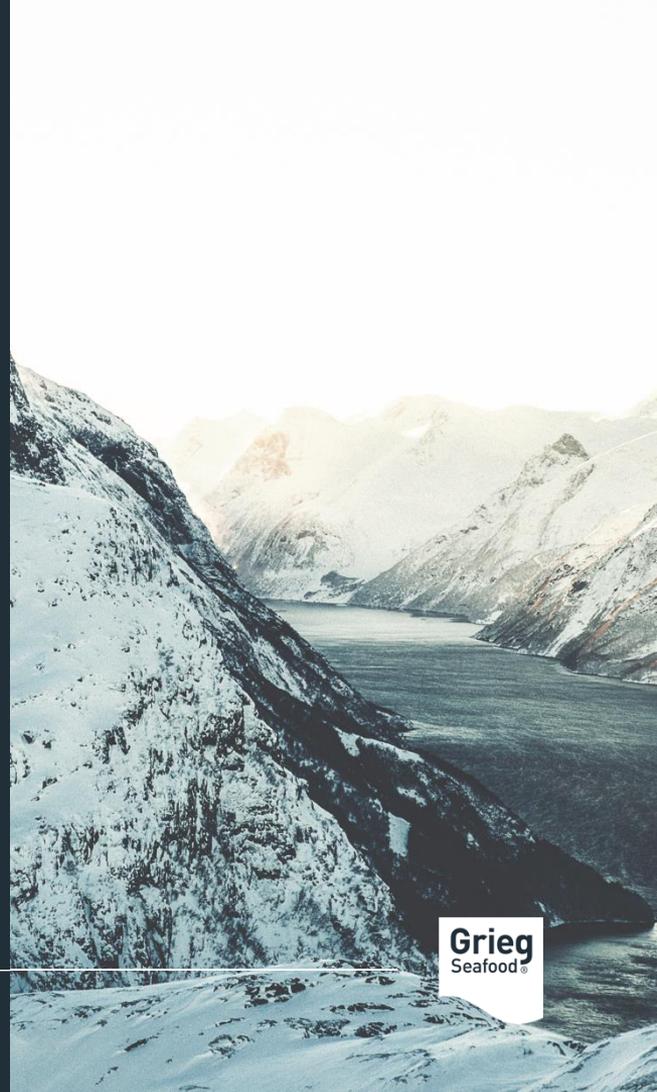


CAPITAL MARKETS DAY 2022 - FLOR & FJÆRE 15 JUNE 2022

# Farming the ocean for a better future

Andreas Kvame, CEO

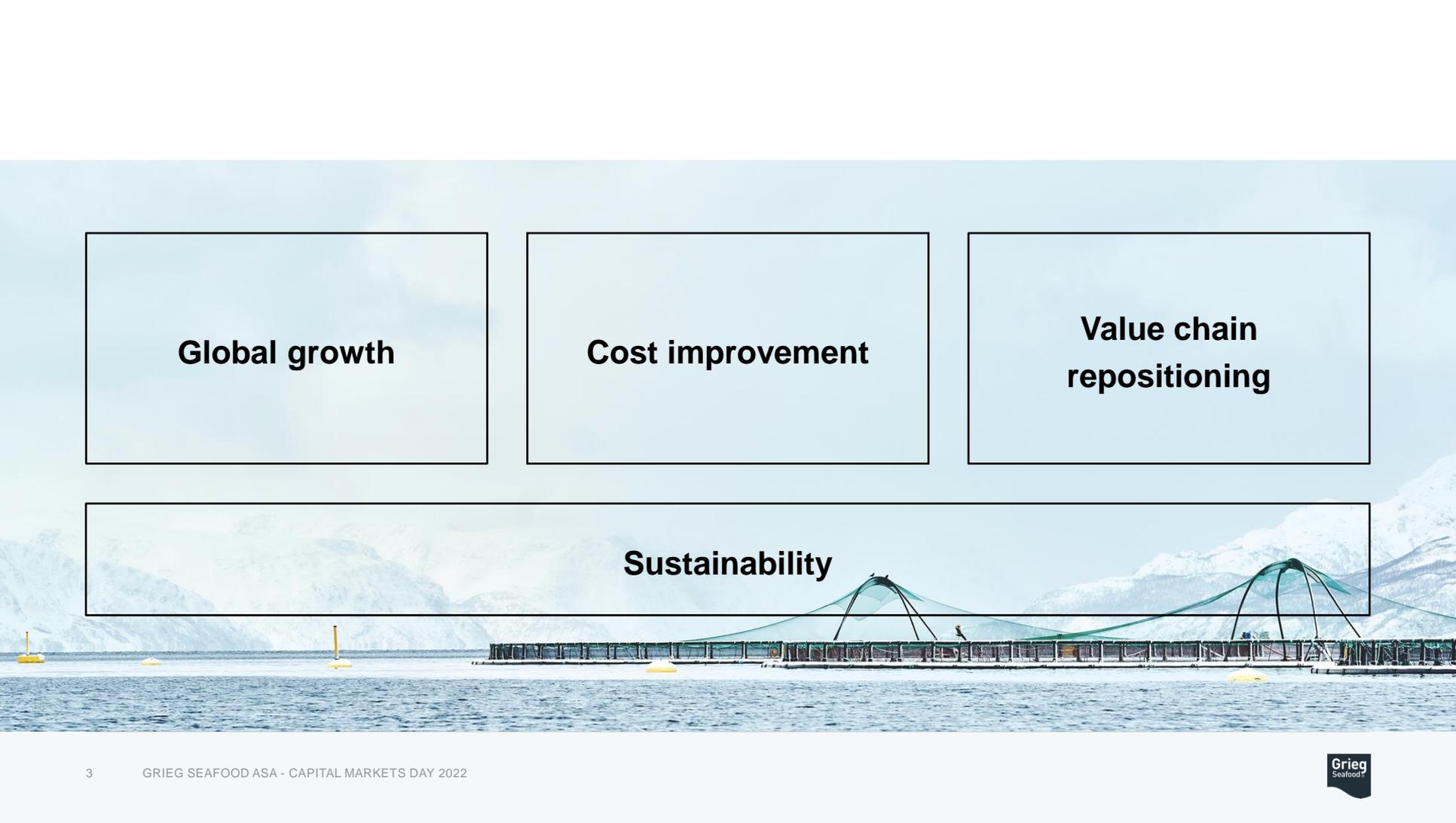


**Grieg**  
Seafood®

Value creation through operational  
integration and responsible growth

**120-135,000**  
tonnes harvest in 2026





**Global growth**

**Cost improvement**

**Value chain  
repositioning**

**Sustainability**

# CMU 2020 priorities

## What we said

## What we have done

IMPROVE PROFITABILITY

Reduced costs and improved biology and fish health



STREAMLINE AND EXECUTE GROWTH

Exited Shetland, focused on farming in Norway and Canada



SECURE FINANCIAL CAPACITY

Asset sales, issued green bond and refinanced credit facilities



SUSTAINABILITY IS CORE

Continued focus on sustainability, acknowledged by FAIRR and CDP



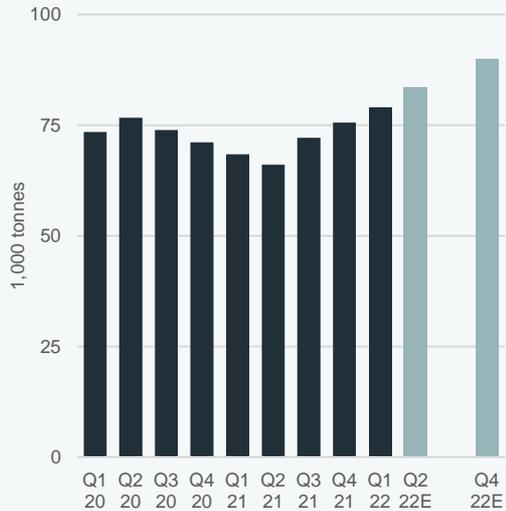
CREATE SHAREHOLDER VALUE

Total shareholder return of some 75% since November 2020

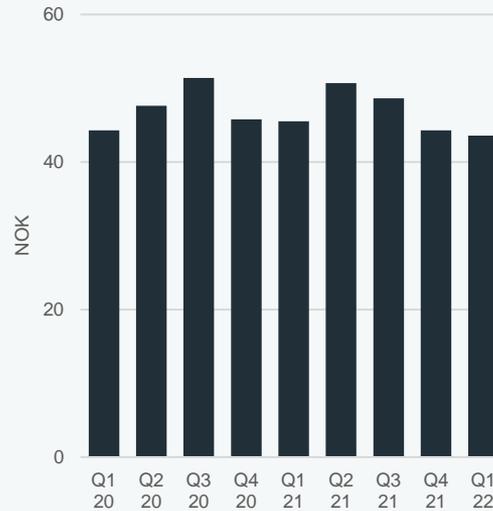


# Turning the trends...

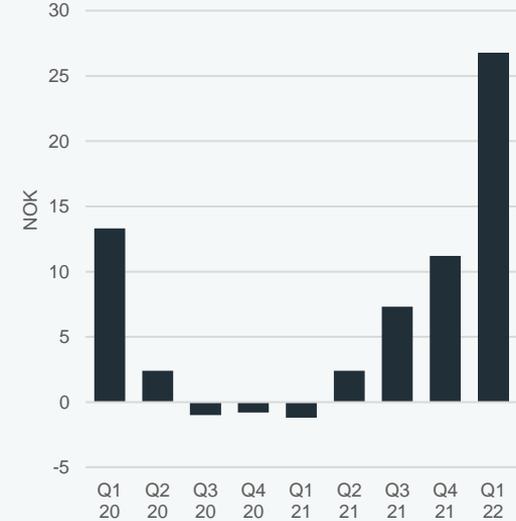
**HARVEST VOLUME\* 12M ROLLING**



**GROUP FARMING COST/KG**



**GROUP EBIT/KG**



\* All figures ex Shetland

# ...creating value for our shareholders...



# ...while re-organizing the company for value creation and responsible growth

## Farming

- Narrowed operational focus to Norway and Canada
- Reduced operational risk
- Optimized financial structure

## Sales and market

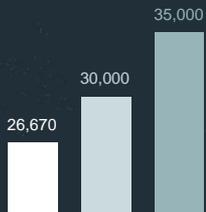
- Discontinued Ocean Quality joint venture
- Established in-house sales- and market organization

Integrating operations across activities and regions

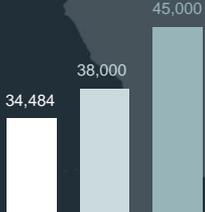
# Focused operations with proximity to main markets...

-  Farming regions
-  Sales offices and representatives
-  Headquarters

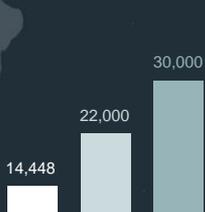
1 Rogaland



2 Finnmark



3 British Columbia



4 Newfoundland



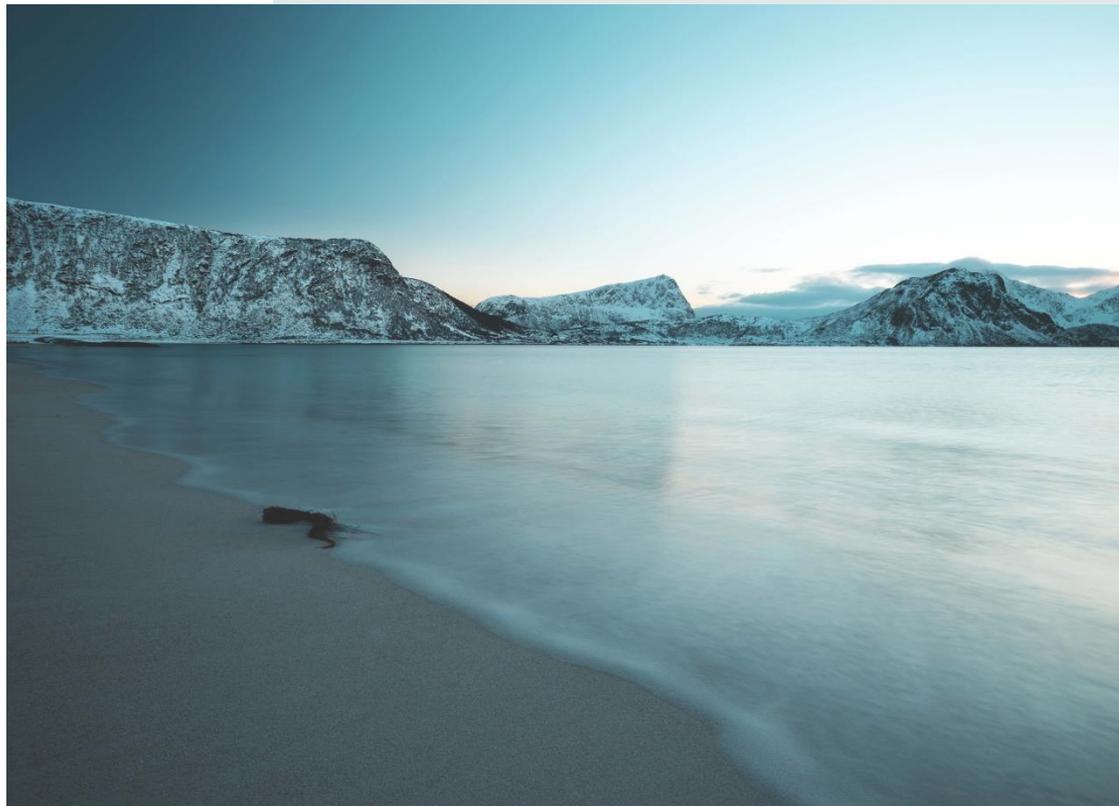
-  Harvest volume 2021
-  Harvest volume 2022E
-  Harvest volume 2026E

# ....run by dedicated and competent employees



# Sustainability

A value creation opportunity



# Sustainability – a prerequisite to salmon farming...

## SUSTAINABILITY DRIVERS

- High fish health and welfare
- Sea lice control through prevention
- Escape control
- Minimal impact on wildlife
- Climate action
- Work safety, diversity and work satisfaction
- Certifications
- Local value creation

## SUCCESS FACTORS

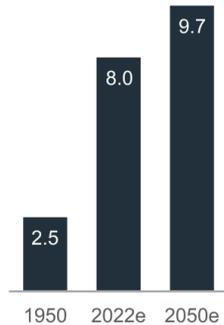
- License to operate and grow
- Higher volume
- Superior quality
- Reduced cost
- Engaged employees
- Preferred by customers and consumers
- Access to and cost of capital

## LONG TERM TARGETS

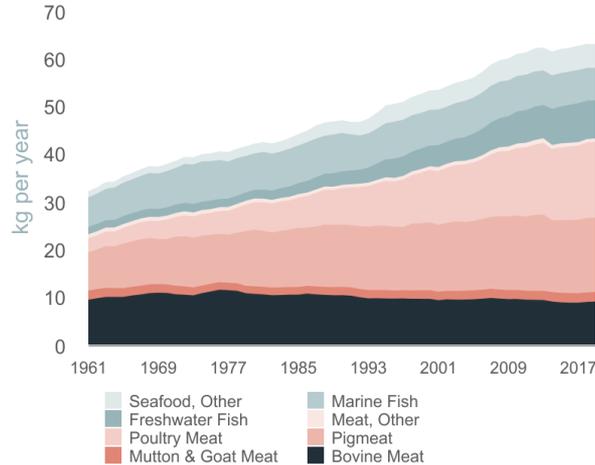
- Harvest of 90,000 tonnes in 2022 and 120 – 135,000 tonnes in 2026
- Cost leader in our operating regions
- NIBD/harvest volume < NOK 30/kg
- Return on Capital Employed of 12%
- Dividend of 30-40% of net profit

# ... a major business opportunity...

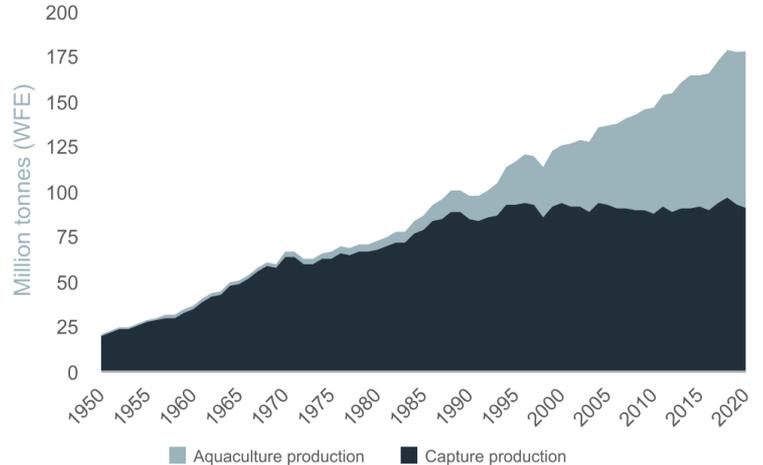
**World population**  
Billions



**Per capita meat & seafood consumption**



**World capture fisheries and aquaculture production**



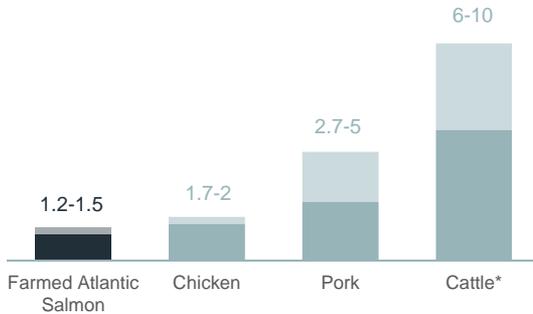
Source: UN (2019) World Population Prospects: the 2019 Revision

