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Accessibility

Korsnäs Offshore Wind Farm

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Accessibility to Marine Wind Farms

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- Offshore wind farms are large-scale construction projects in terms of logistics, placing high demands on the infrastructure of the target area, particularly the ports (obotnia.fi).
- Offshore wind power represents a new phase in renewable energy production for the 2030s. The construction of offshore wind farms is a massive logistical project for the future, and the Regional Council of Ostrobothnia is now investigating how the region's ports can collaborate to offer wind farm developers the best service solutions (obotnia.fi).

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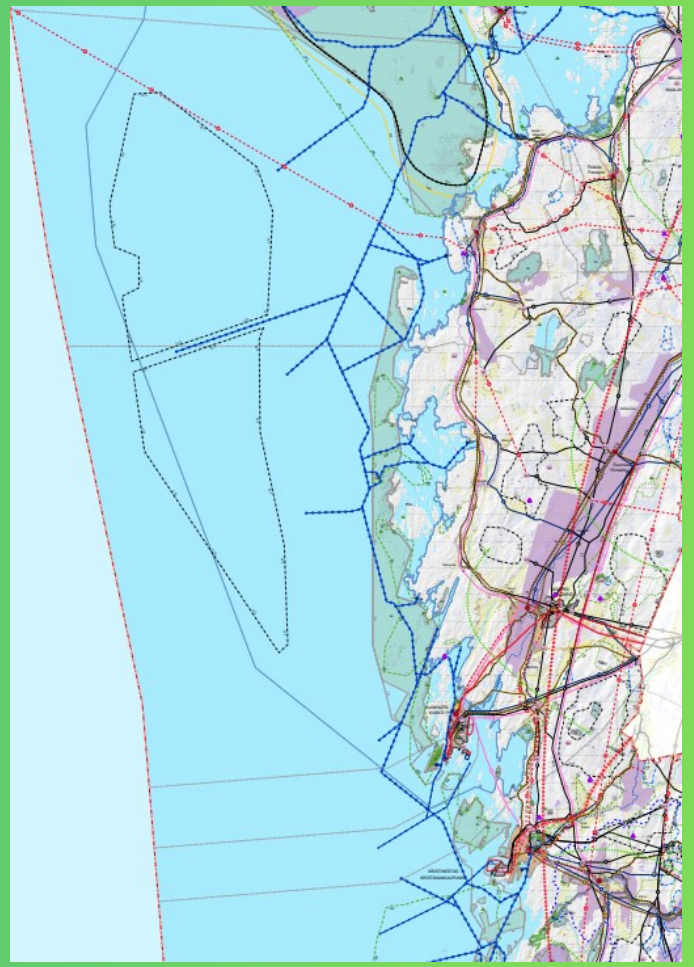
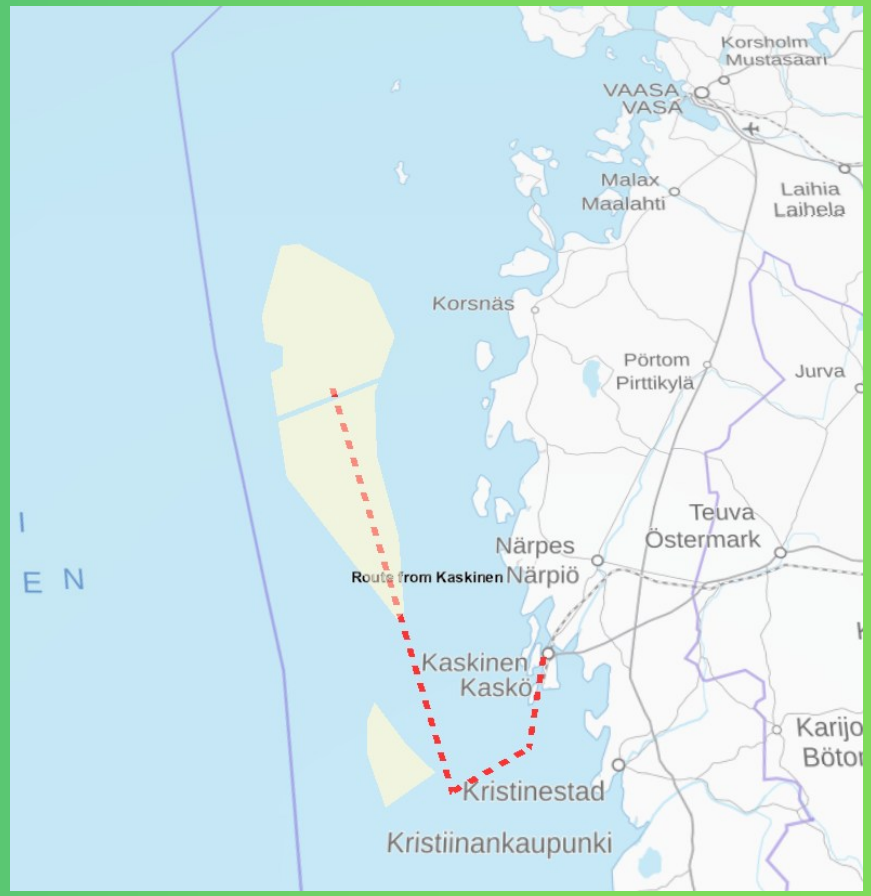
Nearby Ports

