

Finnafjord Cargo Hub

Efficiently Connecting N-European Aquaculture with demanding Global Markets

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A photograph of an industrial facility, likely a geothermal power plant, featuring a complex network of large, silver, insulated pipes and valves. The pipes are arranged in a series of arches, and the background shows a dark, rocky hillside under a clear blue sky.

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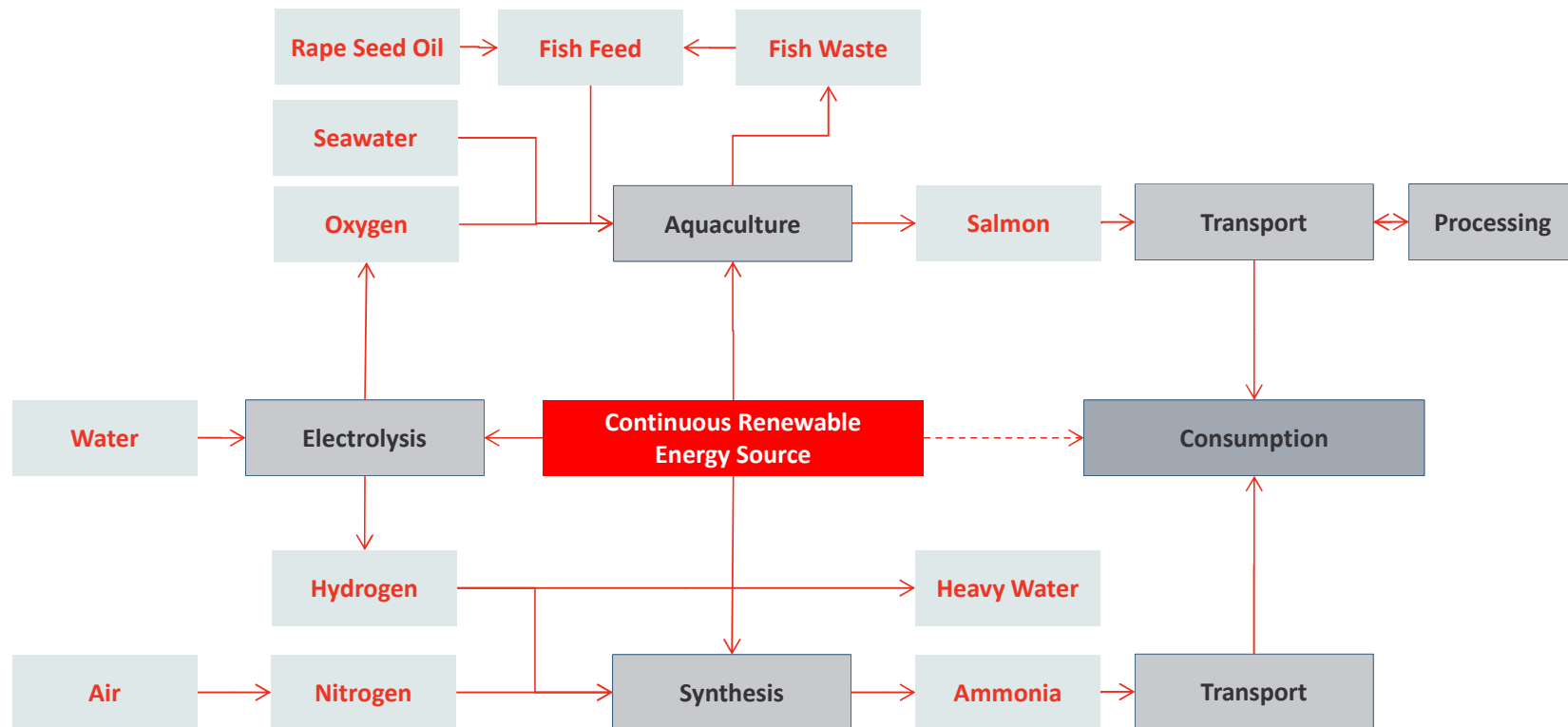
Location of Finnafjord in the North East of Iceland



A wide-angle landscape photograph of Finnafjord in winter. The foreground shows a rugged, brownish-grey tundra with patches of snow. In the middle ground, a large, calm body of water (the fjord) stretches towards a distant, snow-covered mountain range under a cloudy sky.