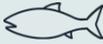
Source: FAO (2022)

Source: Kontali (2022)

# ...and an important part of the solution

## FEED CONVERSION RATIO



					
	Farmed Atlantic salmon	Chicken	Pork	Lamb	Beef

<b>EDIBLE YIELD</b>	68%	46%	52%	38%	na
<b>CARBON FOOTPRINT**</b>	0.60	0.88	1.30	na	5.92

\* The FCR of cattle production has a larger range due to the varying types of feed use  
 \*\* Kilograms of carbon dioxide equivalent (kgCO2eq) per typical serving (40g) of edible protein

Source: [Global Salmon Initiative](#)

# The challenges we must solve

1. Ensuring co-existence with nature and other species
2. Improving fish health and welfare
3. Finding sustainable feed ingredients
4. Cutting carbon emissions
5. Recycle resources
6. Protecting human rights



# Grieg Seafood's approach to sustainable business

## Our pillars



### PROFIT & INNOVATION



### HEALTHY OCEAN



### SUSTAINABLE FOOD



### PEOPLE



### LOCAL COMMUNITIES

## Topics

- Profitable operations
- Our market
- Research, development and innovation
- Responsible business conduct
- Corporate governance

- Fish health and welfare
- Protecting wild salmon
- Protecting biodiversity and marine ecosystems

- Safe and healthy food
- Sustainable feed ingredients
- Climate action
- Recycling and waste management
- Plastic pollution

- Human rights and ethics
- Embracing diversity
- Creating attractive jobs
- Keeping our employees safe

- Rural value creation
- Indigenous relationships
- Dialogue and engagement

## Sustainable Development Goals



# Strategy update



# Strategy for continued business development

## Global growth

Ambition of 120-135,000 tonnes  
harvest by 2026

## Cost improvement

Cost leader in our  
operating regions

## Value chain repositioning

From raw material supplier to  
strategic partner

## Sustainability

# Responsible growth

Capacity utilization

Expansion opportunities

New concepts

120-135,000  
tonnes by  
2026

# Generated from three areas

## OPTIMIZE CAPACITY UTILIZATION

- Improve biosecurity, fish welfare and survival
- Improve flexibility by optimizing area and site structure
- Precision farming capabilities

## EXPANSION OPPORTUNITIES

- Post-smolt - moving growth to land
- New license opportunities in all regions
- Newfoundland expansions
- M&A

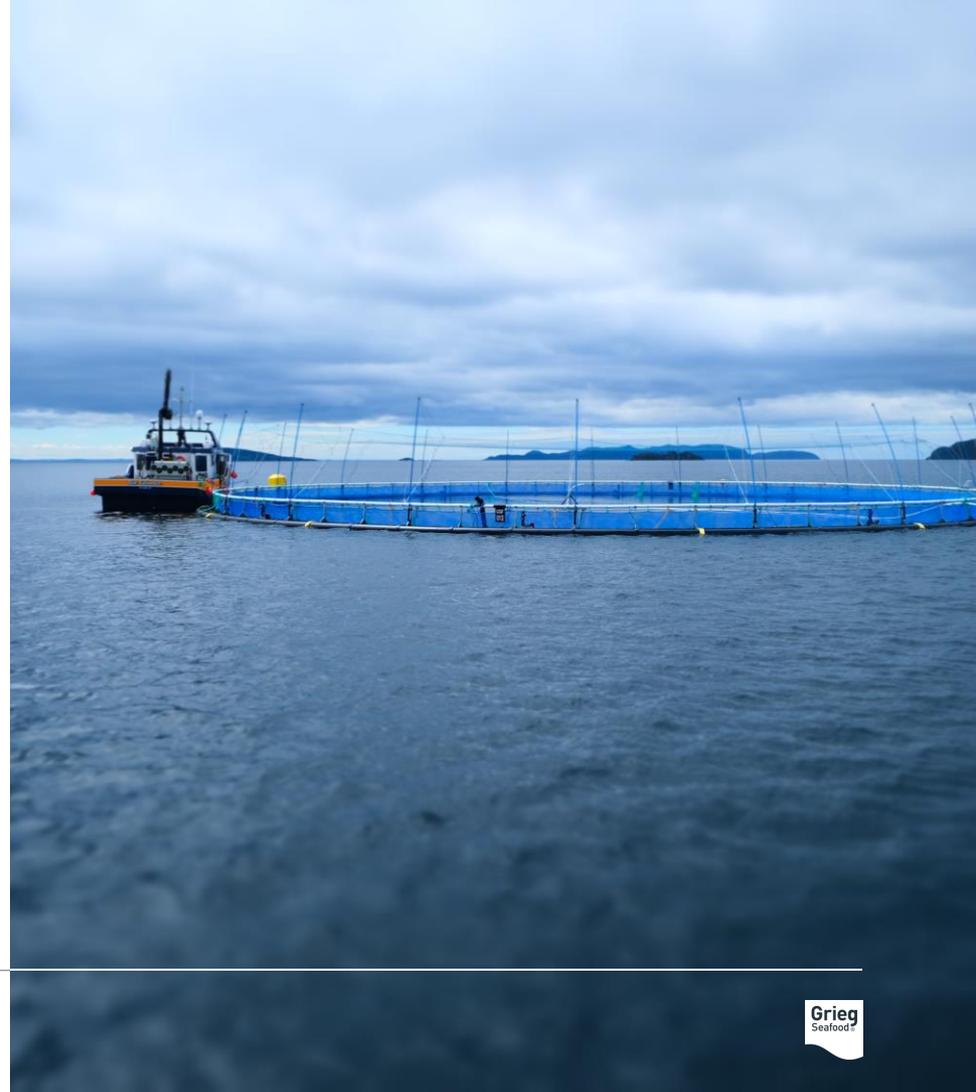
## DEVELOP NEW CONCEPTS

- Pursue and evaluate new potential growth opportunities
- Offshore
- Closed and semi closed containment

# Newfoundland

EXCITING OPPORTUNITY WITH POTENTIAL FOR SIGNIFICANT GROWTH

- Greenfield project with exclusivity for salmon farming in Placentia Bay area
- Favorable biological conditions
- Modern facilities and equipment well-suited for the area
- Freshwater operations performing well - first smolt released to sea in May 2022
- Awarded right to develop Bays West area with significant long-term growth opportunity

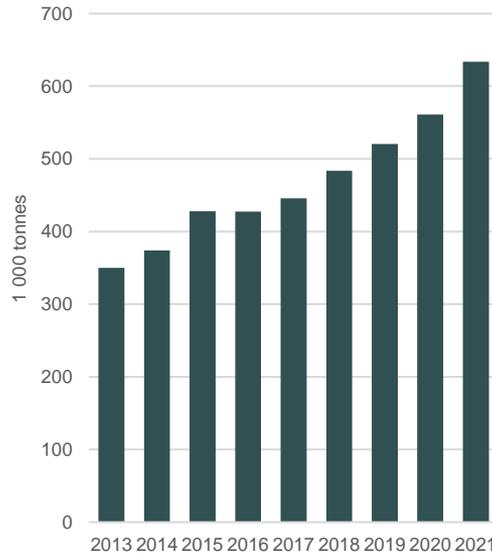


# The Canadian opportunity

## PROXIMITY TO THE LARGE US MARKET

- One of the world's fastest-growing markets
- Increasing demand for healthy and sustainably produced food
- Currently only 1/3 of demand met by North American production
- GSF provide local, low-carbon food to East and West coast markets

## US ATLANTIC SALMON DEMAND



## POLITICAL TRENDS & OPPORTUNITIES

- Developing current operations from a solid base
- Supporting implementation of the United Nations Declaration on the Rights of Indigenous Peoples in Canada
  - We strive to deliver on the Canadian Truth and Reconciliation Commission's Call to Action for Businesses
  - We have partnerships with 3 First Nations in BC
- Support the Federal Government's 2025 transition plan for the BC salmon industry. Our solutions:
  - Shorten time at sea (post-smolt)
  - Solid barriers between the farmed and wild salmon

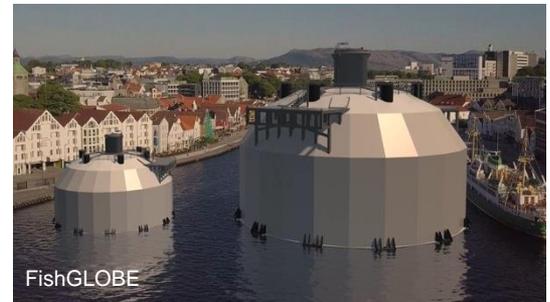
# New concepts

## BLUE FARM - OFFSHORE

- Moored concrete cage, designed for locations in harsh environments and potentially offshore farming
- Received 4.5 development licenses
- Contribute to development of new technology, in addition to building knowledge on biology and operations on exposed locations
- Early phase of planning
- Assume 2 years of planning + 2 years of construction from decision

## FISHGLOBE – CLOSED CONTAINMENT

- Entered 50/50 partnership with FishGLOBE for construction of a 30,000 m3 unit
- Awarded 2 development licenses for full grow-out production
- Investment decision expected by end 2022



# Cost improvement

Post smolt

Preventive farming practices

Digitalization - Precision Farming

Integrated operations

Improve  
competitiveness  
and secure  
responsible  
expansion

# Post smolt

## IMPROVING BIOLOGY, WELFARE AND GROWTH

- Less time in sea reduce biological risk and improve operational performance
- Core to fulfil sustainability requirements and ambitions
- Increase CAPEX and smolt cost, reduce OPEX and biological costs
- Capacity expansions across regions
- Very promising results in Rogaland

## ROGALAND POST SMOLT PILOT



90g  
in 2014



460g  
in 2021



800g  
in 2025

50% of harvested fish were from post smolt in 2021

## EFFECTS

Biological control ▲

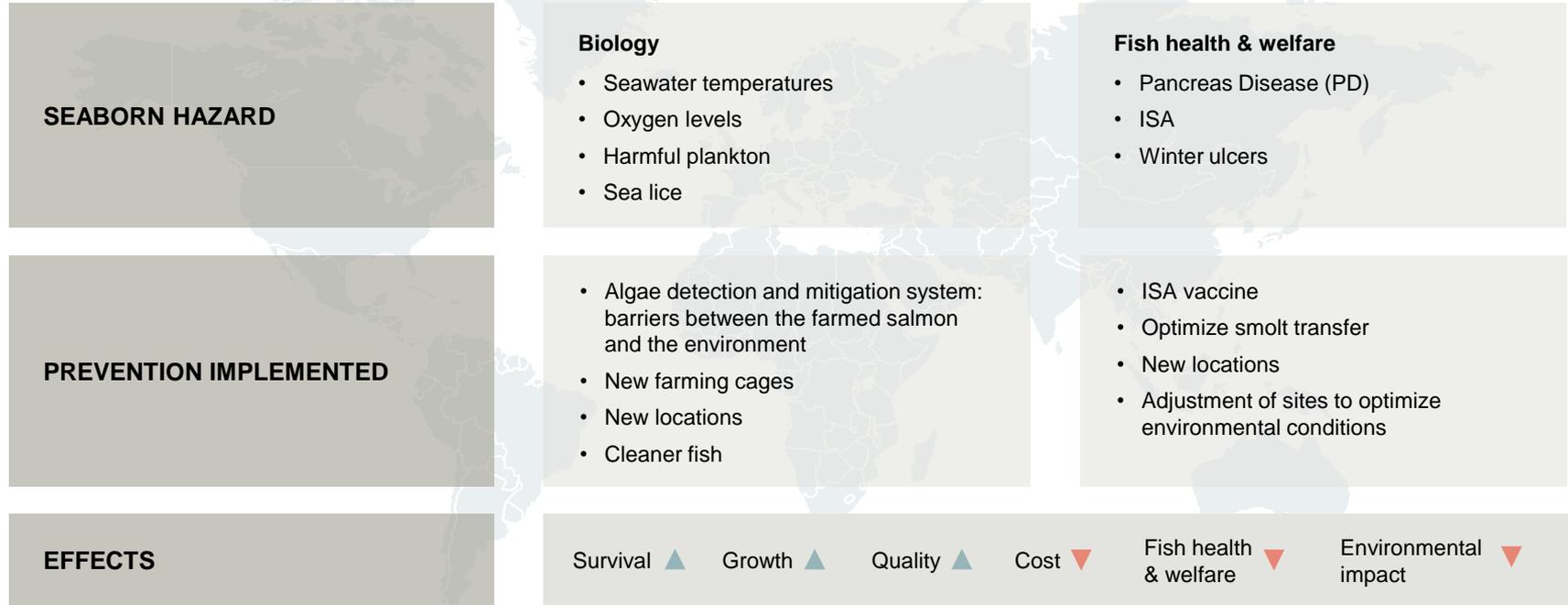
Production ▲

Fish health & welfare ▲

Cost ▼

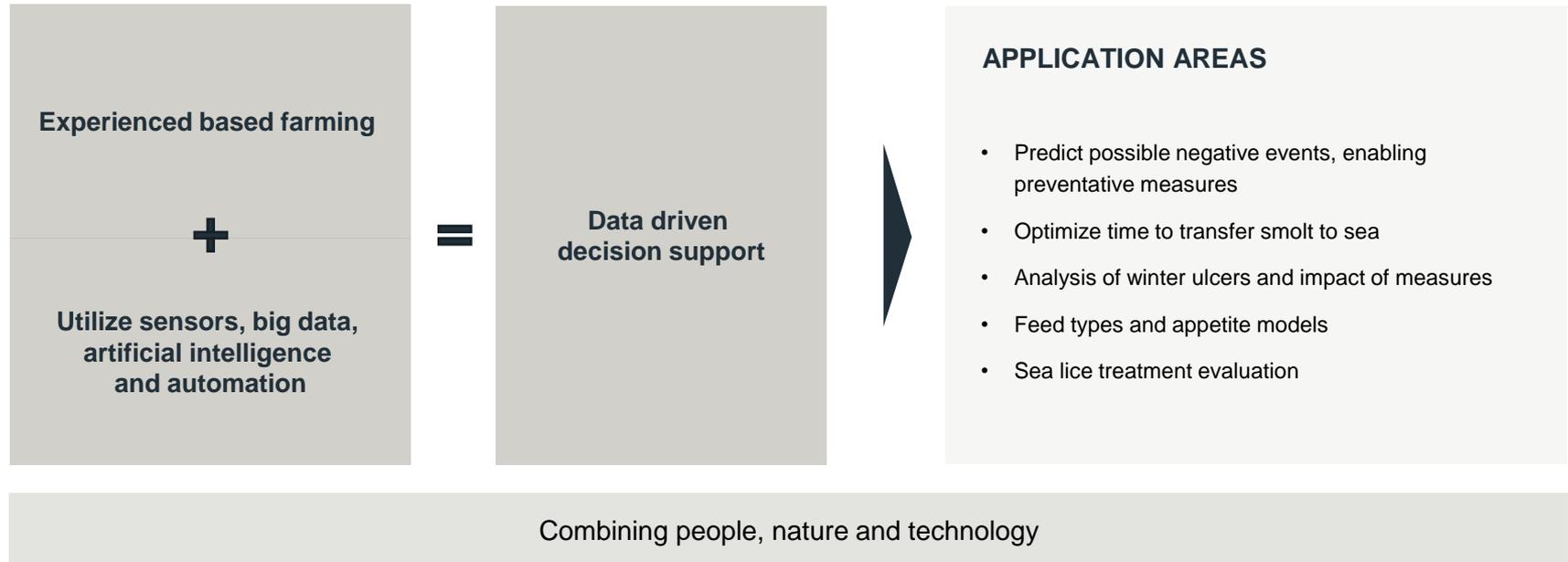
Environmental impact ▼

# Preventions – Mitigating biological risk and improving fish welfare



# Precision Farming – Digitalization of salmon farming

INCORPORATING STRATEGIC, TACTICAL AND OPERATIONAL DECISION SUPPORT INTO OUR PRODUCTION PROCESSES



# Value chain repositioning

Integrated sales organization

Value Added Processing

Brand development

Increase price achievement

# From raw material supplier to innovation partner

Raw-material supplier							
Value chain repositioning							
 <p><b>Breeding</b></p>	 <p><b>Freshwater farming</b></p>	 <p><b>Post-smolt</b></p>	 <p><b>Seawater farming</b></p>	 <p><b>Harvesting</b></p>	 <p><b>Sales and distribution</b></p>	 <p><b>Value added processing</b></p>	 <p><b>Retail / HoReCa</b></p>
<p>In Rogaland, we have a broodstock operation where we breed for specific traits, such as strong health or resistance to sea lice and diseases.</p>	<p>In all of our regions, we have RAS freshwater facilities, where the eggs are hatched and the salmon spend at least the first year.</p>	<p>As part of our post-smolt strategy, we keep the salmon longer on land in all regions to shorten the time in seawater, reducing risk of biological challenges. In Rogaland, the average size of the smolt transferred to the sea in 2021 was 460 grams compared to 120 grams in 2015.</p>	<p>The salmon live and grow in the sea until they reach a harvestable size of 4–5 kg.</p>	<p>We have harvesting plants in Rogaland and Finnmark. We use a harvesting vessel in BC. In Newfoundland, we have a cooperation with a local plant.</p>	<p>We have our own global sales and market organization with local offices in the countries we farm salmon, to support growth and the downstream strategy.</p>	<p>We have a small share of VAP in Norway and BC. We will form closer partnerships in the market and increase the value of our salmon through VAP.</p>	<p>Our salmon is found in retail stores or on the menu at restaurants or hotels. Currently, we have the HoReCa brand Skuna Bay in Canada.</p>