- The Regional Council of Ostrobothnia, together with the region’s ports, has launched the project *"Offshore Wind Power and Ports in Ostrobothnia.“*
- The goal is to determine how the region's ports, in cooperation with ports on Sweden’s east coast, can best meet the needs of offshore wind farm developers and energy companies. Based on this project, a joint strategy will be developed for Ostrobothnia’s ports to support the construction of offshore wind power (obotnia.fi).
- An excerpt from the Ostrobothnia Regional Plan 2025 shows the locations of the cities of Kaskö and Kristinestad in relation to the Korsnäs wind farm.



Port of Kaskinen

- The port of Kaskinen is the closest commercial port to the wind power area.
- However, since larger vessels must navigate around via the entrance to the fairway, the distance to the Korsnäs wind farm is approximately 70 km to the latitude of Harvungön.



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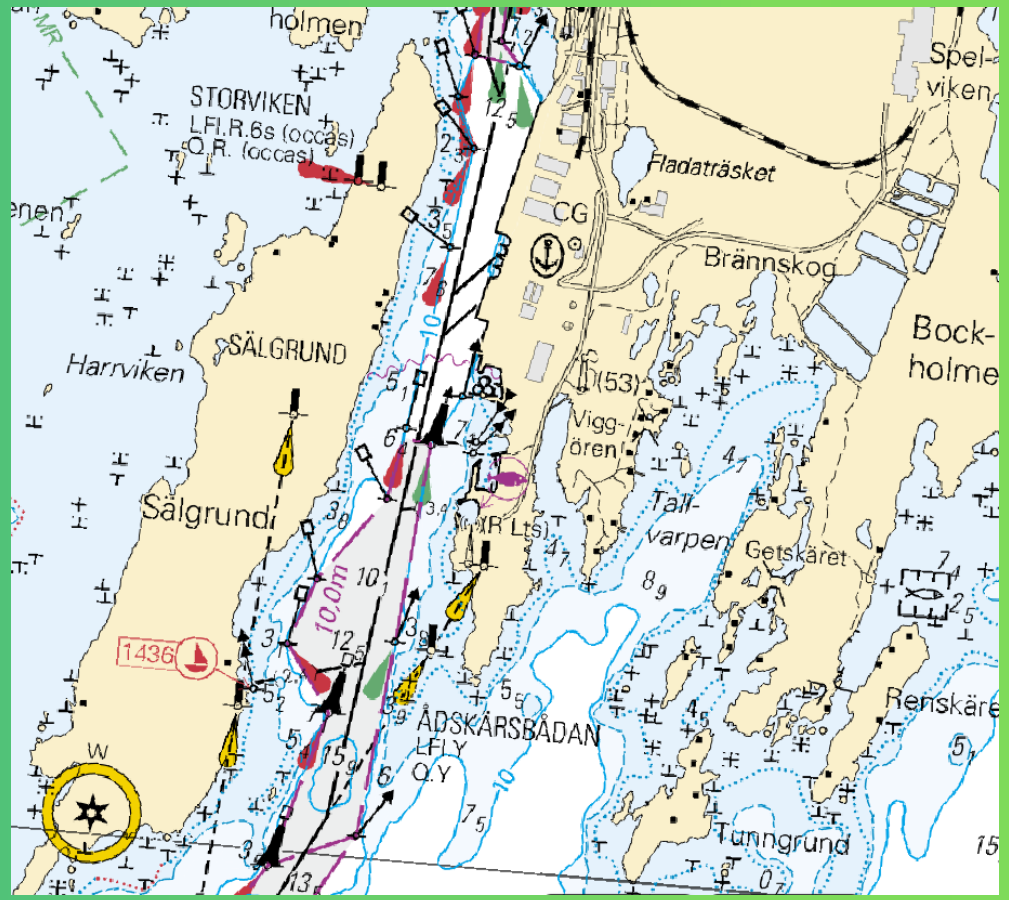
Port of Kaskinen, data

- The port and fairway have a navigational depth of 9.0 meters, and the suitable vessel size ranges between 1,000 and 45,000 deadweight tons (DWT).
- The inner turning area has a radius of 270 meters, while the outer turning area has a radius of 350 meters.
- The port is part of the extensive TEN-T (Trans-European Transport Network) port network.