Finnafjord, Winter 2014

Industrial site – Energy Conversion → Hydrogen to Ammonia, Oxygen and Heavy Water as by-products

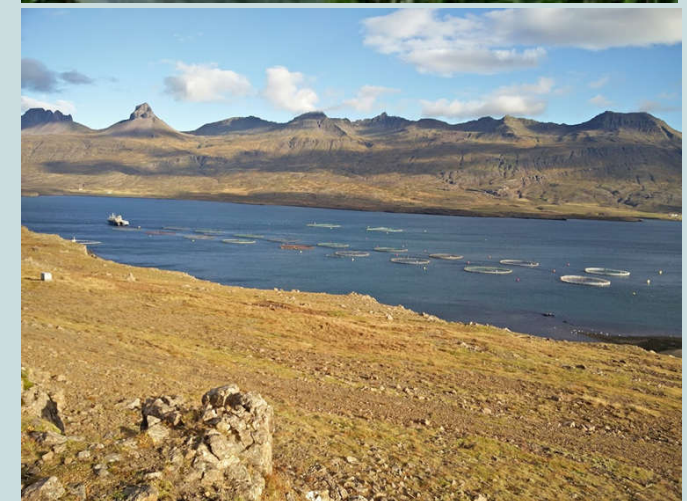


Protein Production Land Based Aquaculture

- Production in a more controllable environment
- Reduces the danger of escaped aquaculture fish mixing with wild populations
- Eliminates the danger of sea lice being transferred from aquaculture to wild fish
- Reduces organic and chemical waste from aquaculture
- Could become more competitive due to:
 - Regulatory restrictions on net pen farming
 - Higher prices on licences




Sea lice on an Atlantic salmon.
Photo credit: Christopher Todd



Land Based Aquaculture | Criteria for Success

- Low energy cost
- Continuous renewable energy
- High reliability reg. delivery of energy
- Access to clean sea water with right temperature
- Good weather conditions all year around
- Low land close to sea level
- Reasonable cost of land
- Little tidal movements
- Reasonable construction cost
- Access to oxygen