# Maximizing group value creation

## INTEGRATED SALES ORGANIZATION

- In house sales organization handling all volumes
- Coordinated activities between farming and sales

## VALUE ADDED PROCESSING

- Increase 20-30% harvest volume for VAP by 2026
- Processing partners close to key customers and markets
- Supporting sustainability reduced CO2 emission

## BRAND DEVELOPMENT

- B2B
- Strategic partnerships

Improving group EBIT/kg



ROOTED IN NATURE

Capital Markets Day 2022

# Sales and Market

Erik Holvik, CCO



**Grieg**  
Seafood®

# Value chain repositioning

## Integrated sales organization

- Established own sales and market organization, sell 100% of our fish
- Significant benefit from coordination between farming and sales
- Measured on group EBIT not internal sales margin

## Value Added Processing

- 20-30% harvest volume for VAP by 2026
- Establish processing partners close to key markets and customers (EU, US)
- Improved sustainability and reduced CO2 emission

## Brand development

- Development of B2B brand
- Implementation over the next quarters
- Important pillar of strategic partnership

**Increase price achievement**

**Optimized EBIT and performance between farming and sales**

# Integrated sales organization

## Match biological performance and optimal sales

- Optimal harvest profile depends on biology, market price for various fish sizes and harvestable size
- Positive trend in Q1-22 vs Q1-21 with reduced impact of quality cost and harvest profile

## Objective and key result

- Measure price achievement and risk mitigation, not internal sales margin
- Continuous improvement in all parts of the value chain
- Be a valued partner for our customers and suppliers

## Supporting improved price achievement vs Nasdaq (NOK/kg)



# Value Added Processing – part of the solution

## OBJECTIVE

- Increased price achievement
- Closer to final customer
- Risk management
- Sustainability
- Brand development

## EXECUTION

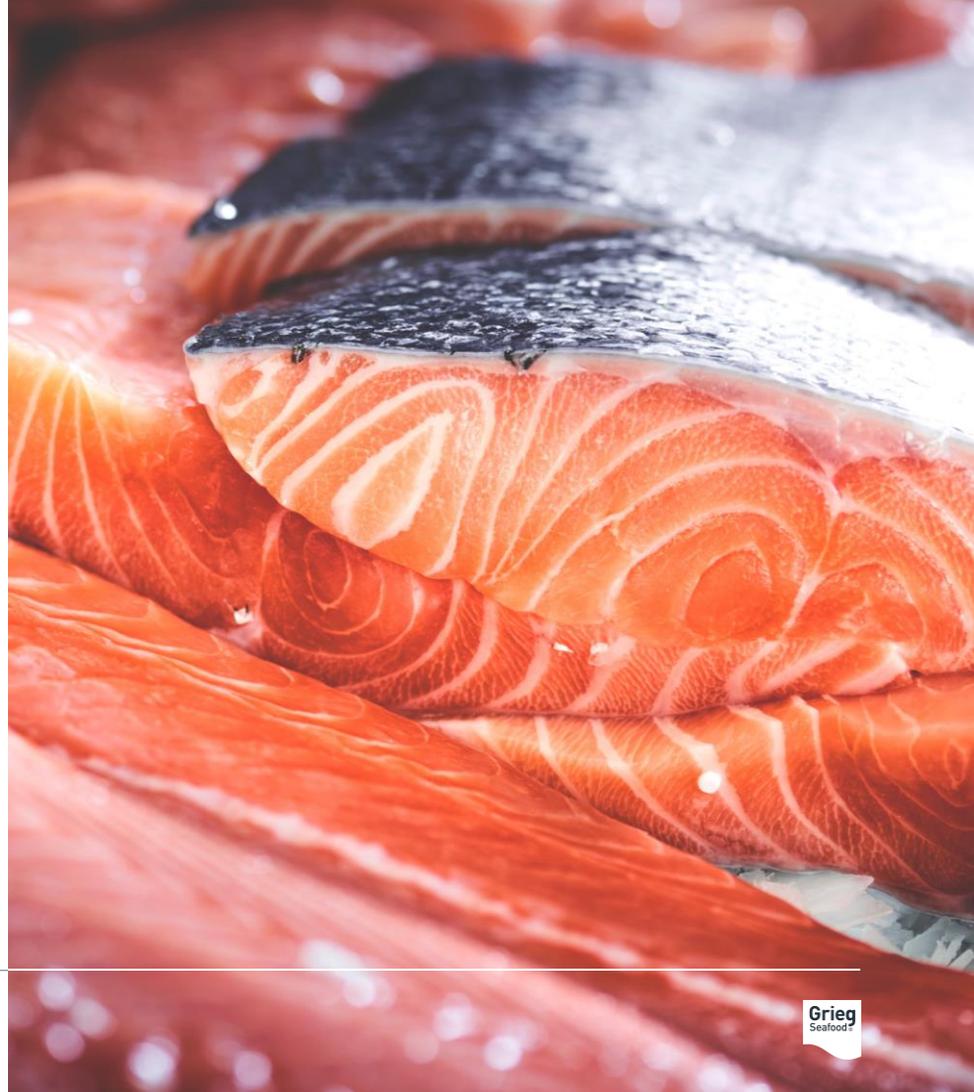


- VAP product portfolio implementation and development
- Long term partnerships with processors in Norway and Europe with strategic fit

# Market positioning strategy

## Target: achieve a price premium

- Launch of B2B Grieg Seafood brand with selected partners
- GSF DNA the foundation of this process
- Cultivate the successful Skuna Bay brand
- Direct relationships with strategic retail and foodservice customers
- Offer the customer differentiated salmon



# Value chain repositioning: Roadmap

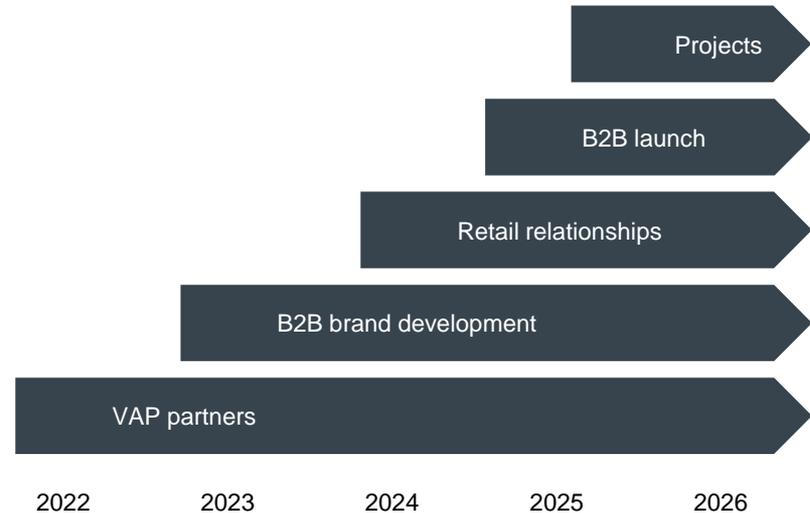
## Key milestones 2022

- Ambition of 5-10% of harvested volume for VAP
- Establish processing partnerships in Norway and Europe
- Entry of GSF VAP products to selected markets
- Capitalize on the potential in the Skuna Bay brand
- Develop Norwegian origin B2B brands

## Key milestones 2023-2026

- Increase VAP share of harvested volume to 20-30%
- Direct relationships with retailer and selected foodservice customers
- Launch of B2B strategy on Norwegian and Canadian salmon
- Launch of innovation projects for increasing VAP performance

End objective: Optimize EBIT



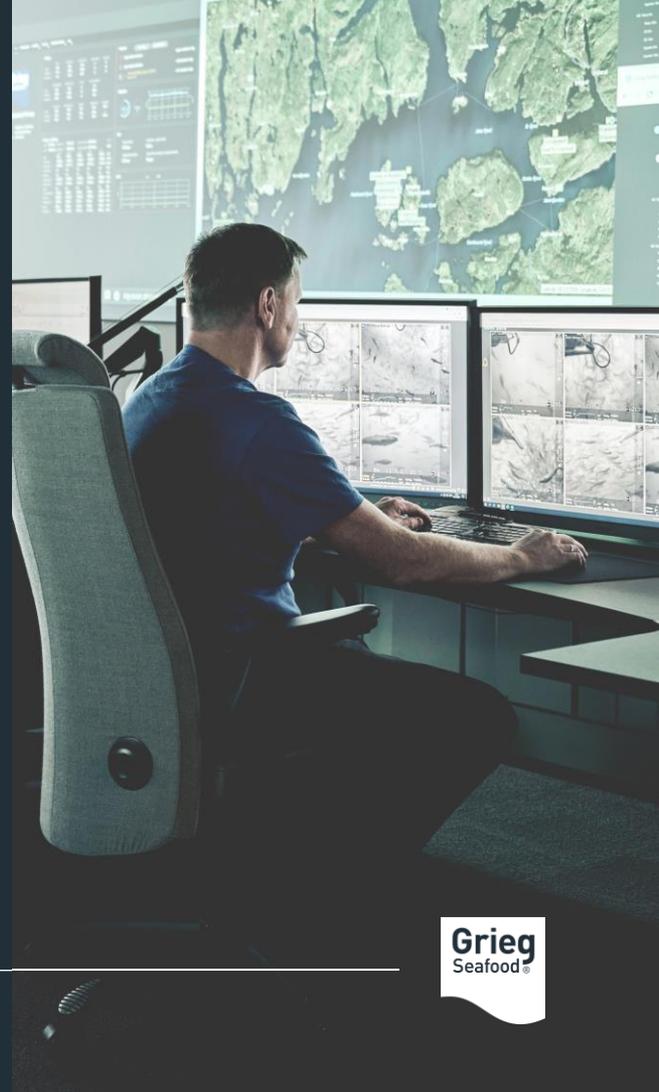


ROOTED IN NATURE

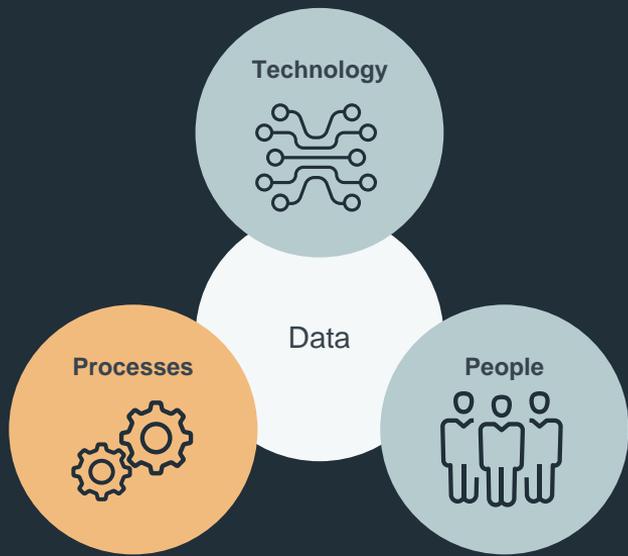
Capital Markets Day 2022

# Digitalization GSF Precision Farming

Trond Kathenes, Chief Digital Officer



**Grieg**  
Seafood®



## Combining experience and data-based insight in salmon farming

# Digitalization in salmon farming

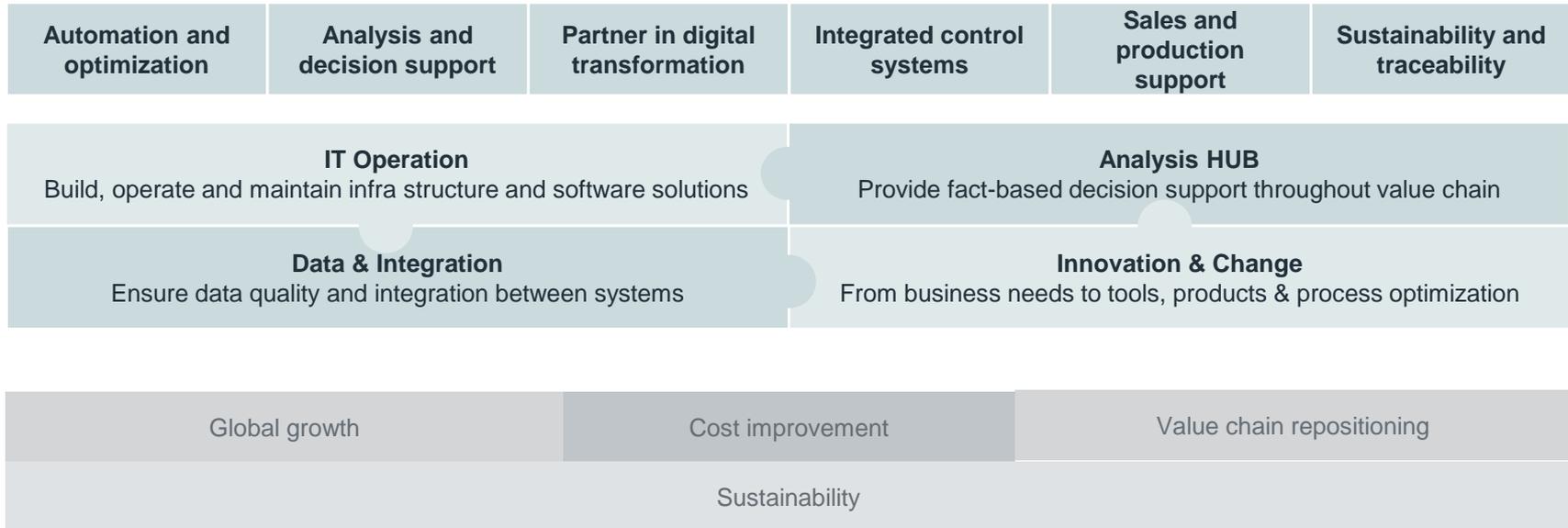
**What we said  
in 2018**

Applying advanced **sensors**,  
**big data**, **artificial intelligence**  
and **automation** to generate **better  
decisions**, thereby increasing yield  
and **resource efficiency**



# GSF – Precision Farming

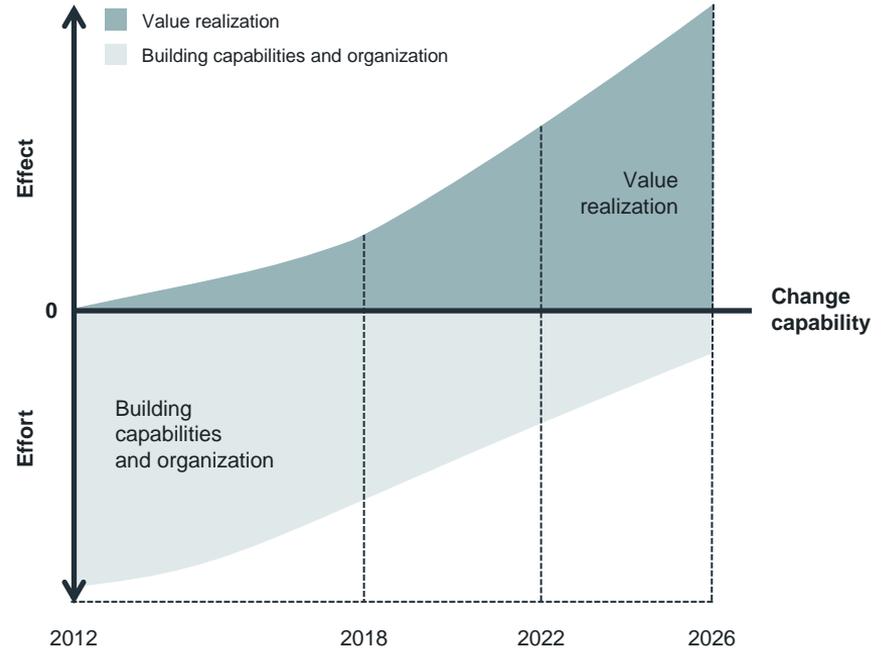
## 2026 strategy



# The foundation for digital transition

ALL ELEMENTS MUST BE IN PLACE AND WORK TOGETHER TO GIVE EFFECT

<b>Automation of data</b>	Automation/Artificial Intelligence
<b>Analysis of data</b>	Analysis platform Visualization and reporting
<b>Aggregation of data</b>	GSF Business platform
<b>Communication of data</b>	Infrastructure and network
<b>Creation of data</b>	Applications Sensors/IIoT