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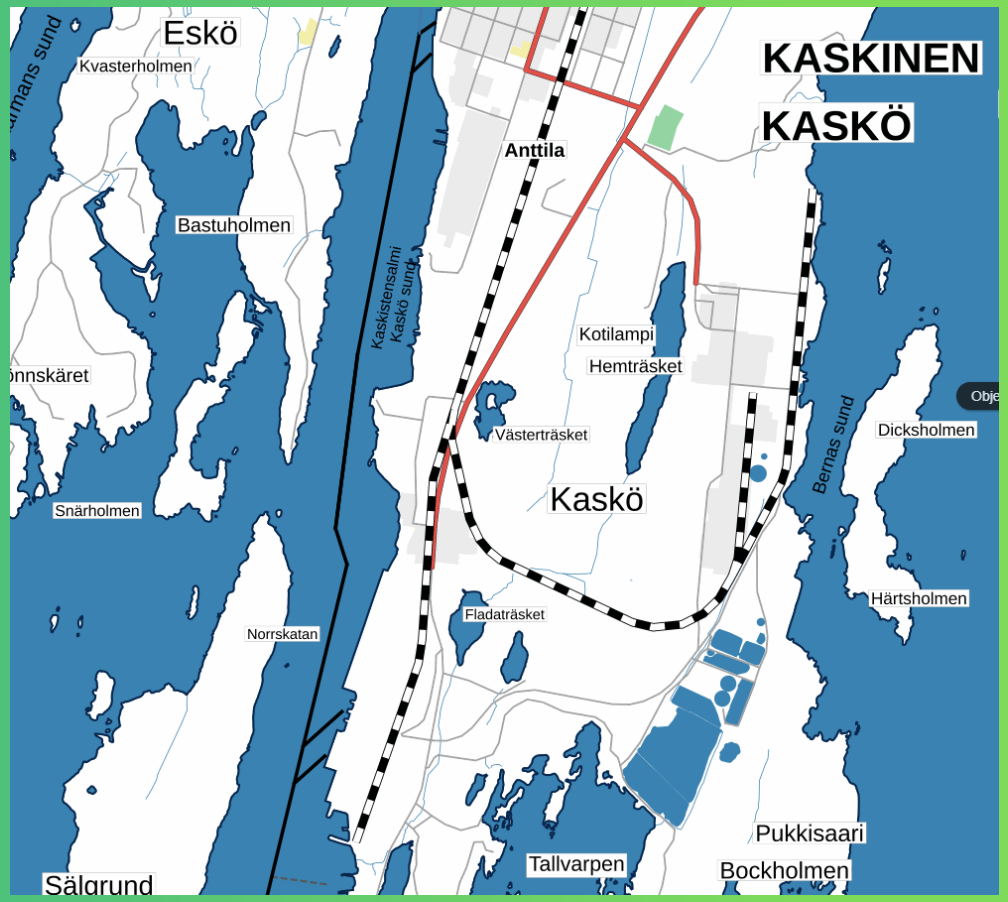
Port of Kaskinen, data

- **Road and rail connections:**
  The port is served by a railway, with two tracks available for loading and unloading, accommodating two trains with 24 wagons each.
- From highway E8, the port is 14 km away via road 67. The unobstructed road is wide enough for special transports, such as wind power components, without significant additional operations.



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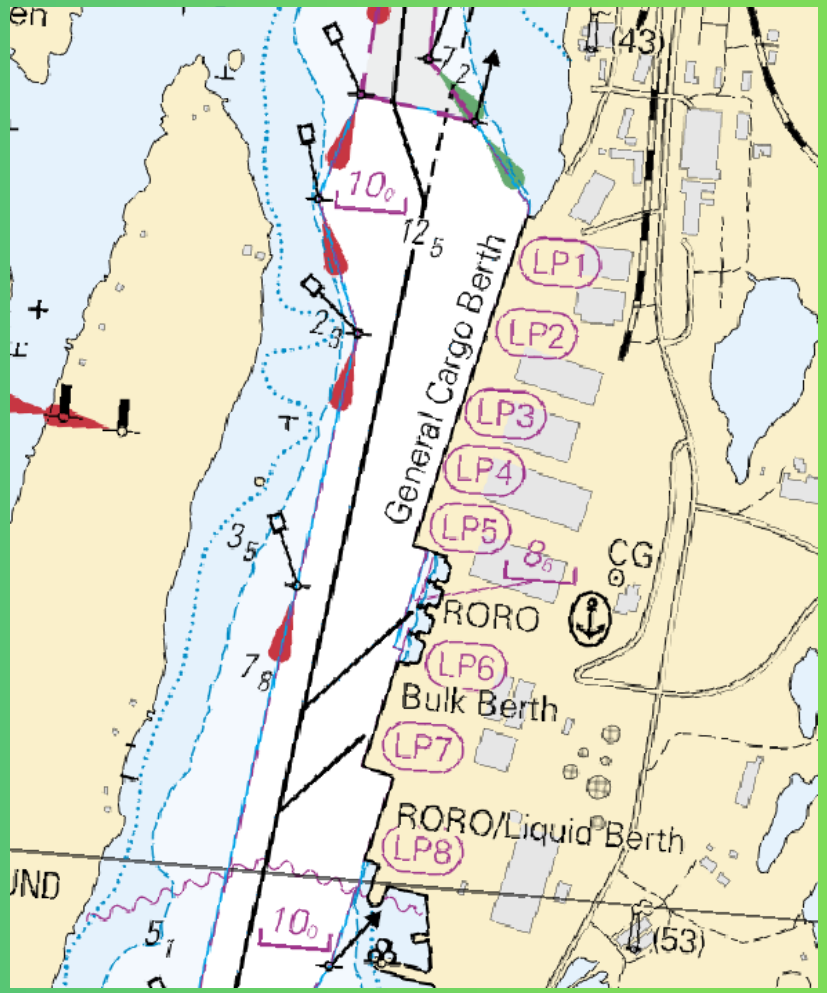
Port of Kaskinen, data

