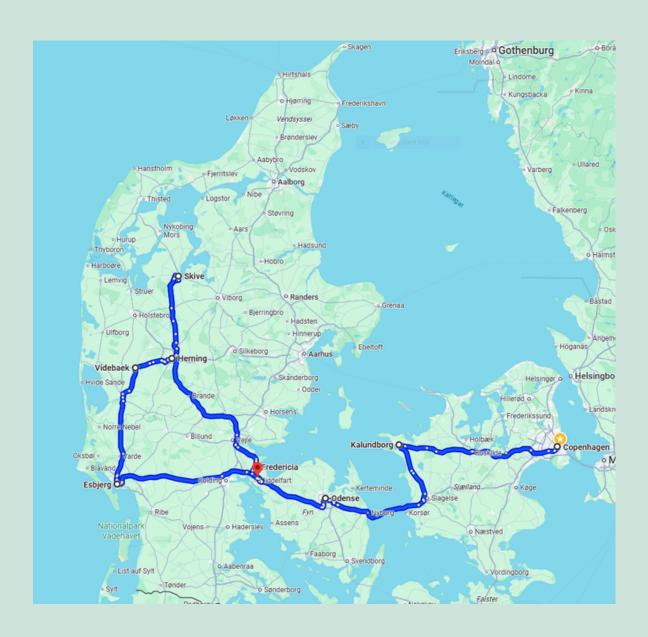
Delegation program: CSI in Denmark

Oregon Industrial Symbiosis Tour



Exploring the Danish approach to industrial symbiosis



Resource efficiency has long been embedded in Denmark's green approach. Since the 1970s public and private companies have engaged in local industrial symbioses, exchanging residual and surplus products such as water, energy, and natural resources.. This circular mindset and business model has been named the best available technology for achieving European climate goals of cleaner industrial production by 2030. All over Denmark, these local partnerships show how companies can obtain a green energy supply while using, sharing, and conserving resources sustainably.

We hope that the Danish experiences you encounter on your trip will inspire and instigate an even greater appetite for resource-efficient measures.



Scan the QR-code to learn more about some of Denmark's ressource-efficient industries.

Sunday, 21. September

15:00

Check-in at Hotel

Comwell Copenhagen Portside Alexandriagade 1, 2150 Nordhavn Christina will be in the lobby at 15:00

17:00

Welcome orientation and preview of

study tour

Location will be shared on Whatsapp

18:30

Walk to welcome dinner

Christina will lead the way

19.00-21.00

Dinner

Evening

Overnight stay in Copenhagen

Comwell Copenhagen Portside Alexandriagade 1, 2150 Nordhavn

Additional resources



Read the latest State of Green publication on sustainable industry



Listen to Sound of Green to hear stories from Denmark's green transition



Vitsit stateofgreen.com to see more solutions from Danish solution providers



Monday, 22. September

08:00 Be in the hotel lobby ready to leave

08:15-09:00 Transport to State of Green, Denmark

09:00-12:30 Session at State of Green

House of Green Vesterbrogade 1E, 1620 CPH V Together with partners from the Danish Energy Agency, Biogas Denmark, Danish Industry and the Danish Agriculture and Food Council, State of Green will facilitate an introduction to Denmark's green transition. From the 70s oil crisis to the flourishing industrial symbioses of today, we'll tell the story of how Denmark has transitioned it's energy system while maintianing security of supply and a competitive economy,

Contact person:

Maria Lind Arlaud, Project Manager, State of Green +45 40 47 80 04 l mla@stateofgreen.com

12:30-13:30 Lunch at House of Green

13:30 Exploring Copenhagen from the sea front

Evening Dinner on your own and overnight stay in

Comwell Copenhagen For dinner recor

Portside

Alexandriagade 1, 2150 Nordhavn For dinner recommendations, you're welcome to ask Maria Lind Arlaud.

Suggestions for an afternoon in Copenhagen

 The Green Walk: Take our interactive audio walk to explore Copenhagen's energyefficient buildings and architectural marvels, while listening to insights from Denmark's green transition.



- Visit the former industrial ditrict Refshaleøen and grab a snack at the popular streefood market Reffen
- Amalienborg Palace: Witness the changing of the guard at the royal residence of the Danish monarchy.







Tuesday, 23. September

Campus Kalundborg 3 4400 Kalundborg

07:30 Be in the hotel lobby ready to leave

07:45-09:20 **Transport from Copenhagen to Kalundborg**

Welcome and presentation of Kalundborg 09:30-11:15

Symbiosis and Partnerships

In Kalundborg Symbiosis, the city's biggest industrial public and private companies work together across sectors to share excess energy, water, and materials. In other words, one company's surplus of resources adds value to another. More than 20 different streams of excess resources flow between the companies, creating a symbiosis of resource exchange, adding more resilience and profit to the partners.

Contact person (throughout the visit): Lisbeth Randers Head of Administration, Kalundborg Symbiosis +45 5953 4500 l lirs@kalundborg.dk

11.15-12:00 The Meliora Bio case and Symbiosis Tour to the Harbor Park

> Meliora Bio is a modern state of the art biorefinery upcycling straw for bioethanol, prebiotics, and lignin.

12.00-12:40 Lunch

12:40-14:00 **Workshop on Symbiosis Streams and Ecosystems**

14:00-14:45 **Introduction and transport to Kalundborg Utility**

14:45-16:00 **Kalundborg Utility visit**

> Kalundborg Utility supplies approx. 6,150 households with drinking water and distributes district heating to approx. 5,050 households in Kalundborg city, and cleans waste water from the entire Kalundborg Municipality. In addition, they supply surface water to several large companies in the

symbioses.