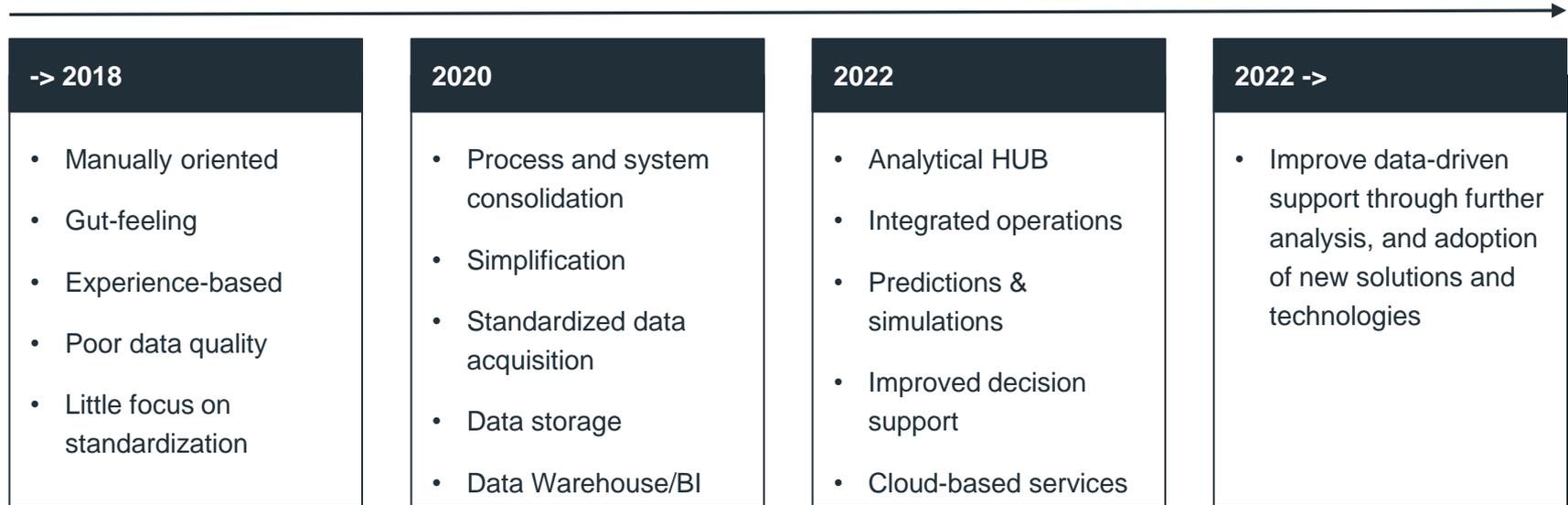


# Technology and data are changing the way we operate

## Historical data

## Real-time data

## Data-driven decision support



# Integrated Operation Center

FACILITATING TRANSITION TOWARDS  
STRATEGICAL GOALS BY PARING EXPERIENCE-  
BASED KNOWLEDGE AND DATA-DRIVEN INSIGHT

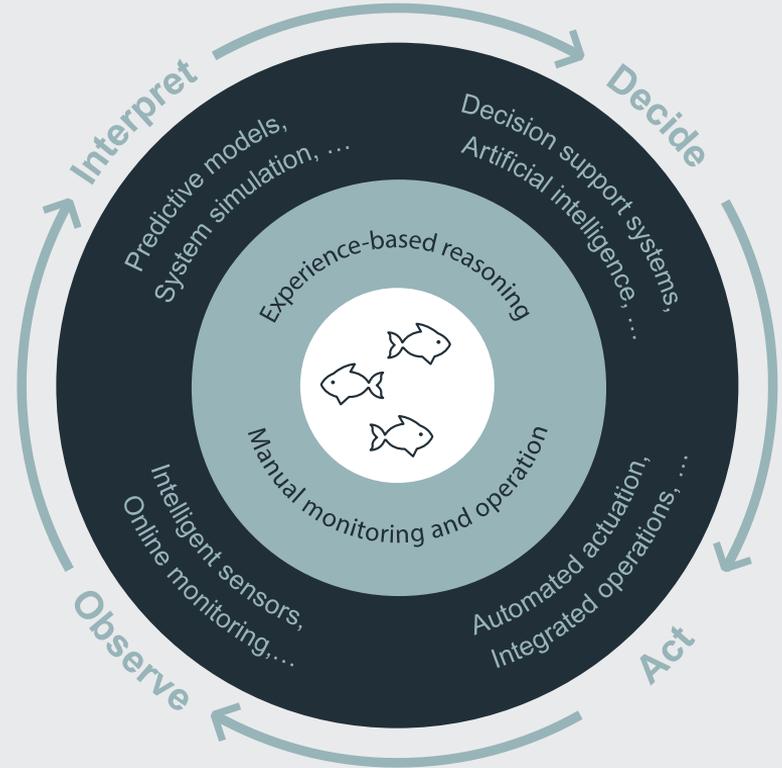
Utilizing the basic principles for decision making from the  
manual oriented farming

**--> Observe --> Interpret --> Decide --> Act**

Smart sensors, prediction models, AI based decision  
support enables expedited decision process and earlier  
actions

\*\*

Co-location of IOC operators and domain experts  
additionally strengthen the decision process, facing  
different biological and technical issues

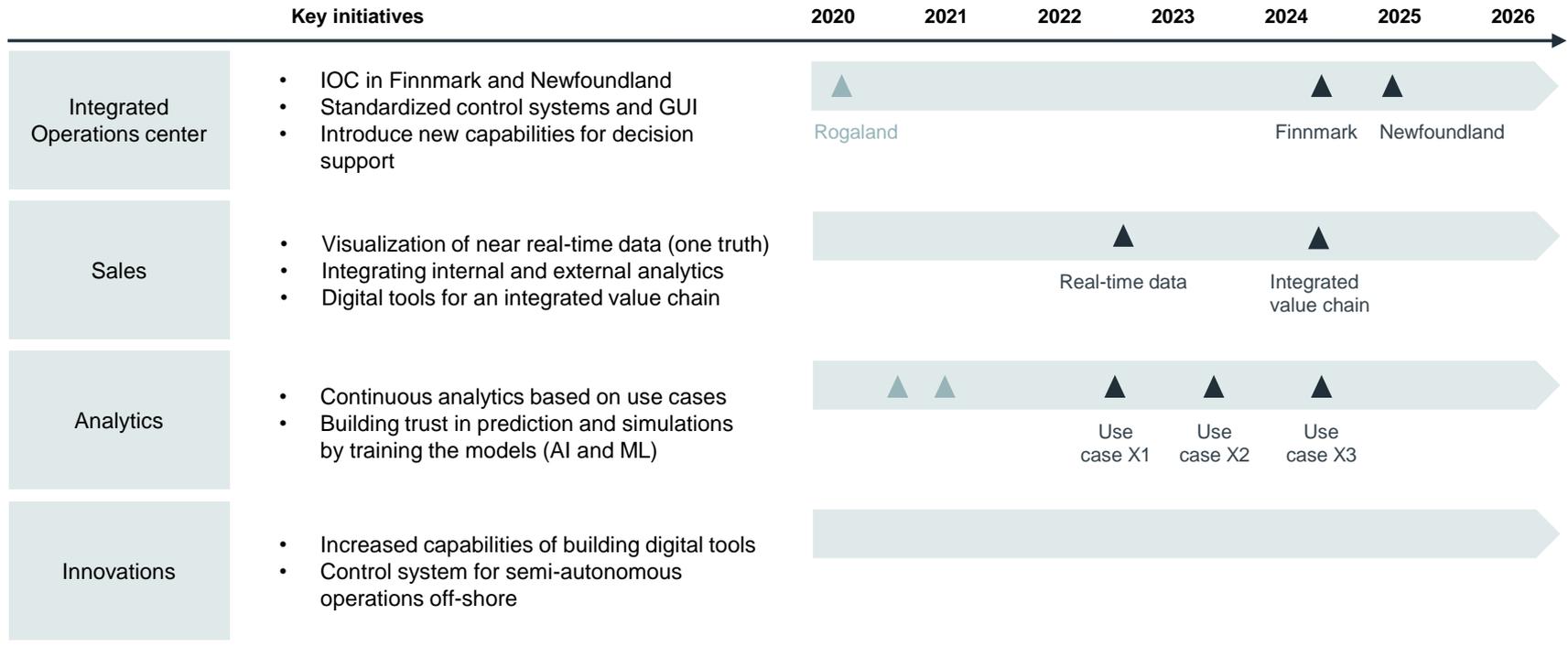




# Findings and deliverables from analytic projects

ANALYTICAL PROJECT	USE CASE	FINDINGS / DELIVERABLES	INPUT TO BUSINESS
Winter ulcers	Identify drivers behind winter ulcers and operational actions to reduce winter ulcers	<ul style="list-style-type: none"><li>• Knowledge to potential root causes for winter ulcers</li><li>• Prediction and simulation tool</li><li>• Early warnings of possible negative impact on production</li></ul>	<ul style="list-style-type: none"><li>• Implement change in operational procedures improving fish welfare and harvest quality</li><li>• Change in output date and size to reduce risk connected to winter ulcers</li></ul>
Rapid smolt growth	Rapid growing smolts perform less than slow growing smolts  Smolts should have a period of lower growth in freshwater to perform well in the sea	<ul style="list-style-type: none"><li>• Data can not argue that there is a strong correlation between temperature in freshwater and growth in sea</li><li>• Reduced number of days in sea reduce mortality, winter ulcers, number of treatments and reduce risk for disease</li></ul>	<ul style="list-style-type: none"><li>• Continue with post-smolt strategy</li><li>• Use prediction tool to identify time windows to transfer fish to sea</li><li>• Continue current freshwater production</li></ul>

# Key initiatives in our strategy from 2022 to 2026





ROOTED IN NATURE

Capital Markets Day 2022

# Rogaland

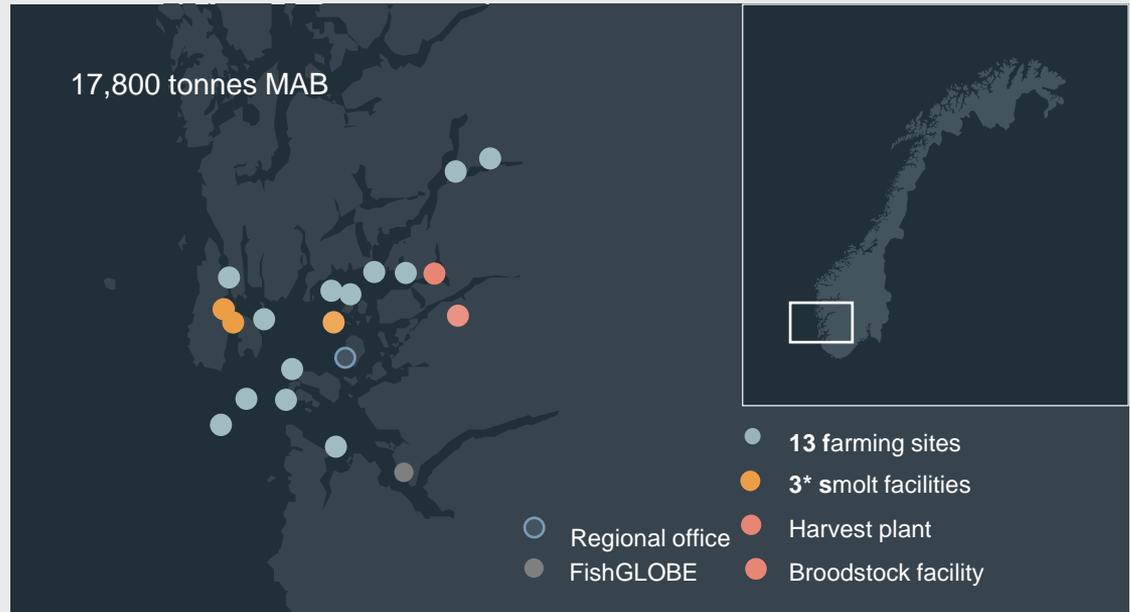
Nina Grieg, Regional Director



**Grieg**  
Seafood®

# Rogaland in brief

- From roe to harvest
- Post-smolt front runner
- Employs 159 employees
- Organic capacity of 30,000 HOG
- Regional biological challenges
  - Sea lice
  - PD
  - Winter ulcers
  - CMS



\* Tytlandsvik, Trosnavåg, Hognaland

# Improving biology...

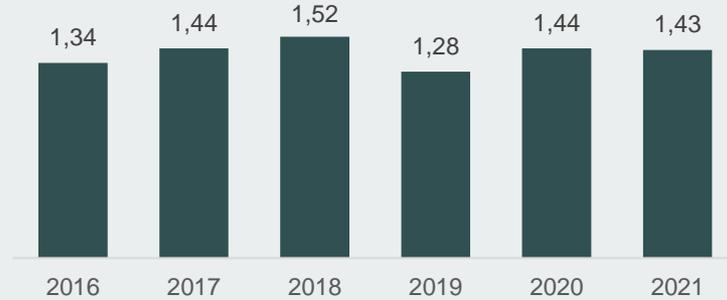
## Survival %



### Natural variations in survival

- Mortality mainly due to PD, sea live treatment and CMS
- Single incident treatment caused mortality in 2020

## eFCR



### Falling trend in eFCR

- Largely driven by the survival curve
- Higher average weight of smolt and harvested fish has increased FCR in sea

# ... and increasing volume

## Harvest weight increasing

- Effective production from post-smolt
- Less treatments and more feeding days

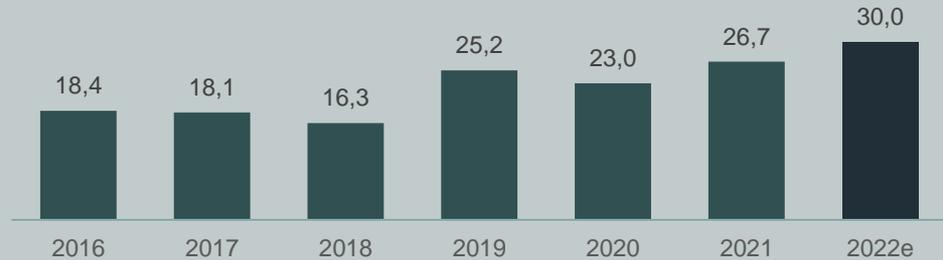
## Strong growth in harvest volume

- New licenses (1,560 MAB) introduced in 2019
- Tytlandsvik completed in 2019

**Average harvest weight**  
average, kg GWT



**Harvest volume**  
1,000 tonnes GWT



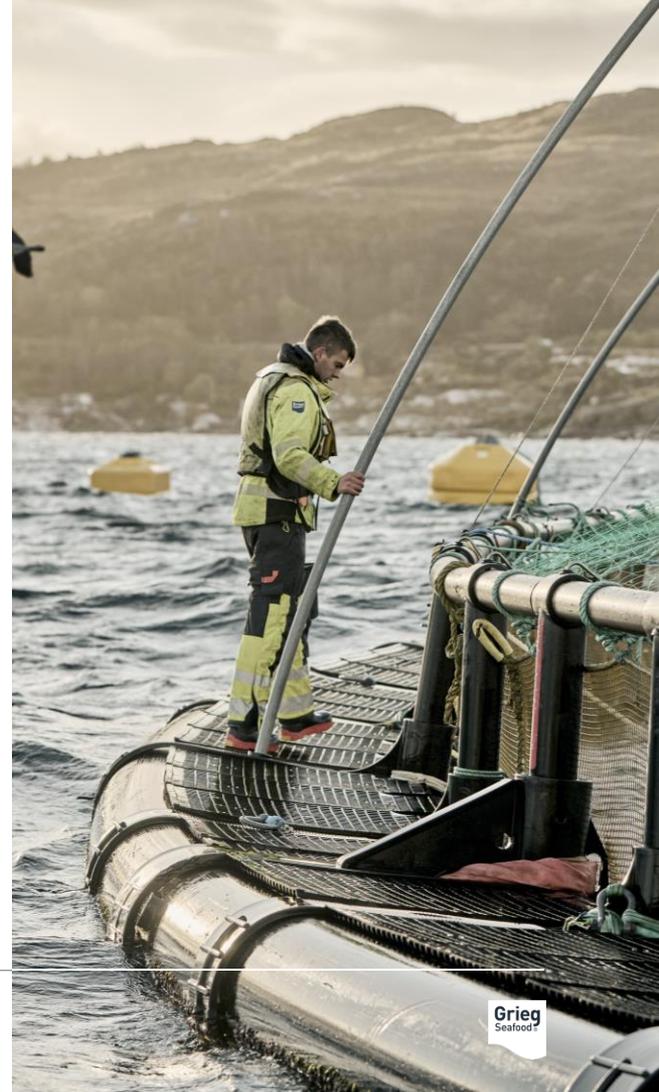
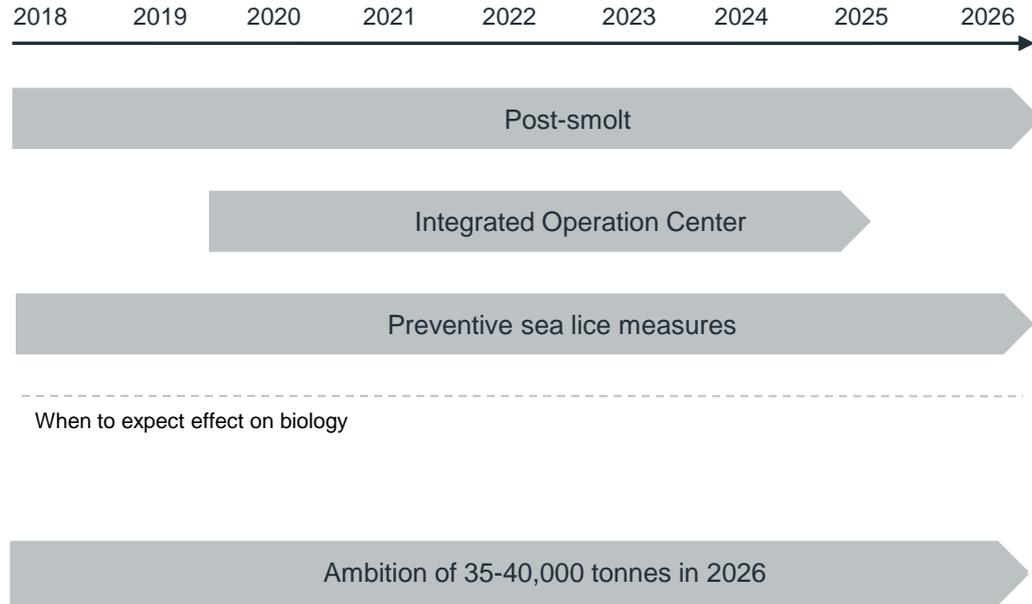
# Improvement initiatives proving results