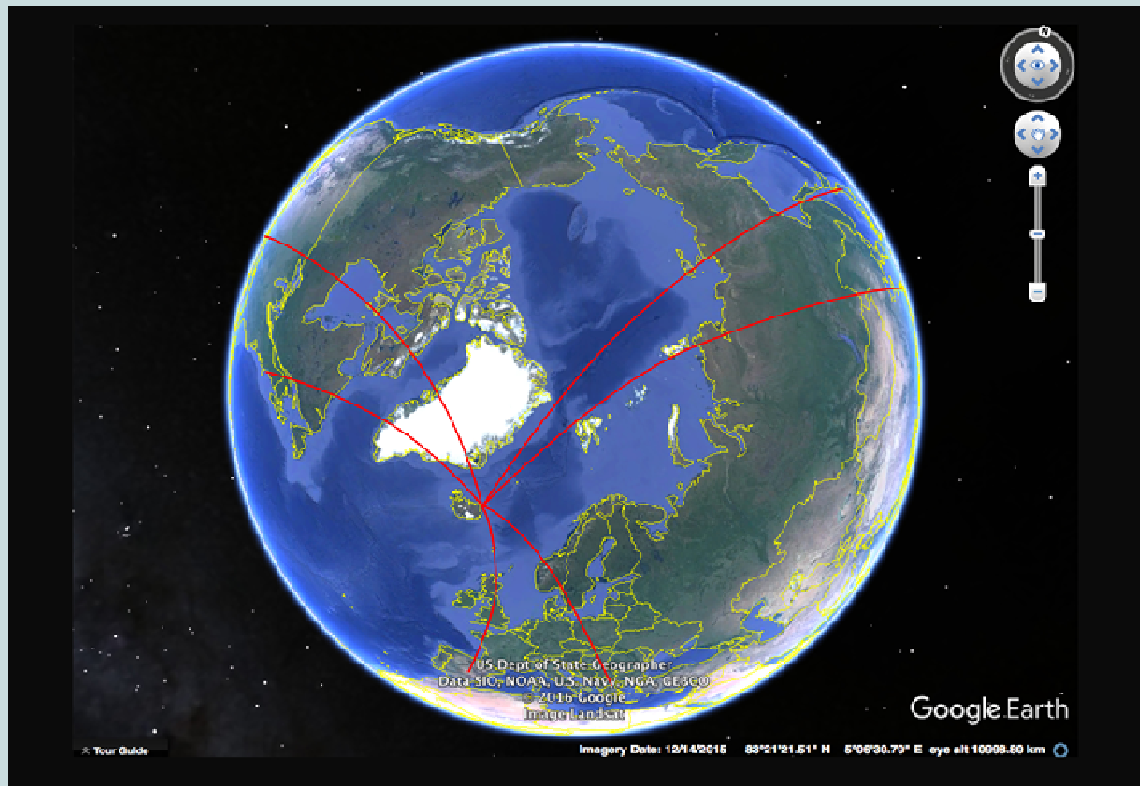


A wide-angle photograph of a flat, dry landscape. The foreground is covered in low-lying, brownish-green vegetation. In the distance, a dark blue body of water stretches across the horizon. To the left, a range of mountains with snow-capped peaks is visible under a clear blue sky with a few wispy clouds.

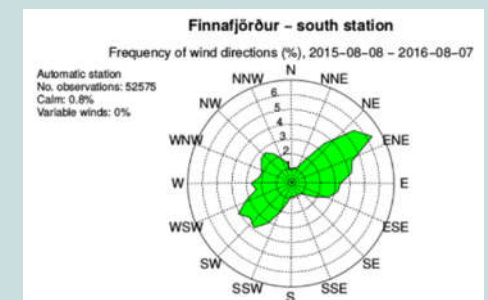
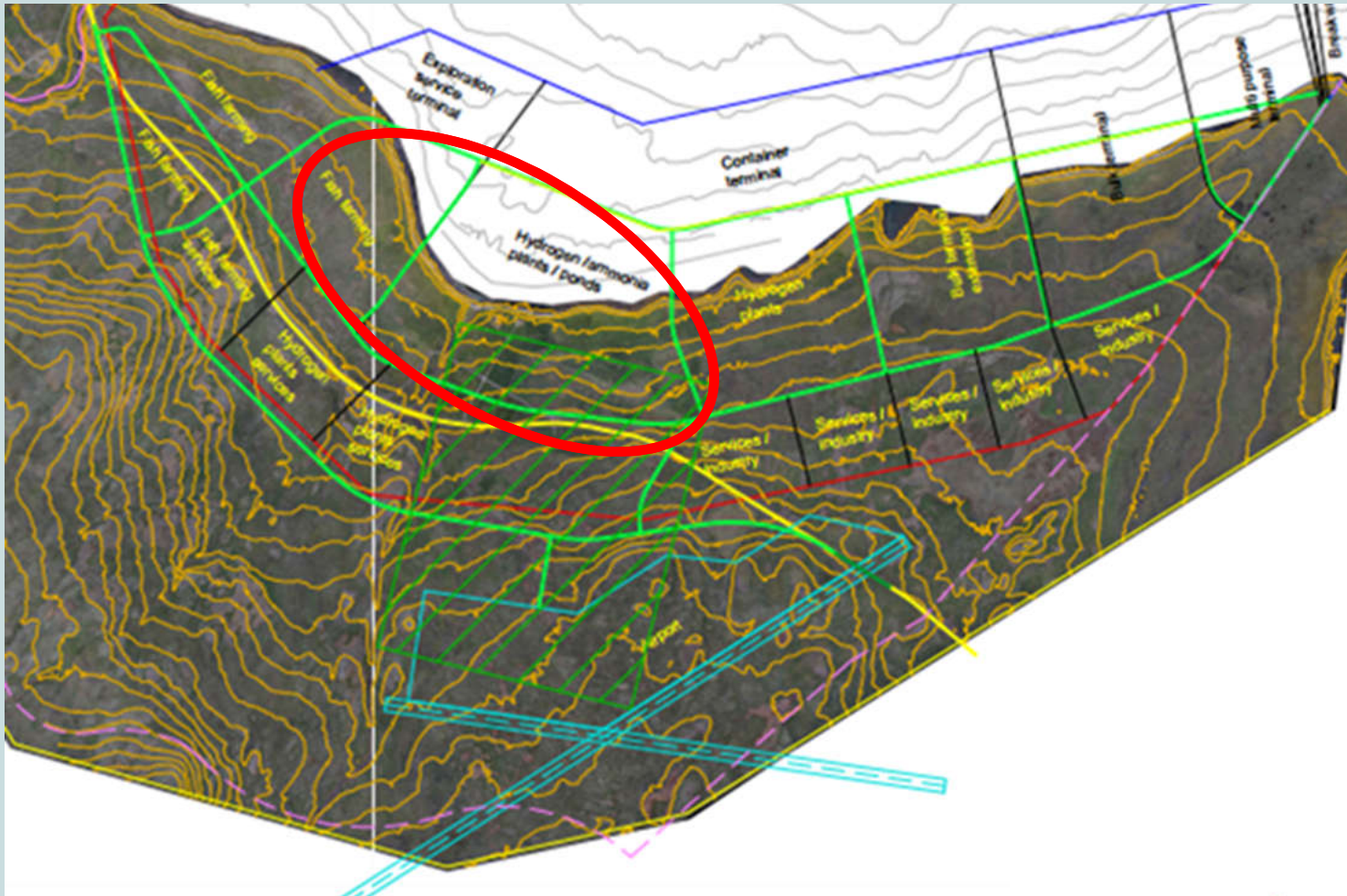
Flat and dry landmass ideal for aquaculture on land, diverse industries and a landing strip

