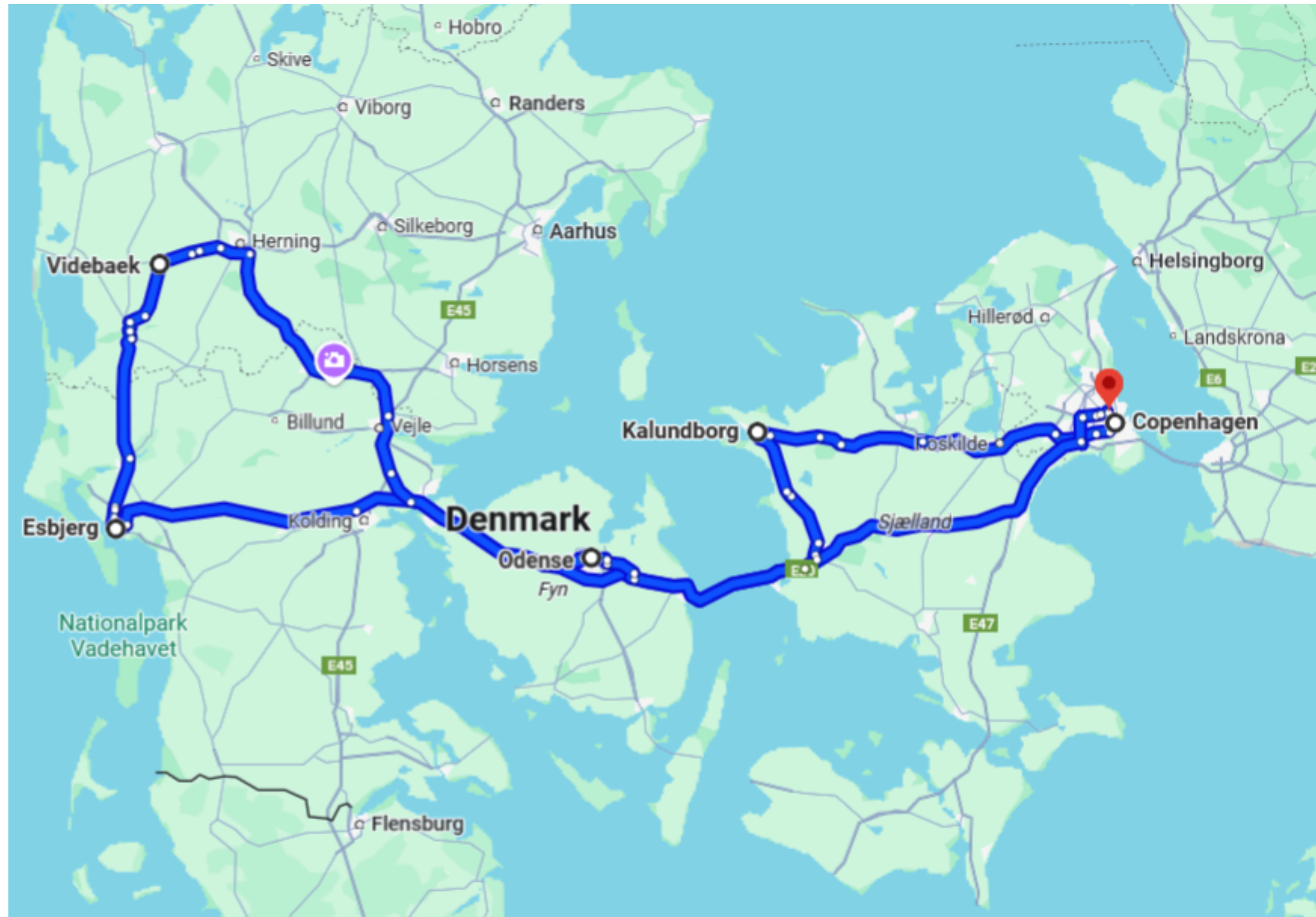


Washington Port Symbiosis Study Tour to Denmark

September 7-13, 2025



SUNDAY

The Study Tour
begins in
Copenhagen!

Welcome orientation
& opening dinner.

MONDAY Copenhagen

Morning

State of Green

A not-for-profit, public-private partnership between the Danish government and the country's three leading business associations (Danish Industry, Green Power Denmark, and the Danish Agriculture and Food Council), State of Green is your one-stop-shop to more than 600 Danish businesses, agencies, academic institutions, experts and researchers. State of Green connects visitors with leading Danish players working to drive the global transition to a sustainable, low-carbon, resource-efficient society.