- The quays in the port have the following dimensions:
- **Deepwater Port, Berths 1-5**: Length 500 meters, verified depth 10.2 meters.
- **Dolphin Berth, Berth 6**: Length 160 meters, stern-to berth, verified water depth 8.8 meters.
- **Berth 7**: Length 165 meters, verified water depth 10.2 meters.
- **Ro-Ro, Chemical Berth, Berth 8**: Length 130 meters, verified water depth 10.2 meters, maximum allowed vessel length 140 meters.
- **Outer Port Berth**: Length 170 meters, verified water depth 8.0 meters.



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Port of Kaskinen, data

- **Storage Areas:**
  The port area covers 42 hectares, including a storage area for general cargo of 38,000 m², and dry cargo storage of 15,000 m² + 53,500 m².
- **Port Cranes:**
- 4 hybrid cranes
- 2 heavy mobile cranes for the port

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Port of Kristiinankaupunki

- The deep harbor at Björnö in Kristiinankaupunki has primarily been a coal and oil port.
- Larger vessels must navigate around via the entrance to the fairway, so the distance to the Korsnäs wind farm is approximately 80 km to the latitude of Harvungön.

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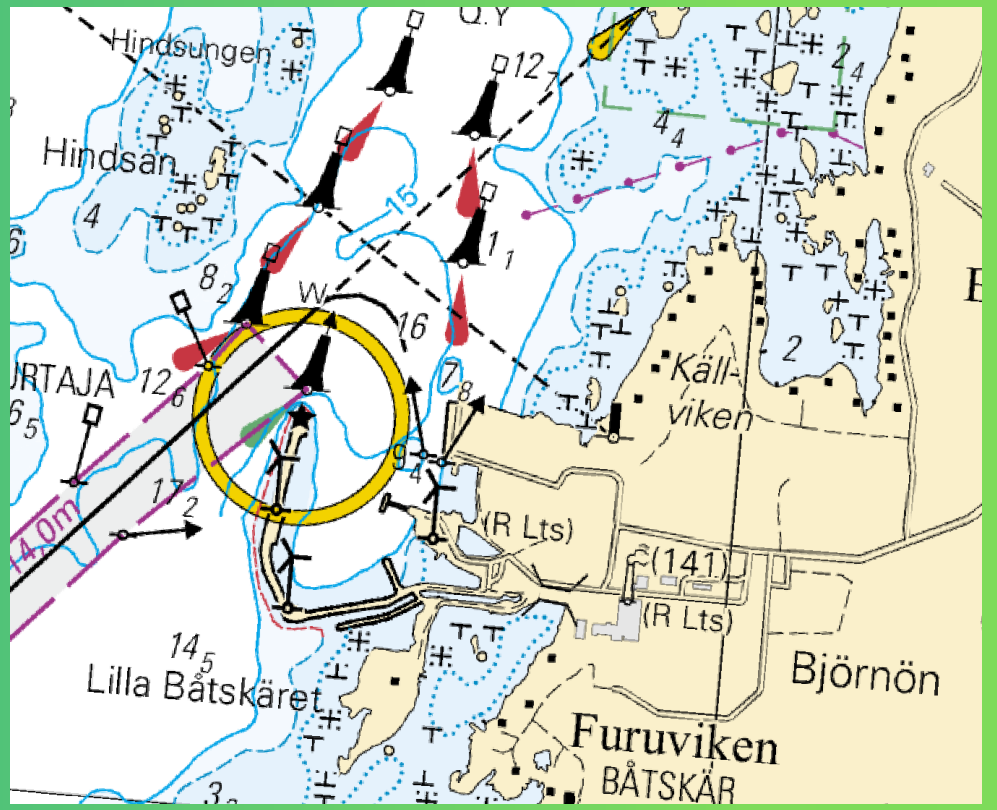
Port of Kristiinankaupunki, data

