NORGES SJØMATRÅD

Proudly representing Seafood from Norway

Sustainability Matters

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Agenda

Background: Our Common Challenge – More from less
Solution: Less is "More from Blue"
More from Blue – The Norwegian Model,
How is Norway on sustainability? – Origin Matters

1. More from Less

Our Challenge



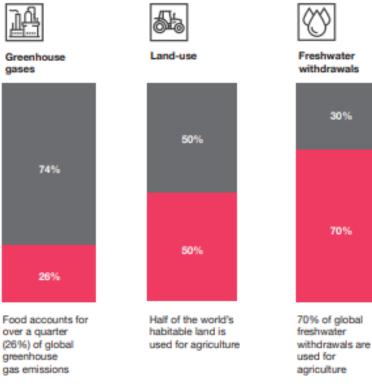
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The challenge:

The environmental impact of food across the globe





30%

70%

Eutrophication

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78% of global ocean and freshwater eutrophication (the pollution of waterways with nutrient-rich

94% of mammal biomass (excluding humans) is livestock

Biodiversity

6%

94%

The sustainable food revolution

strategy&

Part of the PwC network

Future-proofing the world's food supply

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2. More for less is "More from Blue"



1. More blue food from our blue planet

We have the space since 70% of our planet is blue

Only 2% of our food comes from the blue part of the earth

"The world can harvest and produce 6 times more seafood globally. This will cover 2/3 of the animal protein needs of a future population. This requires sustainable harvesting and distribution of marine resources."

High level panel for a sustainable ocean economy (2020) Ocean Solutions That Benefit People, Nature and the Economy)



2. More blue food is more food with a lower carbon footprint

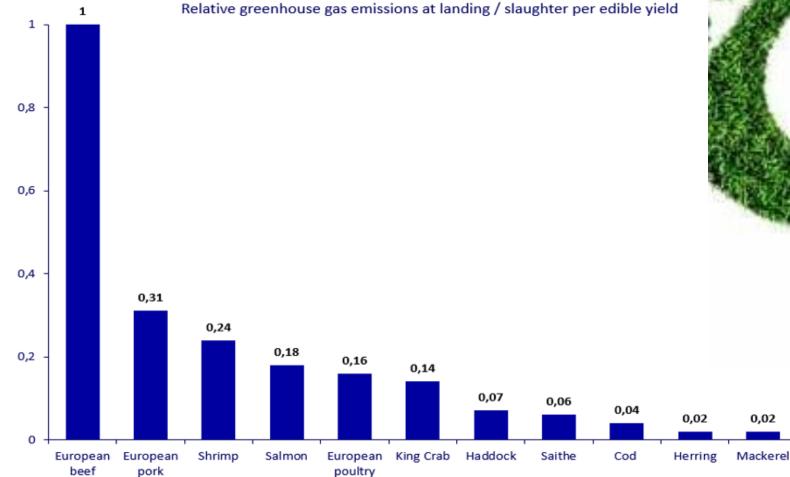
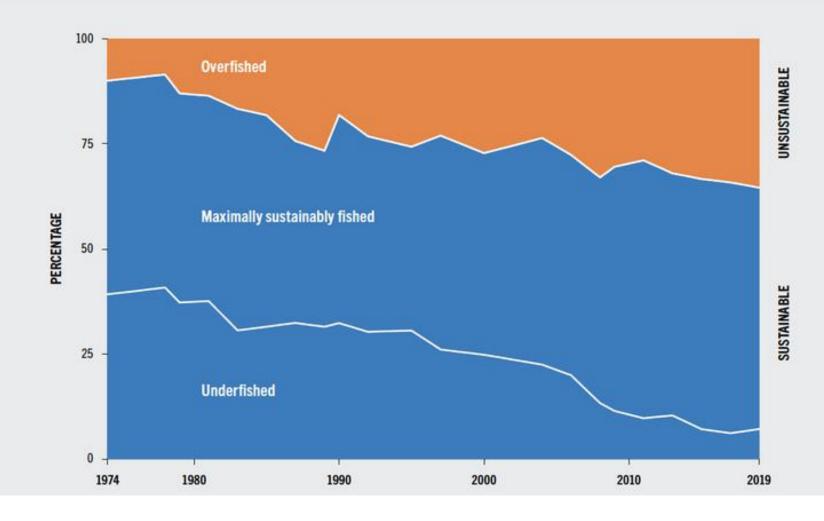




FIGURE 23 GLOBAL TRENDS IN THE STATE OF THE WORLD'S MARINE FISHERY STOCKS, 1974–2019

But how can we get more for less when we at first sight have less?



