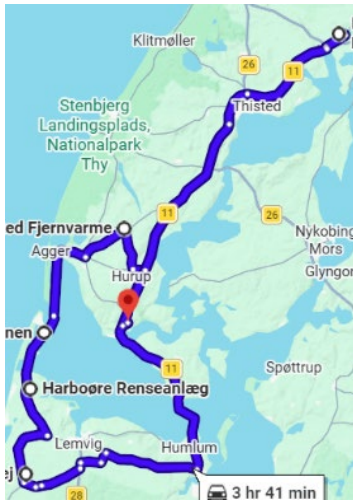


Renewable Study Tour August 2026

INFORSE-Europe Sustainable Energy Seminar in Denmark



Read more: https://www.inforse.org/europe/seminar_2026_INFORSE-Europe_Denmark.htm

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The Nordic Folkecenter for Renewable Energy



What is the Folkecenter?

Established in 1983, the Folkecenter is a visitor and training center devoted to spreading and demonstrating information on renewable energy. The Center is also doing research, development, testing and implementation of innovation within the renewable energy field and other environmental technologies. The Folkecenter is one of the founding members of INFORSE-Europe at the Earth Summit in Rio in 1992.



What can visitors find?

- Octagonal Conference Hall seating up to 200 people. The Hall was built underground using passive architecture principles with windows to the south, solar cells in the windows heated by a heatpump, and much more.
- Exhibition hall with wind mill history showing different types of wind turbines and windmill blades.
- Exhibitions of several types of solar water-heating collectors, and solar cells.
- Different type of solar cells (PV) on the roofs of buildings and integrated in windows.
- Test site for different types of windmills up till 30 kW.
- "Biodome", a greenhouse, where aquaculture techniques are implemented.
- Green waste water treatment based on biological systems.
- "Passive Energy House" a house which produces more energy than it consumes.
- Straw bale house where visitors can see different insulation materials.
- Exhibition of several wave energy models.
- Small shop and library



<https://www.folkecenter.dk/>

1. Bedsted Fjernvarme: District Heating Plant with new large heat pump



The district heating plant has two production plants. The old plant, built in 1963, is located at Balsbyvej 3. Here, there is a 2.5 MW wood pellet plant dating from 1983. The boiler is a Danstoker equipped with a Vølund feeding system; it was originally designed to burn coal but it was converted to wood pellets in 1989. The plant also contains a 2.5-MW oil boiler used as a backup. The boiler was bought second-hand in 2001 from Strandby heating plant. Today, both boilers serve as backup for the new heating plant at Vestervigvej 120, which was built in 2022-23. The new plant consists of a 1.2-MW Fanagy heat pump, an 8-MW Parat electric boiler, and a 2,200 m³ water storage tank. The production is powered exclusively by electricity.

Read More: <https://bedstedfjernvarme.dk/om-os/historie>



2. Thyborøn Sydhavn Windmill: The world's largest co-operatively owned windmill

The 266 m tall 15-MW Vestas V236 wind turbine at Thyborøn South Harbour is owned and operated by a local cooperative. It is the world's largest community-owned land wind turbine. The windmill cost DKK 170 million, and it is owned by 2,800 cooperative members, all of whom live in the Lemvig Municipality. The windmill also serves as a test turbine for Vestas, and it is part of the green transition of the Harbour of Thyborøn. This guild is a prime example of how local ownership of renewable energy plants and local value creation can be achieved. The project has been carried out without a single complaint and was approved unanimously by the city council of Lemvig.

Read More: <https://www.thybsydhavnmolle-2.dk/> and <https://www.thybsydhavnmolle-2.dk/>



3. Harboøre Wastewater Treatment Plant: New pyrolysis plant



The wastewater plant treats 4,000 tons of sewage sludge annually. The new pyrolysis plant converts the sludge into biochar. The sludge is heated in a pyrolysis furnace at temperatures up to 750°C in an oxygen-free room, reducing the sludge to about 10% of its original weight. Through pyrolysis, carbon is stored in the resulting biochar. At the same time, gases from the organic sludge are used to power the process instead of being released as methane, which is a strong GHG. Some of the environmentally harmful substances, such as microplastics and PFAS, can be broken down in the process, but there are still challenges (e. g if the sludge contains heavy metals). There is an expectation of producing annually about 350 tons of biochar and 2,000 MWh of energy, which is fed back into the treatment plant's process and, in the long term, possibly used more widely (e.g., as heat). In Denmark, the present regulation does not allow the use of biochar for soil improvement. agricultural soil.

Read More: <https://aquagreen.dk/pyrolysis-is-part-of-the-industrys-future>

4. Climate Park Ramme: Solar-Wind-PtX-& Nature

The Climate Park, located southwest of Lemvig, is a green energy project that combines solar panels, wind turbines, nature, and PtX (Power to X) production, developed by Skovgaard Energy.



Wind-solar hybrid park installed in 2024-25:

Area: 90-hectare. Power: 59 MW capacity from solar and wind.

Six 2-MW 100 m high wind turbines. 87,000 solar cell panels.

Green hydrogen and a **PtX plant** are converting renewables (solar and wind power) into green energy products such as ammonia with electrolysis. The plant is the world's first dynamic, green ammonia factory without storage of hydrogen, which was realized in partnership among Skovgaard Energy, Topsoe, Vestas and EUDP.



Nature and environment: the park focuses on increasing biodiversity and nature alongside energy production by integrating measures to strengthen local plant and animal species. The solar cell park is Denmark's first large solar park without a fence, providing more space for wildlife. Together with the *Danish Society for Nature Conservation's Lemvig department*, they are also restoring earlier lakes, depressions in the terrain from the Ice Age that were filled in for agriculture. Now they give livelihood for different animal species such as amphibians. Among others, a mixture of seeds was also sown to recreate natural habitats, prioritizing plant species native to the site.

Read more: <https://www.skovgaardenergy.dk/projekter/klimapark-ramme> and <https://www.topsoe.com/press-releases/worlds-first-dynamic-green-ammonia-plant-starts-operations-in-denmark>

5. Optional Tour to Large Windmill Test Centre and Visitor Center Østerild



Test Centre is located at the west coast of Northern Jutland. The area has one of the best wind conditions in the world, which allows the manufacturers to test full sized turbines on land before they enter the market off-shore. Presently, the test center is the only place in the world that is large enough to test the next generations of wind turbines. The test center is operated by the Technical University of Denmark, while visitor center with the exhibition is operated by Thisted Municipality. Both are done in collaboration with stakeholders and partners.

Read More: <https://www.testcenter.dk/>