- The fairway to the harbor has a navigational depth of 12 meters.
- The dimensions of the quays in the deep harbor are:

- Coal quay, length 160 meters, secured depth 13.5 meters
- Oil quay, length 50 meters, secured depth 11.5 meters



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Port of Kristiinankaupunki, data

- **Road and rail connections:**
  There is a connection to Björnö's harbor from national road 8 along regional road 662 and local road 6620. National road 8 offers connections along the coast northwards to Vaasa and Oulu and southwards via Pori to Turku.
- There is no direct railway connection to Kristiinankaupunki

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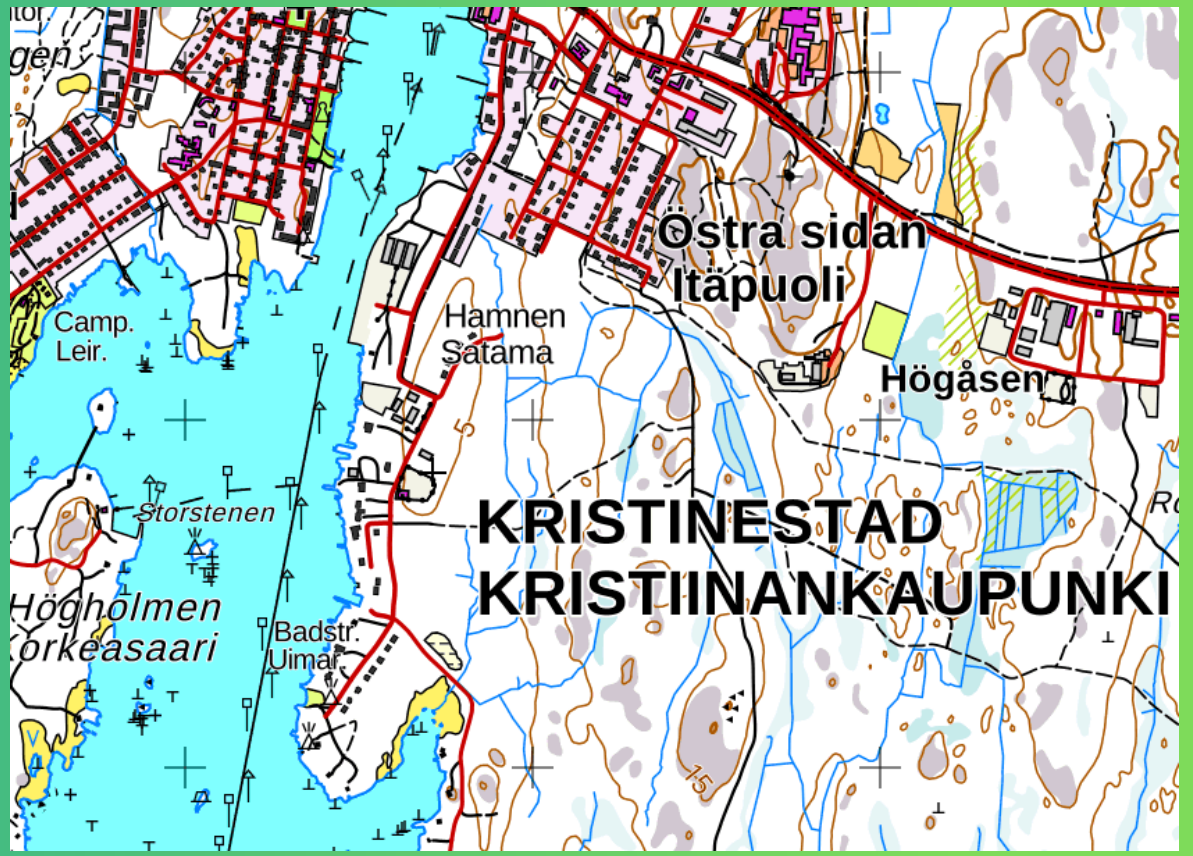
Port of Kristiinankaupunki, data

Inner harbor in Kristiinankaupunki

- The inner harbor in Kristinestad is mainly used for recreation.
- The navigational depth to the harbor is only five meters.



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Port of Vaasa

- Compared to other harbors in Ostrobothnia, Vasa Harbor at Vasklot is the most versatile: it handles many different types of goods, both bulk and general cargo, as well as oil.
- The fairway to Vasa has a navigational depth of 9 meters and a total length of 60 km. The distance from Vasa Harbor to Korsnäs wind farm is approximately 110 km for a vessel requiring a navigational depth greater than 3 meters.