Afternoon

Danish Energy Agency & Danish Port Authority

Speakers hosted by State of Green during the afternoon will include, representatives from:

The Danish Energy Agency, responsible for tasks linked to energy production, supply and consumption, as well as Danish efforts to reduce carbon emissions. The DEA also has a division called Global Cooperation which is implementing energy cooperation projects in 19 countries, focused on green transition systems.

The Danish Port Authority will discuss its vision for a zero-emission port, and its support for business partnerships and a circular economy.

TUESDAY Kalundborg

Morning

Kalundborg Symbiosis

The Kalundborg Symbiosis is considered the world's pioneer of industrial symbiosis. Launched over 50 years ago, the collaboration has grown to include 18 companies and public operators, sharing surplus energy, water, and material resources. Local benefits include: \$30 million annual economic benefit, 600,000 tons of CO2 savings, and 50,000 tons of material cycled, in a city of only 17,000 people.

Afternoon

Kalundborg Multi-Utility

This unique multi-utility is now central to the Kalundborg Symbiosis, supplying local industry and it's 50,000 customers with: Drinking water; Process water; Cooling water; Wastewater treatment; District heating.

WEDNESDAY Esbjerg

Morning **Fredericia Energy Tour**

The Triangle Energy Alliance in Fredericia works across private and public interests to integrate energy infrastructure and industry. The collaboration aims to expand Power-To-X production facilities in industrial scale in the seven municipalities of the Triangle Area. Power production from sustainable sources will be refined through the process of electrolysis to be stored as green fuels, for instance green hydrogen, e-methanol, green aviation fuels, or even green fertilizers for the ag industry.

Afternoon **Port of Esbjerg**

Denmark's biggest port, Port of Esbjerg is part of a highly specialized network of ports with a key role in the Danish and European offshore wind sector. Established in 1868, the port was originally reliant on the fishing industry. But since it became home to Denmark's first large-scale offshore wind farm in 2002, it has paved the way for explosive development in the offshore wind industry. Today, more than 80% of Europe's offshore wind capacity has been shipped out from the Port of Esbjerg. The Port is the only place in the world home to companies from the entire wind value chain. From R&D, manufacturing, over transport, and pre-assembly, to installation and maintenance.

THURSDAY Videbaek

Morning **Esbjerg Sea Harbor**

TBD - Additional tours and presentations exploring the Port and Harbor's role as a platform for industrial symbiosis for the City of Esbjerg. The transition from old to new technology-heavy industry has transformed the Port from a fishing harbour to an energy metropolis. New activities and services like power-to-x production and a science center has generated extensive job growth and attracted investments, habitants, and workers to the entire city of Esbjerg.

Afternoon **Arla Food Ingredients**

The Danmark Protein facility of Arla Food Ingredients in Videbaek is the world's largest whey protein and lactose factory, producing protein from the leftovers of cheese production. Their operation is a great example of industrial symbiosis in the food industry and shows the amazing variety of valuable products that can be extracted from an ingredient that was formerly considered a waste product (whey). Arla can also speak to converting other 'waste' streams into value, including energy/heat, water, and other materials, by redesigning industrial processes for greater efficiency.

Friday Odense

Morning

GreenLab Skive

GreenLab is a green and circular industrial park, powered by 100% local green energy, designed for businesses that want to contribute to the green transition. The businesses located here are supplied with sustainable energy from multiple energy sources in the form that best suits their production. Moreover, they will all be connected to the SymbiosisNet™ – a unique smart grid solution that will let them share their surplus energy resources with each other. GreenLab has attracted and deployed \$450 million in public-private investment (mostly private). It Provides six major industrial facilities with carbon-free power, heat, steam, water, instrumental air, and nitrogen.

Afternoon

VCS Denmark

VanCenter Syd (VCS) is one of the largest water and wastewater utilities in Denmark and a frontrunner in the water sector. They offer customized training programs at strategic and practical levels to support optimized water distribution, water resource recovery, and green energy production.

Evening

Closing Celebratory Dinner

Saturday Copenhagen

The Study Tour concludes

Breakfast is included with your stay.
There are no official Study Tour activities.