

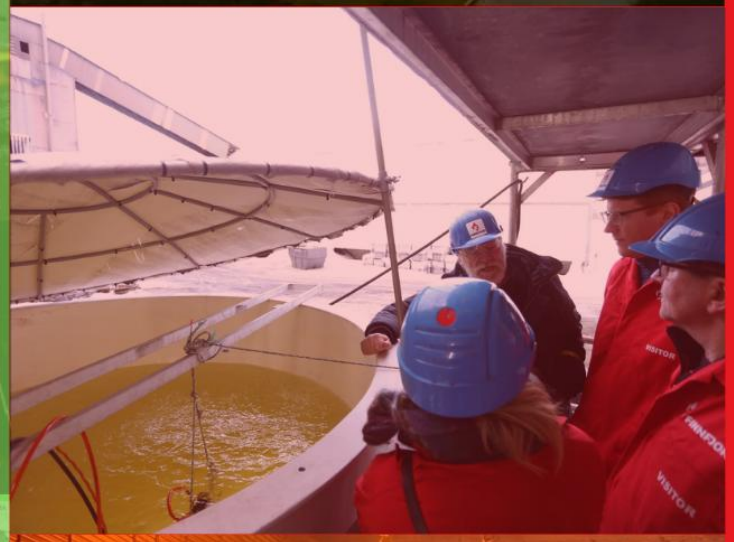
IMPORTANT INDUSTRY IN THE NORTH

THE ONLY NORWEGIAN OWNED FERROSILICON FACILITY IN NORWAY



ZERO EMMISSION GOAL







FINNFJORD

A CONTRIBUTOR AND INNOVATOR

$$2\ Fe_2O_3 + 4\ SiO_2 + 7\ C \rightarrow 4\ FeSi + 7\ CO_2$$

NORTHERNMOST FERROSILICON PLANT

Hans Andreas Sørensen and
Emma Jørgensen Krogstad

#holditorsken

FERROSILICON PLANT

Produces ferrosilicon used in iron production, and byproduct microsilica.

$$2\,Fe_2O_3 + 4\,SiO_2 + 7\,C \rightarrow 4\,FeSi + 7CO_2$$

1960 - Founded
2012 - Heat renewal system
2018 - One of the biggest and most energyeffective plants
2021 - New CO2 capture facility

Annual productioncapacity is 100 000 tons and emmits 300 000 tons of CO_2

SUSTAINABILITY INITIATIVES

- Heat renewal
- Electrisity production
- Algae project

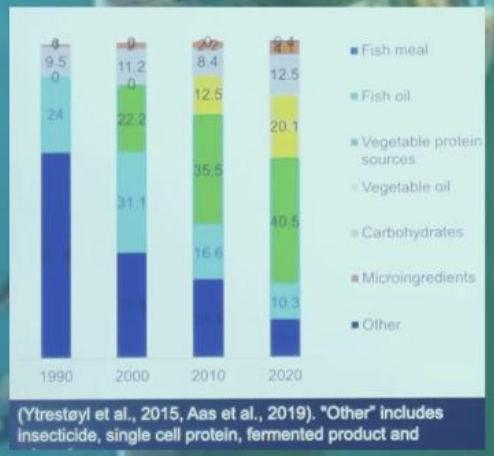


Algae project

CO2 FREE PRODUCKTION

Finnfjord ferrosilicon plant sett a goal to releas zero greenhouse gases to the atmosphere

finnfjord as partnerd in 2014 with the university in tromsø with an ongoing project, to use the co2 made in the produktion of ferrosilicon, to grow algae for fish food. to then achieve zero emissions of co2.

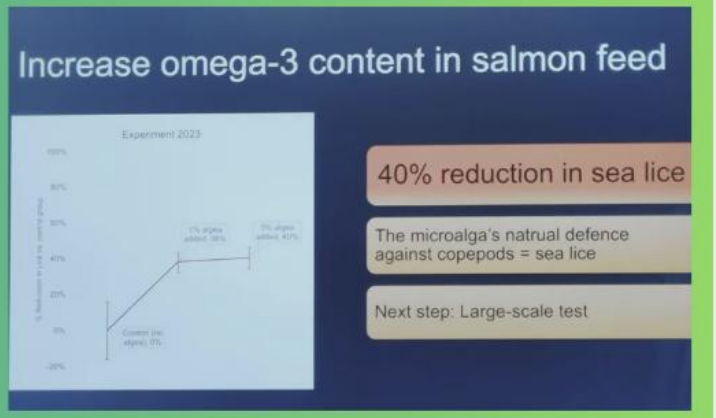


(Ytrestøyl et al., 2015, Aas et al., 2019). "Other" includes insecticide, single cell protein, fermented product and

The algie used in the project, is autotrophic single-celled algae. The algae is from the regions of Troms and Finnmark, and a very important part of the diet of the native population of salmon.



The algae is cultivated in large tanks in greenhouses where they feed on the CO2 from the metal produktion, and under perfect circumstances they can splitt twice a day



In tests where they mix the algae with the fish food, they managed to reduce the number of sea lice by 40%