By making progress on these milestones:

This is why aquaculture is the hot topic at Cop 28



Food and Agriculture Organization of the United Nations

Achieving SDG 2 without breaching the 1.5 °C threshold: A global roadmap

Domain	Year	Description
Livestock	2030	Methane emissions from the livestock sector have been reduced by 25% compared to 2020.
LIVESLOCK	2050	Total factor productivity for livestock has grown at 1.7% per year globally.
Fisheries and aquaculture	2030	100% of fisheries under effective management and all illegal, unreported and unregulated activities phased out
	2040	At least 75% growth in global sustainable aquaculture. Production compared to 2020 level.
Crops	2050	Total factor productivity for crops has grown by 1.5% per year globally.
	2050	Total factor productivity for crops has grown by 2.3% per year for low-income countries.
Enabling healthy diets for all	2030	All the countries have updated their food-based dietary guidelines to provide context appropriate quantitative dietary patterns.
	2030	All countries have legislation restricting food advertisement targeting children.
Forest and wetlands	2025	Zero net-deforestation is achieved globally.
Forest and wetlands	2035	Zero gross-deforestation is achieved globally.
Soil and water	2030	Achieve universal and equitable access to safe and affordable drinking water for all.
Son and water	2040	10 Gt of CO_2 eq of additional carbon have been sequestrated in cropland and pasture soil between 2025 and 20
Food loss and waste	2030	Reduce by 50% per capita global food waste at the retail and consumer levels.
roou loss and waste	2050	All food loss and waste are integrated in a circular bioeconomy and used for feed, soil enhancement or bioener
Clean energy	2030	No people are using traditional biomass for cooking.
	2050	CO ₂ capture from bioenergy reaches 1 263 Mt CO ₂ per year.
Inclusive policies	2030	All countries have implemented nationally appropriate social protection systems and measures for all, and ensivulnerable to climate-related extreme events and other economic, social and environmental shocks and disaster
	2040	Gender productivity gap in land productivity gap between female- and male-managed farms of the same size is
Data	2030	All farmers and ranchers have access to globally recognised solutions to monitor their GHG emissions.
	2030	Total factor productivity for crops and livestock corrected for non-market inputs and outputs are monitored in basis.

2040 At least 75% growth in global sustainable aquaculture. Production compared to 2020 level.

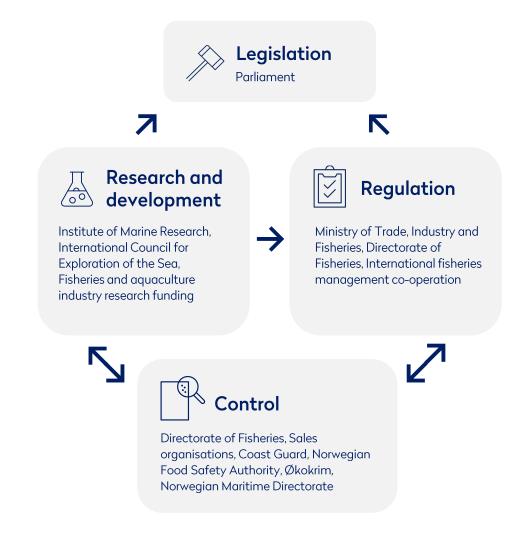
More from Blue

The Norwegian Model Origin Matters

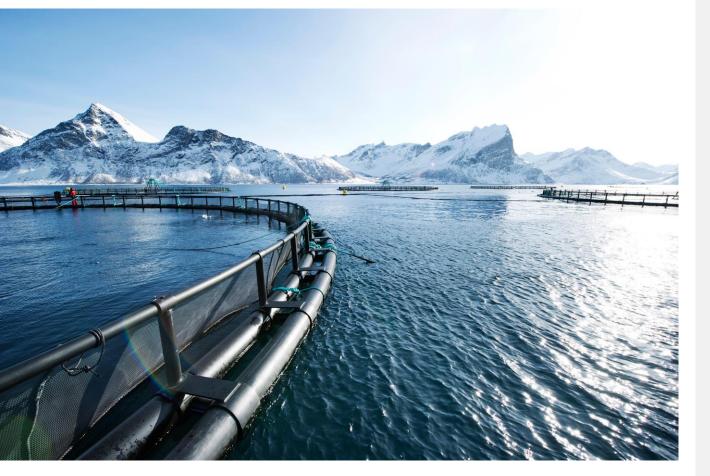


The Norwegian management model – with focus on creating a good tomorrow

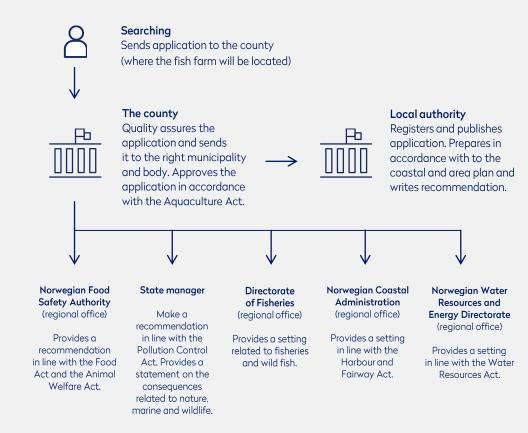
Sustainability is central to the management of Norwegian seafood. Norwegian seafood management consists of four parts that together work towards a balanced and sustainable seafood industry:



The Norwegian Model: Aquaculture is regulated through licences



Actors who are responsible for regulation of aquaculture



How is the Norwegian Model working?