- 2020 and first half of 2021 challenging due to single mortality events
- Biology improved significantly during second half of 2021
  - Post-smolt main contributor
- Expect post-smolt to contribute to more stable biology going forward

## Farming cost development NOK/kg



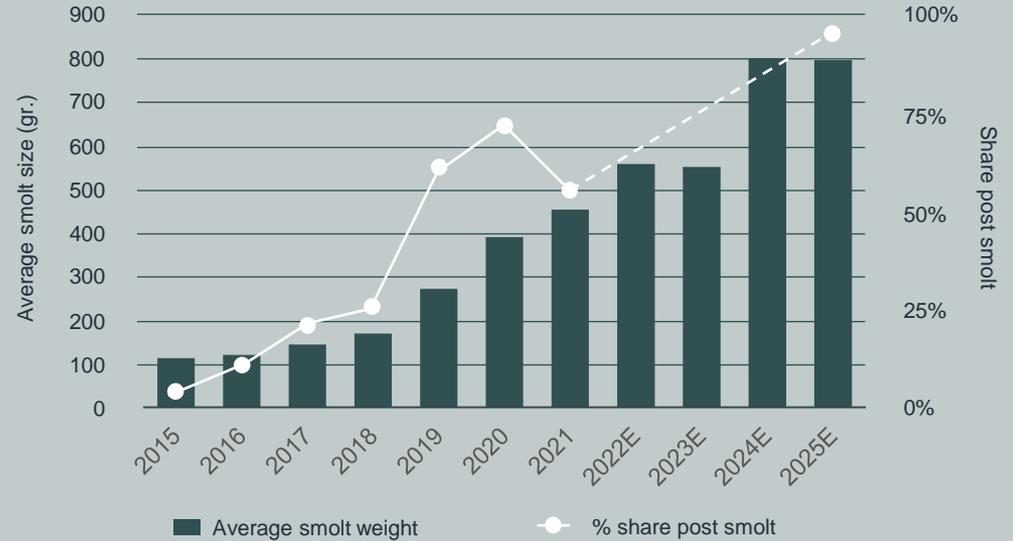
# Key initiatives and priorities



# Larger smolt – a game changer...

- Improve biological control, fish welfare and survival
- Reducing time in sea from 18 to less than 12 months
  - Minimize bio exposure
- Increase flexibility and allow for more efficient production cycle
- Reduce wild-salmon interactions
- We are only halfway there – the major impacts are yet to come

Rogaland smolt release



# ... Rogaland leading the way

## Tytlandsvik Aqua

- Concluded expansion to 6,000 tonnes
- Stable delivery of high quality post-smolt
- Cooperation with Bremnes Seashore and Vest Havbruk



## Årdal Aqua

- Planned 4,500 tonnes post-smolt, with potential for grow-out
- Construction commencing in 2022
- In cooperation with Omfar and Vest Havbruk
- Based on same design as Tytlandsvik

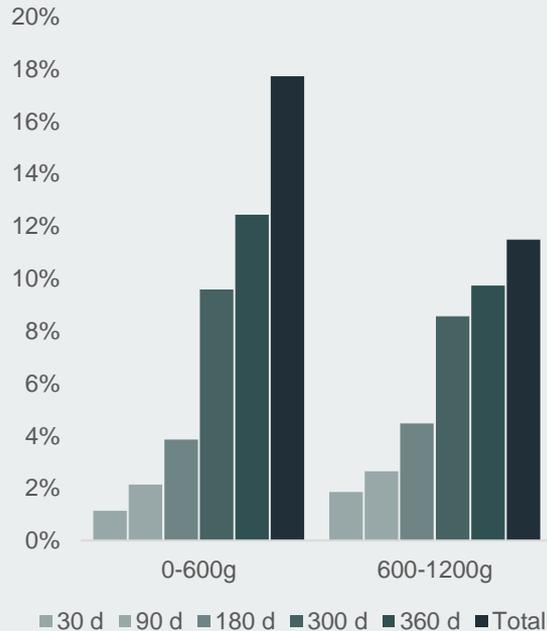


	Current capacity*	Planned expansions*	Optional expansions	Completion year (concluded / optional)	% volume*	% ownership**
<b>Trosnavåg</b>	1,200	0	+600	25/26	100%	100%
<b>Tytlandsvik</b>	2,250	+750	+1,500	24/26	50%	33%
<b>Årdal Aqua</b>	0	+4,500	+1,500	24/25	100 %	37%
<b>Fish Globe</b>	900	0	0	2022	100 %	0%
<b>Total capacity</b>	<b>4,350</b>	<b>+5,250</b>	<b>+3,600</b>			
<b>Well positioned with land capacity</b>						

# Proving promising results

- Stable production of post-smolt up to 1 kg
- 18 groups of post smolt > 600g harvested so far
- Post-smolt of 900g transferred to sea end March '21
  - Average harvest weight of 4.8kg after 8 months
- Strong indications of improved biological control compared to standard smolt weight

Mortality by input class and time in sea %



**306**

average days in sea

**From 82 to 89 %**

generation survival

**-6 %**

eFCR

**+30%**

smolt yield

**Significant**

reduction in sea lice treatments

# Exploring new solutions – smolt at sea

- Unique closed containment system in sea
- Currently two globes in production in Rogaland, each with a size of 3,500 m<sup>3</sup>
- Promising results:
  - 6 groups of post-smolt produced
  - Zero lice treatment
  - Low energy requirement < 1kwh pr kilo fish produced
  - Some mortality challenges caused by winter ulcers
- Next Seafood established as joint venture to develop the technology further and adapt it to the grow-out salmon phase



# Key initiatives to ensure growth and fish welfare

## Preventive measures

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### Post-smolt

- Reduced time in sea lower exposure to sea lice

### Use of cleaner fish

40% of the pens harvested in Rogaland in 2021 never needed any sea lice treatments

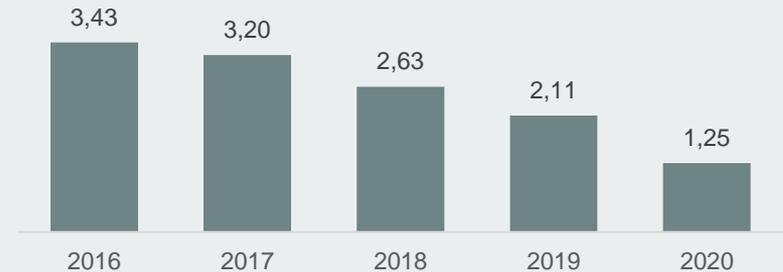
Target <1 sea lice treatment per generation

## Strong reduction in sea lice treatments

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### Average # of lice treatments per fish lifecycle

Number, ex. active feed



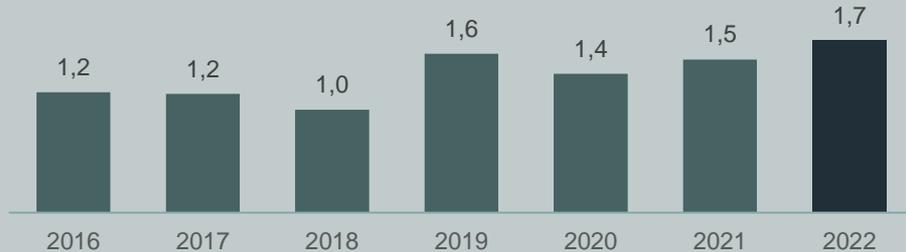
# Ambition of 35-40,000 tonnes in 2026

- Current production capacity of 30,000 tonnes
  - On schedule to reach full utilization in 2022
  - Post smolt – managing risk and higher survival
  - Shorter production cycle and turnaround time of sites
  - Improved feeding through Operational Central
- Add 4,000 tonnes post-smolt capacity by 2025
  - Upside potential through multiplication effect
- Add 1,000 tonnes through other growth investments
  - Possible expansions in traffic light, Fish Globe, Blue Farm, post-smolt

**Harvest volume**  
1000 tonnes GWT



**Harvest volume per MAB capacity**





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# Finnmark

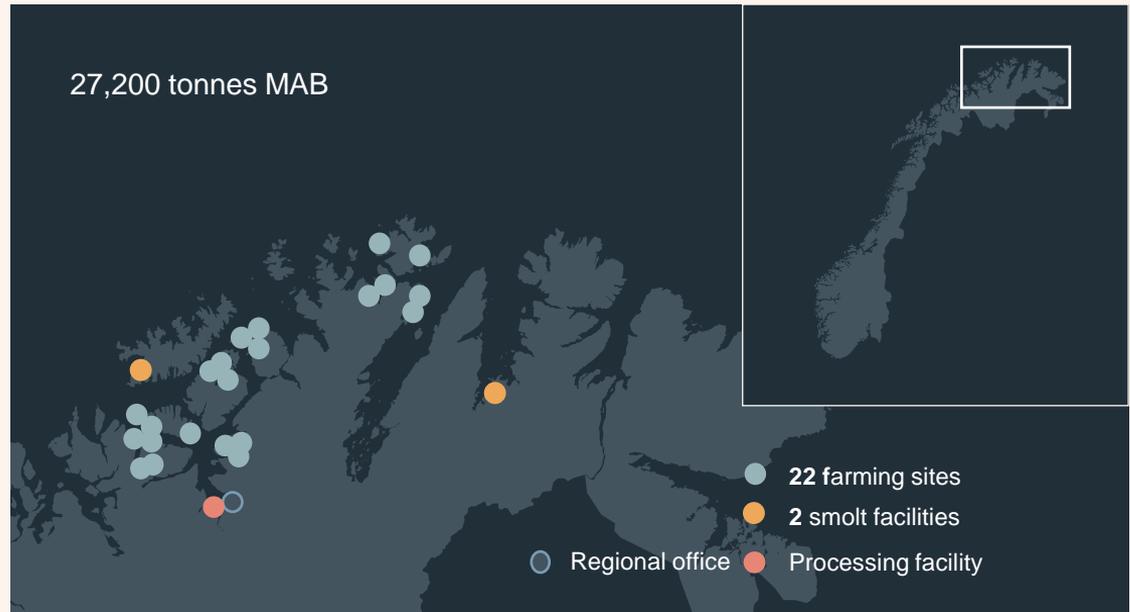
Berit Seljestokken, Seawater Production Manager



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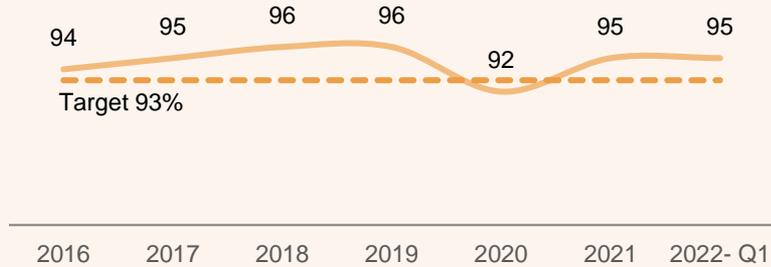
# Finnmark in brief

- Employs 248 people
- Organic capacity of 39,000 GWT
- Regional biological challenges
  - Winter ulcers
  - ISA
  - Sea lice



# Biology back on track

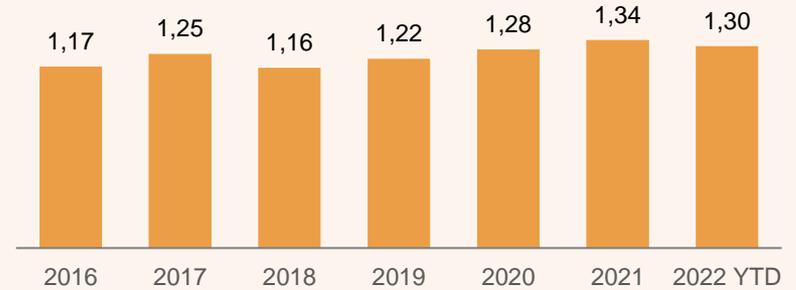
## Survival %



### History of high survival

- 2020 affected by winter ulcers and ISA
- Impact mitigated by systematic work - vaccination, sea lice handling, feed and smolt

## eFCR



### Turning the trend on FCR

- Strong feed conversion rates in 2016-2019
- 2020-21 generations impacted by mortalities and reduced growth
- Measures taken have shown promising results from the second half of 2021

# Reduced weight from accelerated harvest

## Upside on harvest weights

- Biological challenges such as winter ulcers and ISA have forced early harvest of smaller fish
- Targeting average harvest weight of 4.5 kg

## Strong volume growth

- Increased stockings from 2018 facilitated higher harvest volumes
- Improved site structure key reason for improvement

**Average harvest weight**  
average, kg GWT



**Harvest volume**  
1 000 tonnes GWT



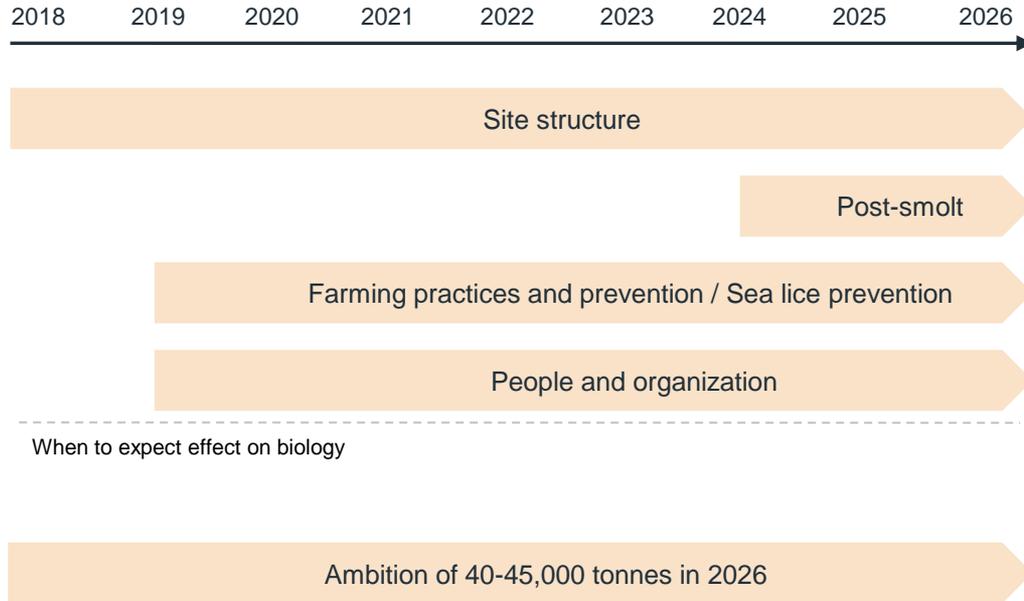
# Improved fish health - reduced cost

- 2020 and first half of 2021 challenging due to winter ulcers and ISA
- Systematic work with vaccination, sea lice treatment, feed and smolt contributed to significant improvement from second half of 2021
- Expect continued positive impact from initiatives going forward

## Farming cost development NOK/kg



# Key initiatives and priorities



# Site structure development



- Key to improve license utilization and bio security
- Increase flexibility in production planning
  - Positive development since 2016
  - Optimized existing sites
  - Five new farming sites
  - 100% ASC certification
  - Harvested volume up 56% in the 2016-21 period
- Continuous search for new sites

# Post-smolt expansion

## ADAMSELV

- Capacity increase to 5,000 tonnes (2,000)
- Average weight up to 500g from 200g
- Construction start planned end of 2022
- First smolt delivery during 2024
- Effect on harvest from end of 2025