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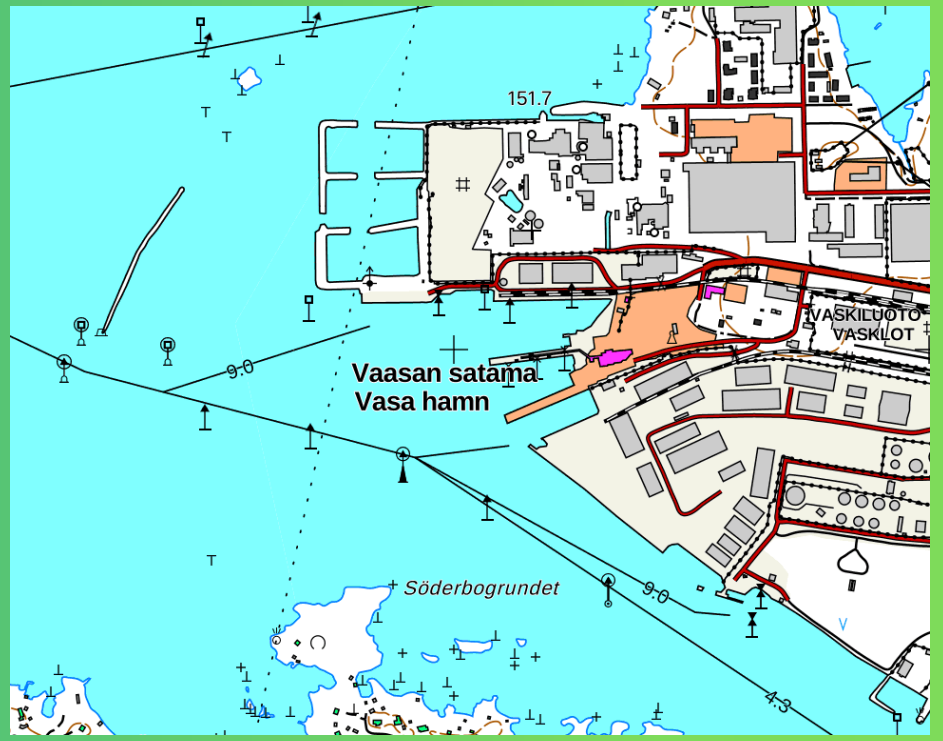
Port of Vaasa

Quays:

- Lasses quay, length 358 meters, depth partly 7.9 meters, partly 9 meters
- Coal quay, length 145 meters, depth 9 meters
- Reins quay, length 240 meters, depth 7 meters
- North quay with Ro-Ro ramp, length 160 meters, depth 7.3 meters
- South quay, length 180 meters, depth 8.6 meters
- Oil quay, length 105 meters, depth 9 meters



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Port of Vaasa

Port Cranes:

- Liebherr LHM 600 port mobile crane
- Liebherr LHM 400 port mobile crane, 2 units
- Mantsinen MSK 100-8 EX750 material handling machine

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Port of Vaasa

Storage Areas:

- There are approximately 8 hectares of paved storage areas and additionally a gravel area used for storing parts for wind turbines.

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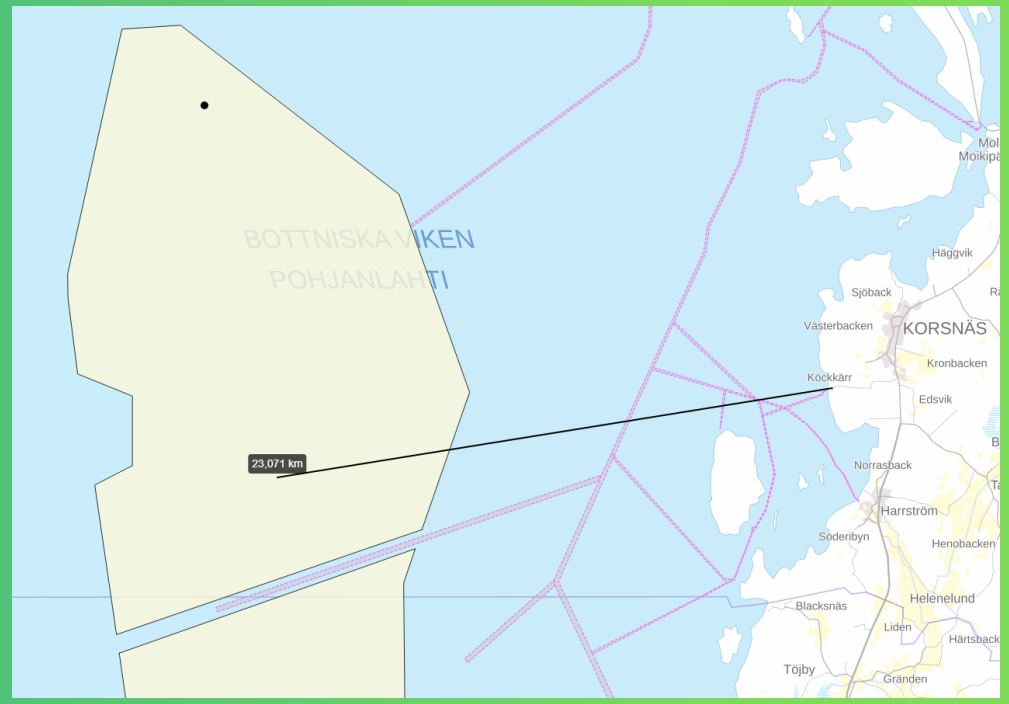
Smaller Harbors Near Korsnäs Wind Farm: Aurora

For vessels, primarily boats, with smaller drafts, there are a few harbors for fishing and recreational boats.