Status from an ESG perspective



Where is Norway performing well

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Greenhouse Gas emissions

- Emissions per kg
- **PwC Climate index**

Usage of fresh water

Del 3 - Årets aktiviteter og resultater

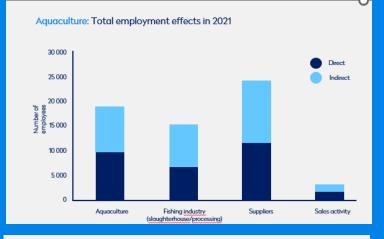
Environmental impact from fish farms (Source: Fiskeridirektoratet)

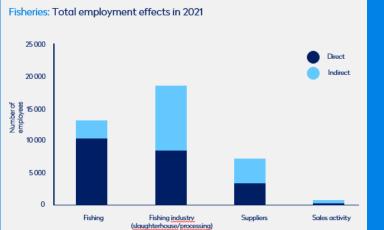
94% av oppdrettsanleggene har meget god eller god miljøtilstand

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Local Communities: + 100 000 JODS (Source: NOFIMA Ringvirkningsanalyse)

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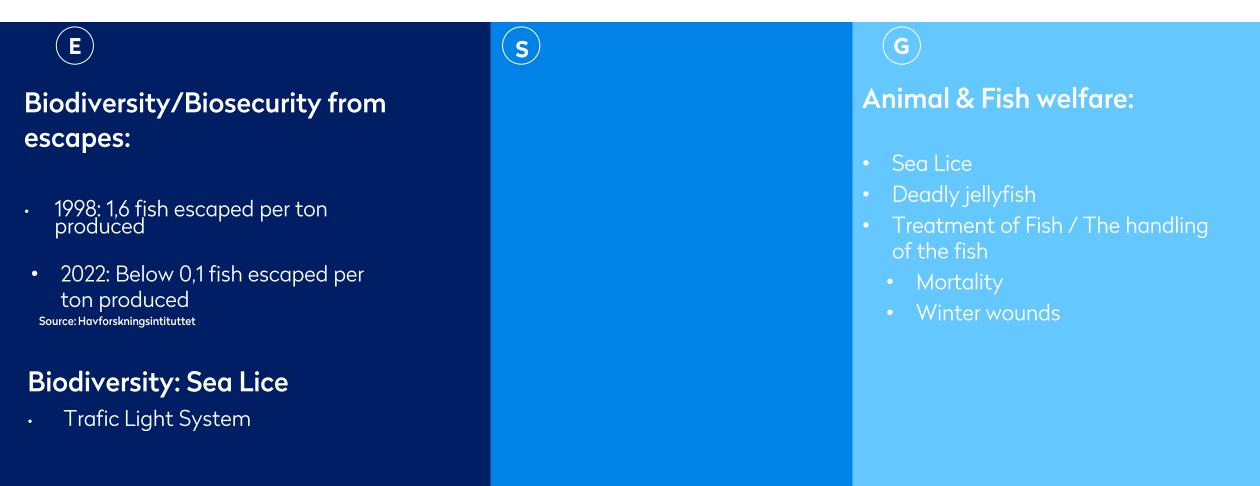


G Food safety: Usage of Antibiotics. in production of food

In the last 30 years, the use of antibiotics in Norwegian aquaculture has fallen by 99%. In the same period, the production volume has increased 24-fold

Use of antibiotics (active sub	stance) g/kg
Norway (fish farming)	0,00058
Iceland	0,0046
Norway	0,0064
Sweden	0,0118
Finland	0,0193
Denmark	0,039
France	0,0686
Germany	0,089
Spain	0,230
Italy	0,274
Chile (laks)	0,320
Cypres	0,423

Where are the Norwegian aquaculture challenges – and what are we doing to improve?



To summarize – Coller Fairr index

- Top 60 worlds largest listed protein producers are ranked on sustainability from an ESG perspective:
 - 4 Norwegian Seafood/Salmon companies in top 10 list

The FAIRR Initiative is a collaborative investor network that raises awareness of the environmental, social and governance (ESG) risks and opportunities brought about by intensive livestock production. The index evaluates companies based on critical environmental, social and governance issues related to meat dairy, and aquaculture production

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No one can do everything, but everyone can do something





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