## BENEFITS

- Avoid two winters in sea
- Increased survival
- Increased flexibility as time for release is limited



# Systematic work to improve fish welfare and survival

## WINTER ULCERS

- Analytics
- Vaccination
- Feed composition
- Harvest timing
- Post-smolt

## INFECTIOUS SALMON ANEMIA (ISA)

- Analytics
- Vaccination
- Harvest timing
- Post-smolt

## AVERAGE # OF LICE TREATMENTS PER FISH LIFECYCLE

NUMBER, EX. ACTIVE FEED

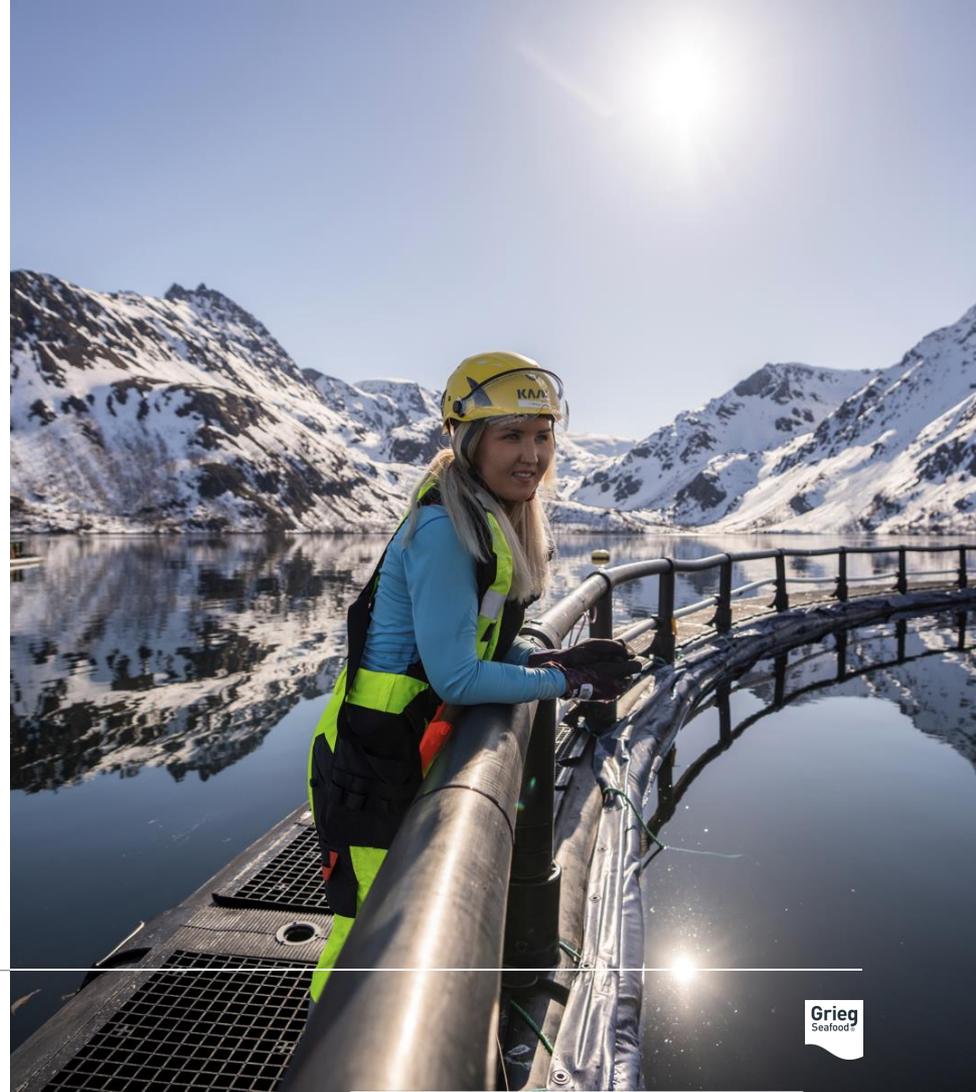


## SEA LICE PREVENTION

- Proactive use of barriers and cleaner fish
  - Barriers used on all farms
  - Cleaner fish used pro-actively in high-risk areas
- Significant reduction in sea lice treatments
- Lower number of treatments reduce handling, starving, stress and winter ulcers

# Investing in our people

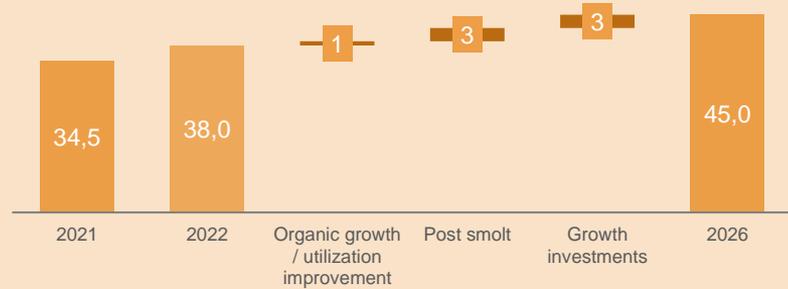
- Well-being and safety for employees always the top priority
- Initiatives to attract, develop and retain talent
- Continuing education and development programs
- 50 certificates of apprenticeships awarded since 2018
- Modern and high-standard equipment and accommodation
- We aim to be the preferred employer in our local communities



# Ambition of 40-45,000 tonnes in 2026

- Organic production capacity of 39,000 tonnes
  - 40,000 tonnes within range through optimized site structure and new sites
- Adding 3,000 tonnes post-smolt capacity in Adamselv
  - Increasing harvest/MAB factor to 1.6x
- Adding 3,000 tonnes capacity through growth investments
  - Traffic light
  - Viewing-license granted in 2022
  - Additional smolt sourcing

**Harvest volume**  
1 000 tonnes GWT



**Harvest volume per MAB capacity**





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# British Columbia

Rocky Boschman, Regional Director



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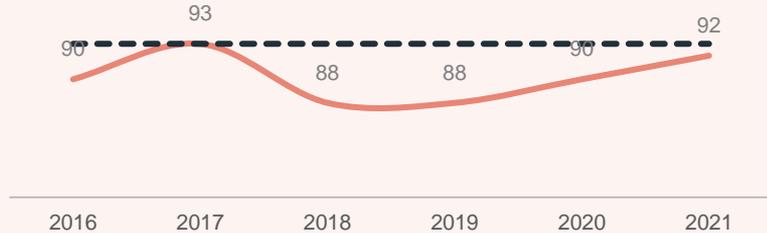
# British Columbia in brief

- Employs 180 people
- Organic capacity of 30,000 GWT
- Volumes alternates every other year due to local production arrangements
- External processing
- Regional biological challenges
  - Harmful plankton
  - Oxygen levels
  - Sea lice



# Improving biology

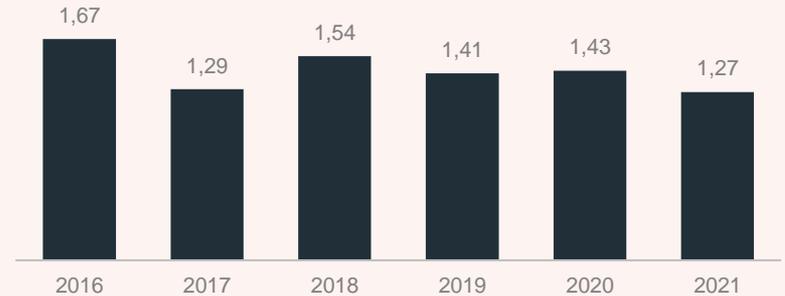
## Survival %



### Gradually increasing survival

- Harmful algae blooms (HAB) and low oxygen main reasons for low survival in 2018-19
- Positive development since 2019 due to AI monitoring supported by aeration systems

## eFCR



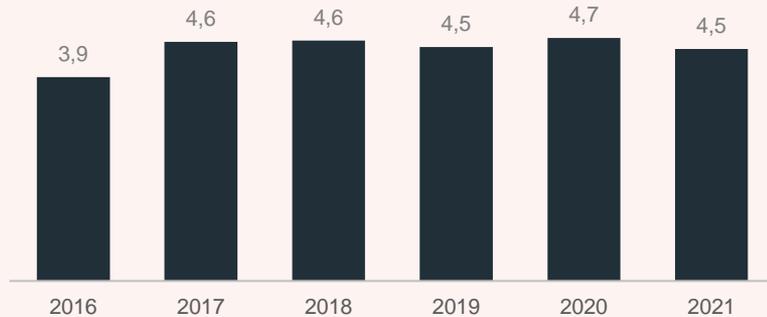
### Gradually decreasing eFCR

- Positive development in FCR since 2019
- Increased number of feeding days due implementation of aeration systems and automated feeding system

# Volume growth driven by improved capacity utilization

## Average harvest weight

average, kg

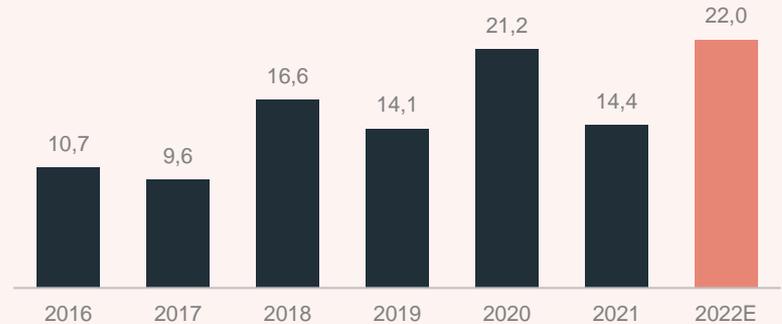


### Stable harvest weights

- Harvest grading program implemented in 2017, allowing for stable harvest weights

## Harvest volume

1 000 tonnes GWT



### Volumes stabilized at higher levels

- Volumes alternates every other year due to local production arrangements

# Positive underlying cost development

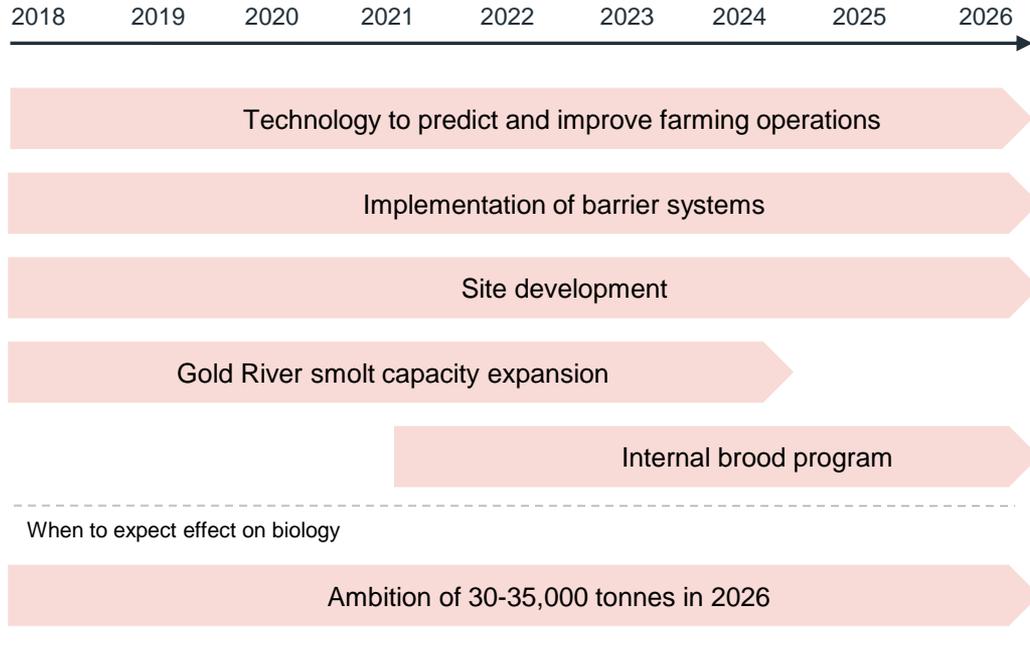
- Survival and FCR have improved gradually since 2019
- Positive effects on costs offset by increased sea lice treatment and more expensive feed
- Significant improvement potential from introduction of barrier systems and sea lice skirts
  - Implemented on 3 farms in 2022, effective from 2023
- Expect positive cost effect from higher harvest volume in 2022

## Farming cost development

CAD/kg



# Key initiatives and priorities



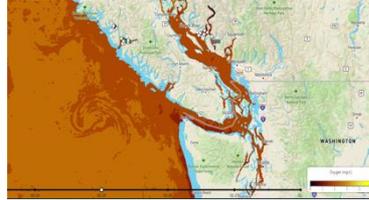
# Technology to predict and improve farming operations

## REAL TIME DATA MONITORING

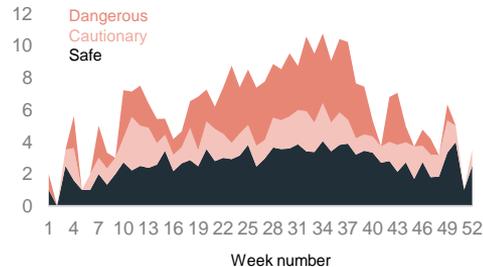
- Fish behavior
- Environmental data
- AI predictions of oxygen level and harmful algae blooms (HAB)

## DATA ANALYTICS

### Environmental data



### Sites with lethal plankton



## AUTOMATED FEEDING SYSTEMS

- Exploring effectiveness at various sites
- Implemented at one site today
- Benefits: optimized feeding profile, fewer lost feeding days, improving FCR

## AERATION SYSTEMS

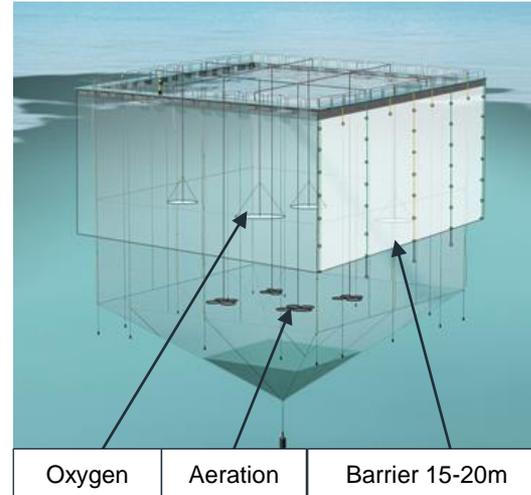
- Installed in all pens
- Utilized in periods with low oxygen levels and algae blooms
- Benefits: allow for feeding in marginal situations and reduced mortality
  - HAB related mortality reduced to 0.4% in 2021 from 3.4% in 2019

# Introducing locally developed barrier system

## “C02L FLOW”

- **Retractable barriers** limits transmission between wild and farmed salmon populations
  - Crucial during wild salmon migration periods
- Cutting-edge **technology** addressing low-oxygen levels within the farm system
- Used in combination with HAB and oxygen monitoring tools
- To be installed at 3 sites in the Esperanza in 2022, corresponding to 40-50% of total harvest in 2023
- Decision to implement on remaining sites will be based on results from Esperanza area

## Successful trials on two sites since 2019



**+40%**  
growth

**+19%**  
survival

**-13%**  
bFCR

**Significant**  
reduction in sea lice  
treatments

# Expanding fresh-water capacity

SECURING QUALITY AND FLEXIBILITY

## Gold River

- Gold River smolt facility expanded from 400 – 900 tonnes, completed in 2022
- Further expansion of post-smolt capacity under consideration, multiple options available

## Broodstock program

- Completed in 2022, capacity to supply 100% internally
- Key outcome: lower egg input cost, secure quality of eggs and improve harvest flexibility



Gold River RAS facility

# Site development key to increase utilization

- Develop current sites
  - Gradual replacement of old pens
  - Transition from 30-meter pen systems to 200-meter circles
- Develop new sites
  - Three new sites: one license approved, two pending



Water Flow ▲

Oxygen level ▲

Feeding days ▲

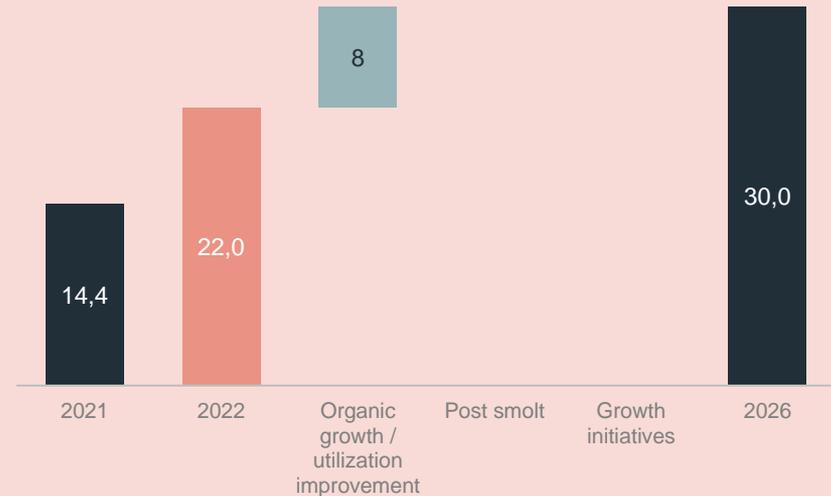
Growth ▲

# Ambition of 30-35,000 tonnes in 2026

- Utilizing current production capacity of 30,000 tonnes
- Barrier systems allow for higher densities
- Develop site structure
  - Optimizing existing sites
  - Three new sites: one license approved, two pending