Storkors Fishing Harbor:

- Closest to the Korsnäs wind farm is Storkors fishing harbor in Korsnäs municipality, with a distance to the center of the wind farm area of about 23 km.
- The navigational depth to the harbor is 2.4 meters. The harbor has a loading quay that is about 30 meters long and a boat ramp.
- The harbor can primarily be used for transporting personnel to the wind farm.



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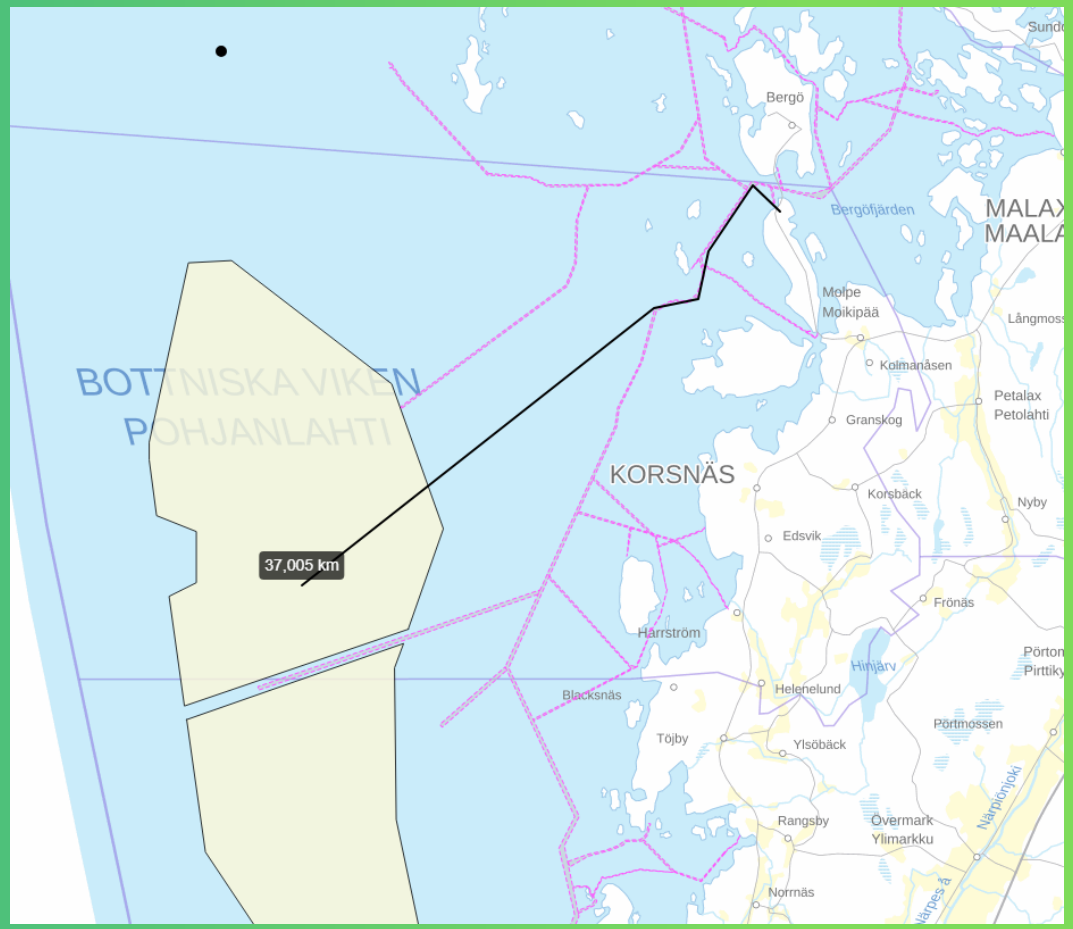
Smaller Harbors Near Korsnäs Wind Farm: Aurora

Skagelbådan Fishing Harbor:

- Near the ferry terminal for the ferry to Bergö, there is Skagelbådan fishing harbor.
- The distance from this harbor to the wind farm is just over 35 km. The navigational depth to the harbor is 2.4 meters.
- The harbor has a short loading quay and a boat ramp. The harbor can primarily be used for transporting personnel to the wind farm.