16:00-18:00 Transport to Faaborg

Dinner together and overnight stay in Faaborg

Hotel Faaborg Fjord Svendborgvej 175 5600 Faaborg

Evening

Dokhavnsvej 15

4400 Kalundborg





Wednesday, 24. September

07:45 Be in hotel lobby ready to leave

08:00-09:00 Transport to VandCenterSyd

09:00-11:00 Visit VandCenterSyd in Odense

Ejby Møllevej 22, 5000 Odense C

Ejby Mølle in is a state-of-the-art water resource recovery facility, with very high standards for wastewater treatment. The facility now produces more energy than it consumes. In 2018, the facility reached energy self-sufficiency of 180% – and VCS continue to push the limits for what is currently considered possible.

Contact person:

Martin Westerboe Sørensen, Special Consultant +45 40 80 84 54 l mws@vandcenter.dk

11:00-13:00 Transport to Esbjerg Harbor

Lunch on the bus

13:00-15:00 Esbjerg Habor visit

Hulvejen 1 DK-6700 Esbjerg, Denmark

The Port of Esbjerg is the world's largest base port for offshore wind and a frontrunner in Europe's offshore sector. Once a fishing harbour, it has transformed into an energy hub with activities like Power-to-X production and a science centre, driving job creation, investment, and population growth in the city.

Contact person: Jesper Bank, CCO, Port of Esbjerg +45 51 96 18 40 l jba@portesbjerg.dk

Evening

Esbjerg Scandic Olympia, Strandbygade 3, 6700 Esbjerg Free time, dinner together and overnight stay in Esbjerg





Thursday, 25. September

08:30 Be in the hotel lobby ready to leave

08:45-09:00 Transport to Esbjerg Municipality

09:00-12:00 Workshop with Esbjerg Municipality

Torvegade 74 6700 Esbjerg

Esbjerg is known as the Green Energy Metropolis of Denmark. As home to Europe's largest offshore wind service port and a growing cluster of renewable energy companies, the city also pioneers innovative district energy systems and sector coupling solutions that integrate renewable power, heating, and industry. Together, these strengths make Esbjerg a key driver of Denmark's green transition and a gateway for global energy collaboration

Contact person:

Peter Raben Nebeling, Chief Consultant, Esbjerg Municipality +45 27 24 13 56 l pne@esbjerg.dk

12.00-13.30 Transport to Videbæk

Lunch on the bus

13.30-15.30 Site visit to Danmark Protein (Arla Foods)

Sønderupvej 26, 6920 Videbæk

Danmark Protein is the worlds largest whey protein and lactose factory, producing protein from the leftovers of cheese production.

Contact person:

Nicolaj Schmidt Damgaard, Water and Sustainability Specialist

+45 9131 8223 I nidam@arlafoods.com

15.30-16:15 Transport to Herning

Evening Free time, dinner on your own and overnight

stay in Herning











Friday, 26. September

07:40 Be in the hotel lobby ready to leave

07:55-09:00 Transport to GreenLab Skive

09:00-12:00 Sitevisit at GreenLab Skive

Næstildvej 10A,
7860 Spøttrup

GreenLab is a circular energy park for businesses
contributing to the green transition. Companies are
supplied with sustainable energy from multiple
sources, tailored to their production needs, and
connected through the SymbiosisNet™ – a smart
grid that enables the sharing of surplus energy and

resources.

Contact person:

Mathias Damgaard Mørch, Education Manager

+45 9299 5351 l<u>madm@greenlab.dk</u>

12:00-14:00 Transport to Frederica Energy

Lunch on the bus

14:00-16:00 Sitevisit at Crossbridge Energy

Egeskovvej 265, 7000 Fredericia Crossbridge Energy A/S, supplies over a third of Denmark's liquid fuel consumption. They are also Denmark's largest supplier of surplus heat, heating over 115,000 homes in the Triangle Region, equivalent to the annual consumption of

23,000 households.

Contact person:

Lasse Kristoffersen

+45 79203541 lasse.kristoffersen@crossbridge.dk

Torben Øllegaard Sørensen

+45 40779257 | t.soerensen@crossbridge.dk

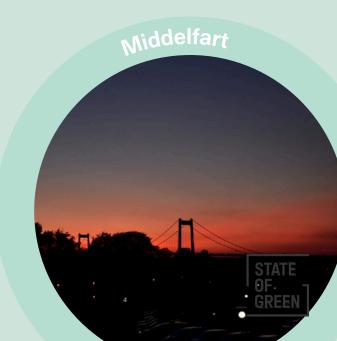
16:00-16:30 Transport to Middelfart

Evening

Comwell Middelfart Karensmindevej 3, 5500 Middelfart Celebratory closing dinner and overnght stay in Middelfart







Meet the team in Denmark



Maria Lind Arlaud Project Manager, State of Green





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Project Assistant, State of Green



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State of Green is your one-stop-shop to more than 600 Danish businesses, agencies, academic institutions, experts and researchers. State of Green connects you with leading Danish players working to drive the global transition to a sustainable, low-carbon, resource-efficient society.



Christina Østergaard

Event planner, Østergaard Event



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christina@ostergaardevent.dk

østergaard event

Christina Østergaard runs a professional event planning team and is responsible for planning the logistics around the delegation's trip to Denmark.



Meet the team from CSI



Rhys Roth

Excecutive Director, Center for Sustainable Infrastructure



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CSI is the trusted Pacific Northwest-based non-profit with a mission to catalyze state-of-the-art sustainable infrastructure solutions that help communities of every kind thrive economically, socially and environmentally.