## Harvest goals

1 000 tonnes GWT





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# Newfoundland

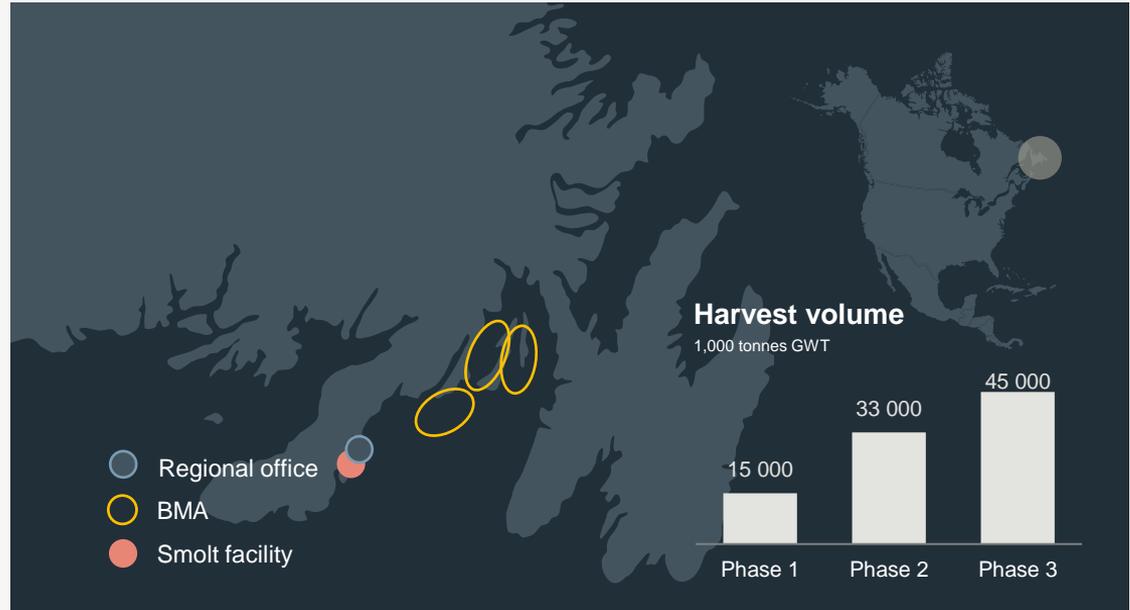
Knut Skeidsvoll, Regional Director



**Grieg**  
Seafood®

# Newfoundland in brief

- Start up in 2015
- Employs 95 people
- Greenfield project with long-term exclusive farming right to the Placentia Bay area
- Option to expand current smolt facility to a post-smolt facility
- Processing at local plant
- Stepwise development of the region, expansion dependent on Phase 1 results

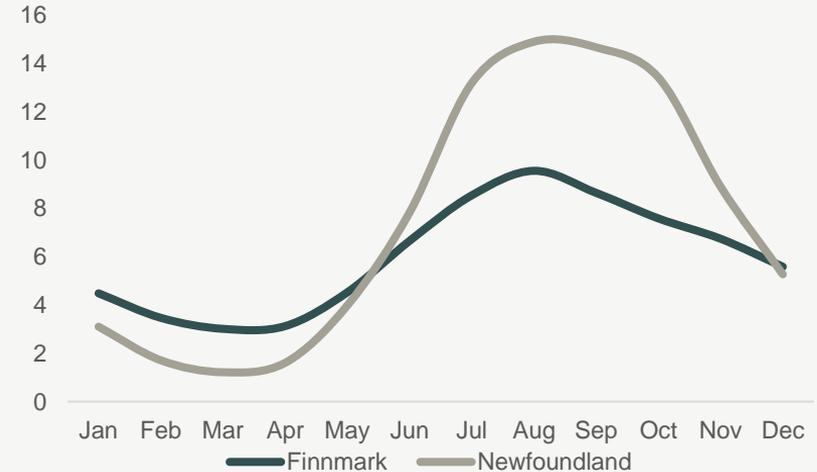


# Region with favorable farming conditions

- Large area with long distances between sites reducing impact from neighbouring farmers lowering risk of biological contamination
- Biological condition comparable to Finnmark
  - Similar seawater temperature profile
  - Exposed to high seas, but less rough weather
- Algae blooms and oxygen levels not an issue
  - Sites and production areas at least 100 meters deep, with good currents and optimal oxygen levels
  - Temperatures below 17° C year round

Average (2016-2022) monthly temperature (10m)

Celsius



# Cutting-edge technologies throughout production process

- Low carbon emission technology both on land and in sea
- RAS facility constructed with innovative AquaMaof design
- First hybrid feed barge commissioned in Atlantic Canada
- Large 160m circles and 40m deep nets
- Integrated Operations Center
- Real-time Environmental Monitoring
- Remote handling systems improve operational efficiency - reducing risk for diseases and predator attraction



# Fully operational RAS facility

- RAS smolt facility completed consisting of hatchery, nursery and a smolt unit with a capacity of 600 tonnes
- Construction of additional 1,400 tonnes post-smolt capacity (post-smolt A) planned resumed in 2023
  - Dependent on successful first winter in sea for summer 2022 smolt release
- Post-smolt design includes expansion option
  - Post-smolt B+: total capacity of 5,000 tonnes
  - Sourcing Phase 2 and 3 production
- Capacity utilization somewhat impacted by narrow smolt window due to low temperatures



# Phase 1

- Ambition of 15,000 tonnes harvest by 2026
- First harvest in 2023
- Buildout in 3 BMAs (production areas)
  - Each site with capacity of 2 million fish
- Next phase(s) dependent on successful Phase 1
  - Biosecurity and fish health
  - Project economics



# Successful first transfer of smolt to sea

- Completed in May
- 2.2 million smolt to be transferred to sea during spring and summer 2022
- Use of sterile all female salmon
  - European broodstock
  - Eliminates risk of genetic pollution of wild Atlantic salmon
  - Does not mature
  - Sterile salmon perform well in cold environments
  - Year-round supply of high-quality eggs
  - Best practices from sterile production across the world applied
  - Production develops according to plan - high survival after transfer to sea >99%



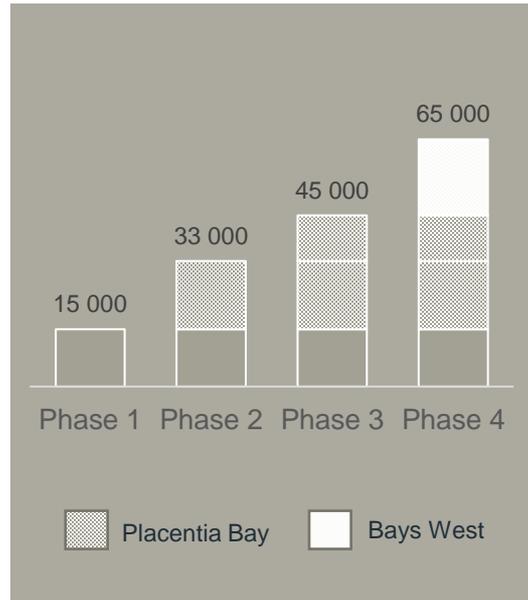
# Significant growth potential

## Placentia Bay

- Harvest potential of 45,000 tonnes

## Bays West

- Grieg Seafood awarded exclusivity in April 2022
- Major expansion potential with potential harvest of 20,000 tonnes
- Provides future flexibility and security for production but is not needed for current production plans





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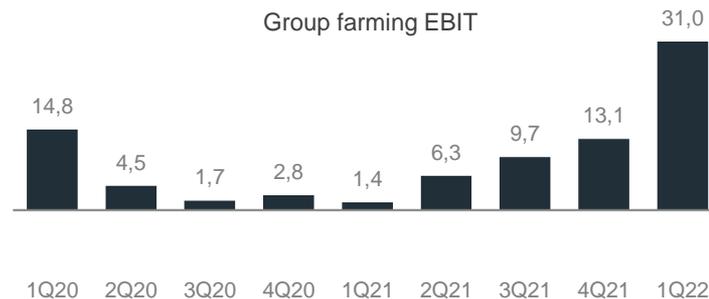
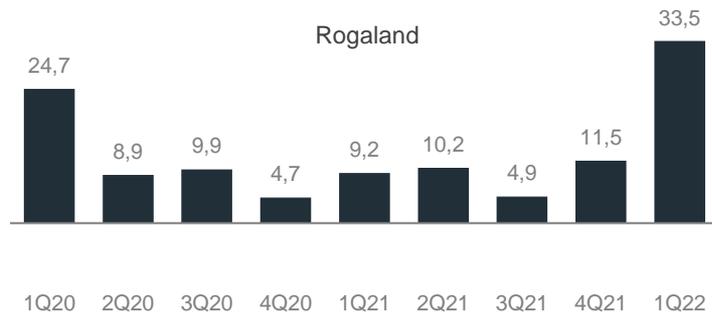
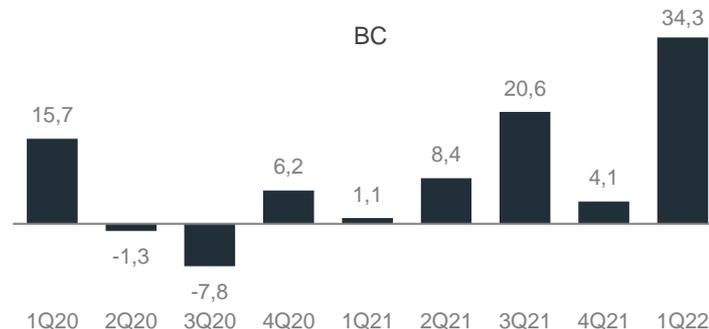
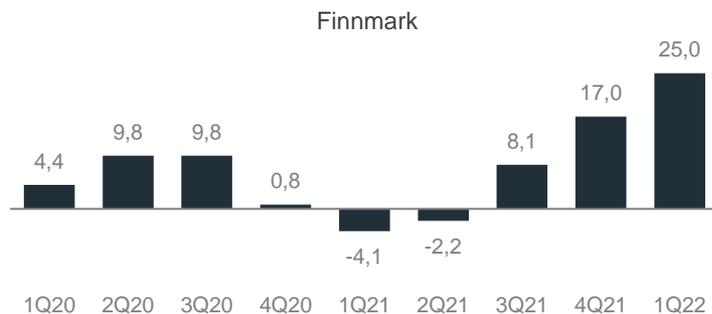
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# Financials

Atle Harald Sandtorv, CFO

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# Financial performance – EBIT/kg

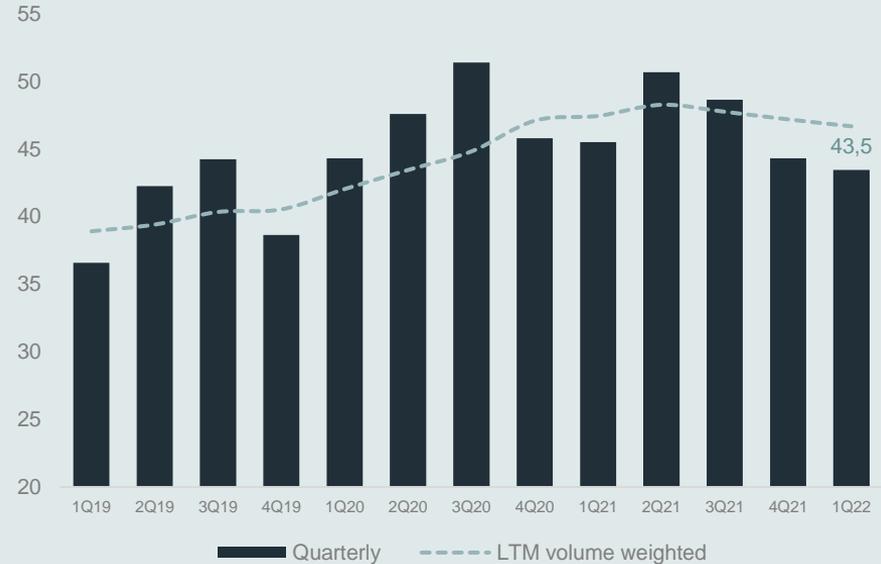


# Operational improvement partly countering inflation

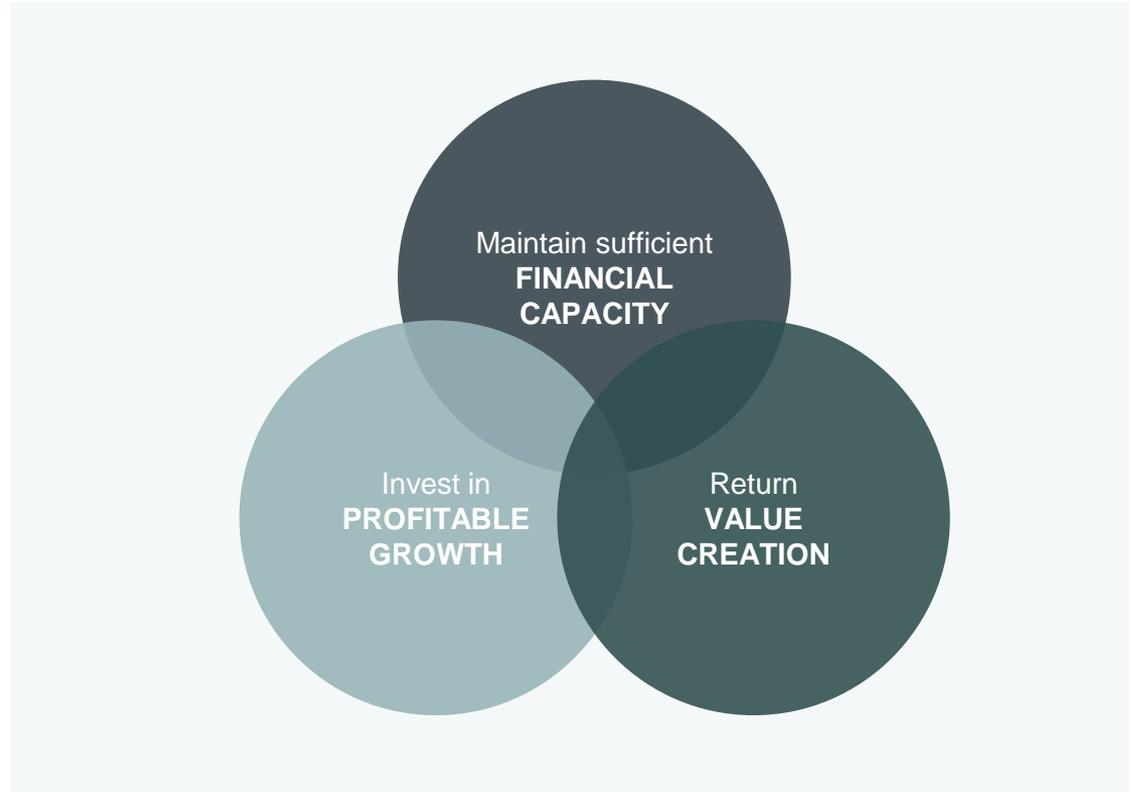
- Operational improvement initiatives have reduced costs
- Quarterly run rate closing in on cost target for the Norwegian operations of NOK 40/kg
- Inflationary pressure with higher feed and energy prices will gradually be factored into production costs and biomass
- Cost ambition: cost leader in our operating regions

## Group farming cost development

NOK/kg



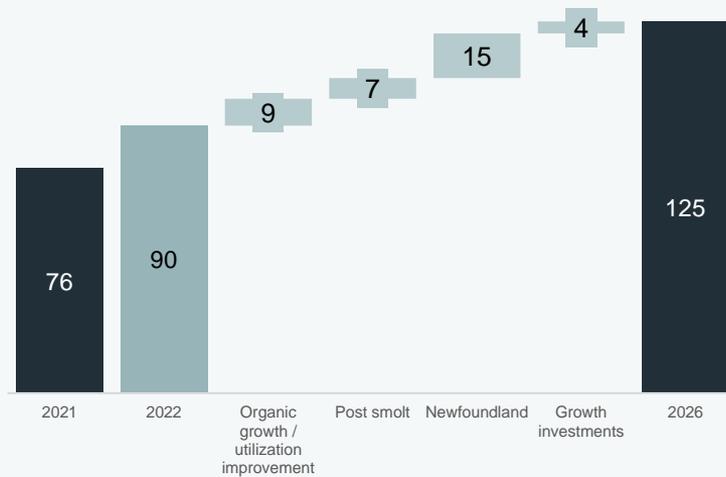
# Balancing financial priorities



# Group harvest ambition

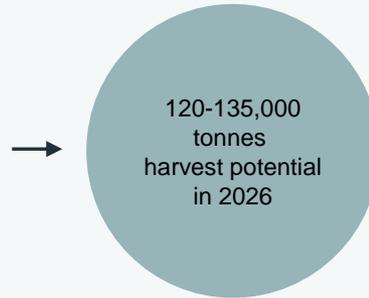
## Harvest ambition

1,000 tonnes GWT



*Volume growth back end loaded in period*

## Range depends on



- Earnings potential
- Cash flow generation
- Capital allocation
- Traffic light
- New technologies
- Post-smolt
- Access to sites