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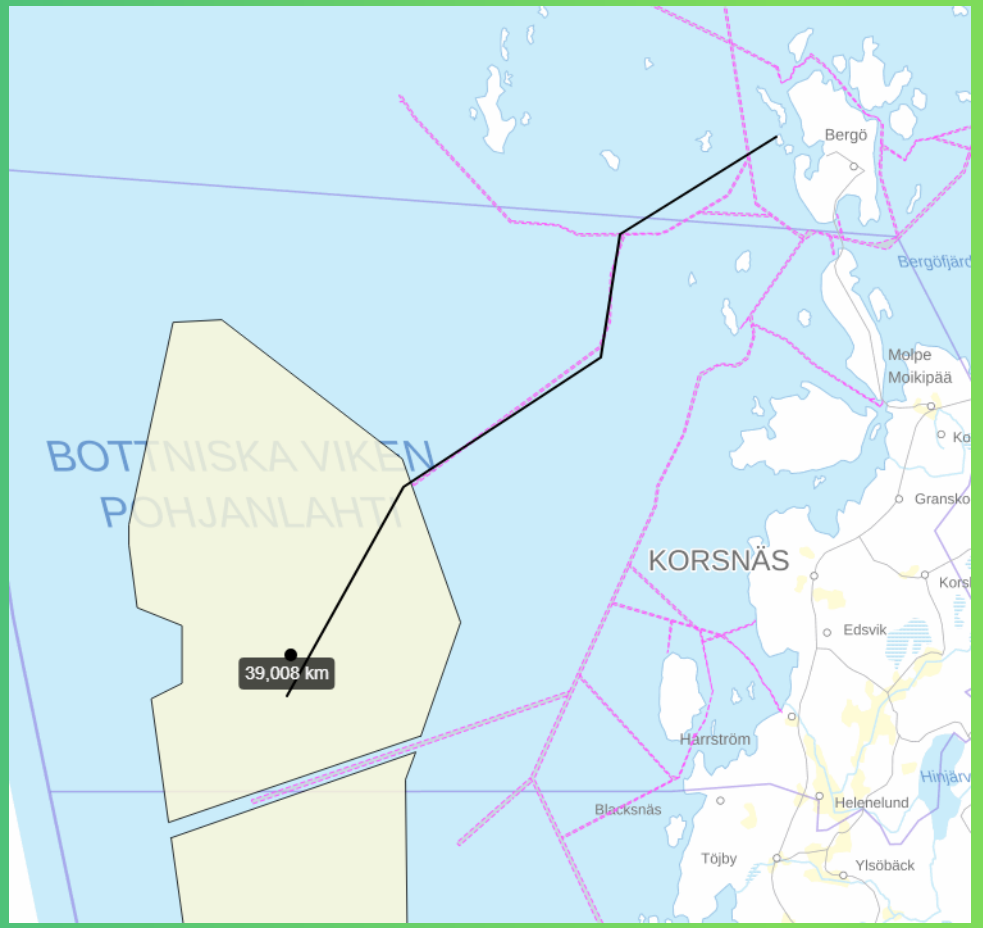
Smaller Harbors Near Korsnäs Wind Farm: Aurora

Ytterbådan Fishing Harbor:

- Ytterbådan fishing harbor is located on Bergö.
- The distance to Korsnäs wind farm is about 39 km along a fairway with a navigational depth of 3.5 meters.
- The harbor has an L-shaped loading quay of about 60 meters and a boat ramp. The road to the harbor goes via the Bergö road ferry and ends with a relatively narrow gravel road.
- The harbor can primarily be used for transporting personnel to the wind farm.



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Ships för building of offshore windmill parks

- Orion is a floating vessel owned by DEME Group and built for heavy and high lifts in offshore projects.
- The vessel is 216.5 meters long and 49 meters wide
- The Liebherr HLC 295000 crane that has a lifting capacity of 5,000 tons to a height of 178 meters and a reach of over 30 meters.
- Can operate from harbors in Kaskinen, Kristiinankaupunki and Vaasa

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Ships för building of offshore windmill parks

- Sea Installer is a jackup vessel owned by DEME Group and built for heavy and high lifts in offshore projects.
- The vessel is 132 meters long and 46 meters wide
- It has been used on VineyardWind1 Offshore Wind Farm, with a hub height up to 148 meters.
- Can operate from harbors in Kaskinen, Kristiinankaupunki and Vaasa

Sources:

Lag om områdesanvändning (uppdaterad lagstiftning Finlex.fi hämtat 20.1.2025)

Finlands Havsplan 2030; 12/2020

Hamnarna i Österbotten och deras specialisering; Österbottens förbund 2012

Kvarken Ports, Port of Vaasa (hämtat 24.1.2025)

https://www.ship-technology.com/projects/orion-offshore-installation-vessel-belgium/?cf-view (hämtat 24.1.2025)

Österbottens landskapsplan 2050

https://www.deme-group.com/