Finna fjord Cargo Hub - Connection to Demanding Markets

- Good weather conditions
- Flat land and ideal soil situation – reasonable construction cost
- Location between USA (5-9 Hours, Europe 3-4 Hours and Asia 8-10 Hours)



Finnaufjord – Draft of a Framework Plan



Finna fjord – Opportunities for Scotland, Faroe Islands and Norway

- Finna fjord - North Norway: 1400 km, 35 hours
- Finna fjord - Central Norway: 1200 km, 30 hours
- Finna fjord - Southwest Norway: 1130 km, 28 hours
- Finna fjord - East Scotland/Aberdeen: 1340 km, 34 hours
- Finna fjord - West Scotland: 1300 km, 33 hours
- Finna fjord - Faroe Islands: 630 km, 16 hours
- Faroe Islands - Aberdeen: 700 km, 18 hours

- Faroe Island-Aberdeen + Truck to London Heathrow + NY: $18+10+8=36$ hours
- Faroe Islands-Finna fjord + NY: $16+6=22$ hours
- North Norway-Oslo airport by truck + NY: $32+8=40$ hours
- North Norway-Finna fjord + NY: $35+6=41$ hours



Conclusion – Finnafjord at a Glance

- Finnafjord offers diverse opportunities for neighbouring countries
- **Interesting** > 1300 ha industrial site with access to renewable energy and reasonable cost for constructions and landmass
 - Ideal site for land based fish farming
 - Ideal site for hydrogen production incl. conversion to ammonia
- Development of deep sea trans-shipment hub with > 6 km quay walls as a connection point between Europe, USA and Asia
- Possibility of a full sized landing strip as a airborne cargo hub for demanding markets for fresh fish and other valuable goods

Finna fjord Port Project - FFPP

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