the construction site of the charging station of the future, where solar power production is located right next to the chargers. That means minimizing energy loss, and true energy optimization in the transport sector. Once the landmark project is completed, electrical car owners will be able to supercharge their vehicles in no more than 15 minutes with clean, sustainable energy from the sun produced only around 50 meters from the point of charging.

#### INDUSTRY:

#### Vesterled - a Brick Plant on the Path to Carbon Neutrality

Producing materials in the heavy industry sector is an extremely energy intensive process - requiring around 2,300 Mtoe in 2019, roughly equivalent to the total primary energy demand of the United States. The Vesterled brick factory has reduced their energy consumption for heating by an estimated 29% in 20 years by improving energy efficiency, reusing heat and by designing a new brick. As a result, carbon emissions in production have been cut by an estimated 36%.

For the past 30 years, Vesterled has been Denmark's most energy efficient brick plant, working strategically to improve sustainability in their entire value chain from product design to sourcing and production.

## SECTOR INTEGRATION:

## The Local Supermarket - How Excess Heat Can Power the World

In 2018, heat accounted for 50% of global final energy consumption. In the US, 65 % of all energy produced ends up as waste heat. All over the world, there is tremendous potential in reusing heat that would otherwise be wasted.

Supermarkets are an integral part of communities around the world, and big energy consumers. In the UK for example, supermarkets consume approximately 3 % of the nation's electricity produced. The local supermarket in Sønderborg reuses the excess heat that is generated from cooling displays and freezers. This means the supermarket can cover 78 % of its heating needs from its own cooling displays. Furthermore, the supermarket sells green excess heat to nearby homes and companies through the district energy system.



#### WATT MATTERS

## THE FORESIGHT ENERGY TRANSITION PODCAST



Experience a live recording of the podcast with Paula Glover (Alliance to Save Energy), Melanie Slade (IEA), Co-host Michaela Holl (Agora Energiwende) and Co-host David Weston (FORESIGHT Clmate & Energy).

June 9, 2022 | 1:00 PM - 2:10 PM. Alsion

From FORESIGHT *Climate & Energy*, Watt Matters is a podcast all about the energy transition and the shift to a decarbonised economy. Through biweekly debates and discussions on the energy transition in Europe, North America and around the world, Watt Matters focuses on how to achieve thriving renewable energy markets and liveable cities through the right mix of policy, regulation, finance and technology.

In 2016, FORESIGHT *Climate & Energy* was launched to help break down the silos of our carbon-based economy and connect the dots of the energy transition. Now we have launched Watt Matters, a podcast all about reaching net zero in the most practical and affordable way.

In each episode of Watt Matters, FORESIGHT Editor David Weston will be joined by Michaela Holl from Agora Energiewende and Jan Rosenow of the Regulatory Assistance Project, as well as regular guests from around the world, to discuss a different topic on the energy transition to a decarbonised economy.

## www.wattmatterspodcast.com



MICHAELA HOLL



**DAVID WESTON** 



**JAN ROSENOW** 