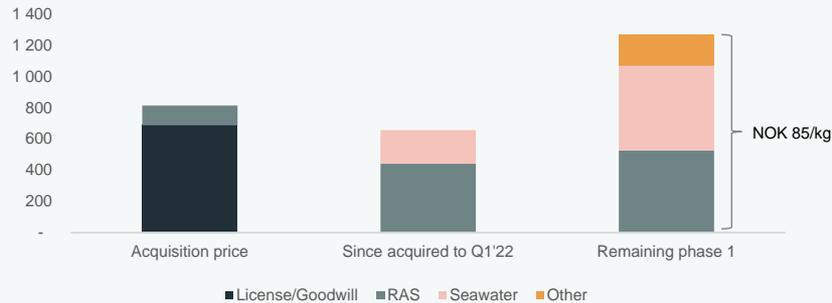
# Newfoundland investment plan

## Phase 1

- Remaining capex of NOK 1.3 billion (Capex/kg ~NOK 180)
- Includes post-smolt A with a capacity of 2,000 tonnes

## Capex profile for phase 1

NOKm



## Further buildout

- Dependent on successful Phase 1
- Significant learning and efficiency gains from Phase 1 reduce capex requirement
- Average capex/kg of NOK 116 for 45,000 tonnes

## Investment requirement for all phases

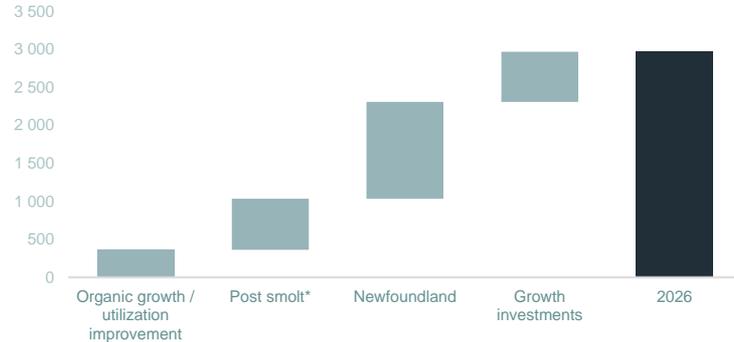
	Phase 1	Phase 2	Phase 3
Harvest volume	15 000	33 000	45 000
License/milestone* and goodwill	700	930	-
RAS	1 100	575	110
Seawater	750	525	350
Other	200	-	-
<b>Total capex and license</b>	<b>2 750</b>	<b>2 030</b>	<b>460</b>
<i>Capex/kg</i>	<i>183</i>	<i>113</i>	<i>38</i>
Biomass/kg	30	30	30
Smolt capacity	2 000	4 000	5 000

# Investment requirement

- Growth capex 2023-2026 of NOK 3.0 billion to increase harvest volume by 35,000 tonnes
- Maintenance capex: NOK 2.5/kg during growth phase
- Remaining 2022 capex: NOK 660 million

## Capex 2023 - 2026

NOK 1,000



## Capex / kg (NOK)

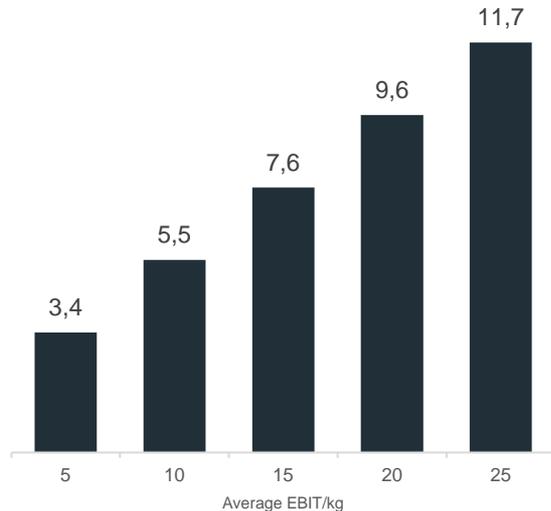
Organic growth / Utilization improvement	Rogaland	~40
	Finnmark	~40
	BC	~40
	Newfoundland	~85
Post-smolt	Rogaland*	~18
	Finnmark	~200
Growth investments	Rogaland	~165
	Finnmark	~165

\* Post smolt investment in Rogaland based on equity share in associated company

# Cash flow generation supporting growth investments

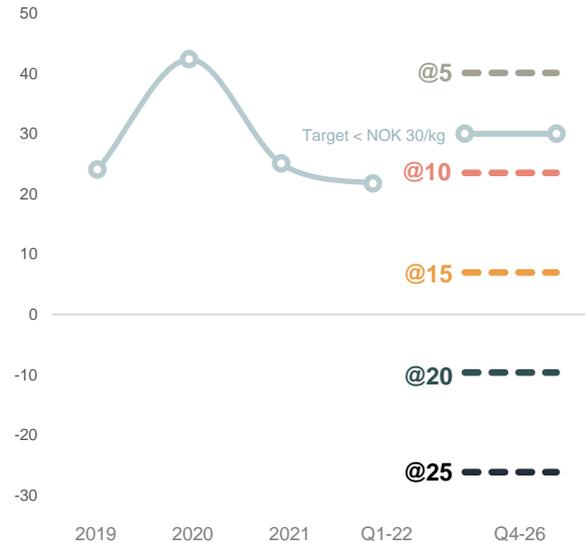
## Cash flow before investments and dividend\*

Q2' 22 – Q4 '26 illustration



## NIBD/kg illustration\*\*

NOK million



- Growth investments dependent on project economics and cash flow generation
- Solid projected cash generation above EBIT/kg of NOK 10 - sufficiently financed after growth investments
- Solid dividend capacity

\* Cash flow before capex, biomass and dividends.

\*\* Excluding dividends for illustrative purposes, except NOK 3 per share dividend to be paid in Q2 2022.  
Main assumptions: Production and Capex / investments as indicated in this presentation. @ = avg. EBIT/kg scenario

# Solid financial foundation

- Finalized financing of syndicated financial liabilities of NOK 3.2 billion five-year senior secured sustainability-linked loans and credit facilities
  - NOK 750 million term loan
  - EUR 75 million term loan
  - NOK 1,500 million revolving credit facility
  - NOK 200 million overdraft facility
- Financial covenant
  - Equity ratio ex. IFRS 16 of minimum 31%
- As of 31 March 2022, 77% of our gross interest-bearing liabilities were sustainability linked

CAPITAL STRUCTURE (NOK million)	31.03.2022
Green bond loan	1,500,000
Term loan	1,478,325
Revolving credit facility and overdraft facility	—
Lease liabilities (incl IFRS 16)	774,029
Other interest-bearing liabilities	100,464
<b>Gross interest bearing liabilities</b>	<b>3,852,817</b>
Cash and loans to associates	-1,709,822
<b>Net interest bearing liabilities incl IFRS 16</b>	<b>2,142,995</b>
Lease liabilities (IFRS 16)	-425,462
<b>Net interest bearing liabilities excl IFRS 16</b>	<b>1,717,533</b>
Cash and cash equivalents	1,707,682
Undrawn credit facilities	1,700,000
<b>Free liquidity</b>	<b>3,407,682</b>

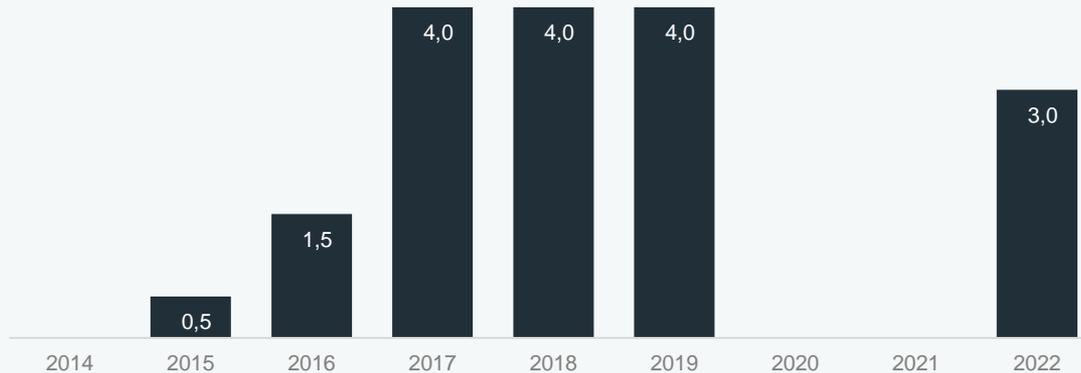
Green bond: balloon in June 2025, 3M NIBOR + 3.4%

Sustainability linked loans and credit facilities: NOK and EUR term loan with installments equal to 12-years repayment profile until balloon payment in 2027. The revolving credit facility matures in 2027, while the overdraft facility is subject to annual renewal. 3M NIBOR + margin depending on sustainability-related KPI's

# Return value creation to shareholders

## Dividend paid per share

NOK



Of the net profit after tax, before fair value adjustments on biological assets

- We aim to provide a competitive return to our shareholders through increased valuation and dividend pay out
- Dividend policy of payout ratio of 30-40% of net profit
- Annual dividend may deviate from policy due to earnings levels and growth investments

# Financial targets

Harvest volume	90,000 tonnes in 2022 and 120-135,000 tonnes in 2026
Cost	Cost leader in our operating regions
Capital structure	Long term target of NIBD*/harvest volume: NOK 30/kg Equity ratio: >31% (bank covenant)
Profitability	Return on Capital Employed of 12%
Dividend	30-40% of the Group's net profit after tax adjusted for fair value appraisals

\*NIBD excl. IFRS 16



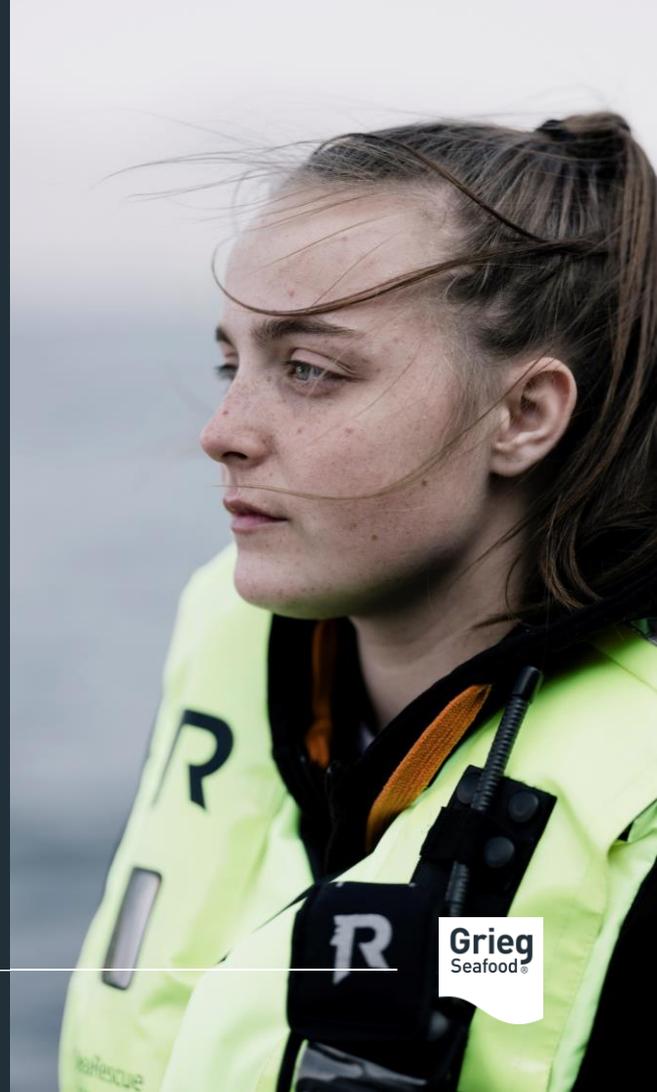
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# Sustainability initiatives and R&D

Kristina Furnes, Chief Communication Officer

Ragna Heggebø, Global R&D manager



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# Our approach to sustainable business

## Our pillars



### PROFIT & INNOVATION



### HEALTHY OCEAN



### SUSTAINABLE FOOD



### PEOPLE



### LOCAL COMMUNITIES

## Topics

- Profitable operations
- Our market
- Research, development and innovation
- Responsible business conduct
- Corporate governance

- Fish health and welfare
- Protecting wild salmon
- Protecting biodiversity and marine ecosystems

- Safe and healthy food
- Sustainable feed ingredients
- Climate action
- Recycling and waste management
- Plastic pollution

- Human rights and ethics
- Embracing diversity
- Creating attractive jobs
- Keeping our employees safe

- Local value creation
- Indigenous relationships
- Dialogue and engagement

## Sustainable Development Goals



# Climate risk and action

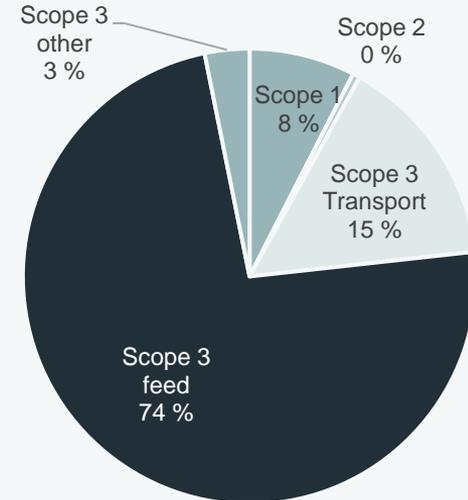
## CLIMATE RISK

- Obtaining biological control in different environmental conditions today prepares us for the future
- New technologies provide flexibility to adapt to changes in the ocean
- Increasing focus on climate risk in feed
- We engage in research projects to develop knowledge about climate risk for our sector

## CLIMATE ACTION

- 35% absolute reduction by 2030 (2018 base year)
- Net zero by 2050
- Scope 1,2,3

## 2021 CARBON FOOTPRINT



# Our estimated pathway towards emissions reductions in 2030

## Feed

- Reduced emissions from feed

## Reduced weight during transportation

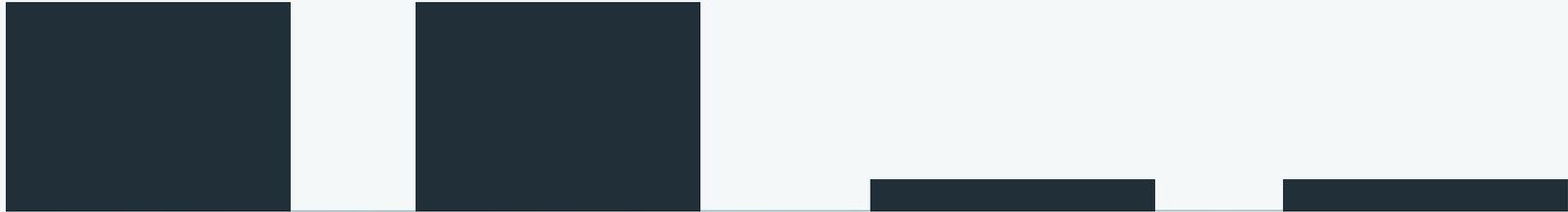
- VAP
- Less ice through new technologies

## More sustainable transportation

- Train, trucks with less emissions, boats etc.
- Farming regions in close proximity to main markets

## Farming

- Reduced bFCR
- Electrification of new equipment



# Tackling nature-related risk

## NATURE RISK

- «Nature risk» - new topic on the agenda:
  - How changes in ecosystem services impact industries
  - How industries may impact ecosystems

## NATURE ACTION

- Mitigation: Post-smolt, barriers, digitalization, preventative farming and new technologies
- We must develop this area further:
  - Grieg Seafood is a member of the Taskforce on Nature-related Financial Disclosures (TNFD)
  - Case study on the impact of nature risk on salmon farming together with WWF, Storebrand, NINA available on [our website](#)



# Towards sustainable feed

- We need feed ingredients that are resilient in the long run – economically, socially and environmentally
- The status of feed
  - Traditionally: focus on a few high-risk ingredients (marine ingredients and Brazilian soy)
  - Going forward: more topics are on the agenda
- Grieg Seafood collaborates with WWF US for holistic ESG risk assessment of feed ingredients
  - Covering biodiversity, climate, freshwater use, human rights, sustainable fisheries, circularity, pollution, governance, scalability etc.
  - More transparency and traceability needed to improve supply chains
  - Pre-competitive collaboration across value chains and animal proteins needed – well positioned to drive change in supply chains



# Research & Development



# We engage in R&D to advance solutions across our value chain

2021-2026 R&D STRATEGY



Breeding



Freshwater farming



Semi-closed & closed conditions



Seawater farming



Harvesting & processing



Sales & distribution

Production growth

Cost improvement

Value chain repositioning

Sustainability

# Tackling skin health and winter ulcers

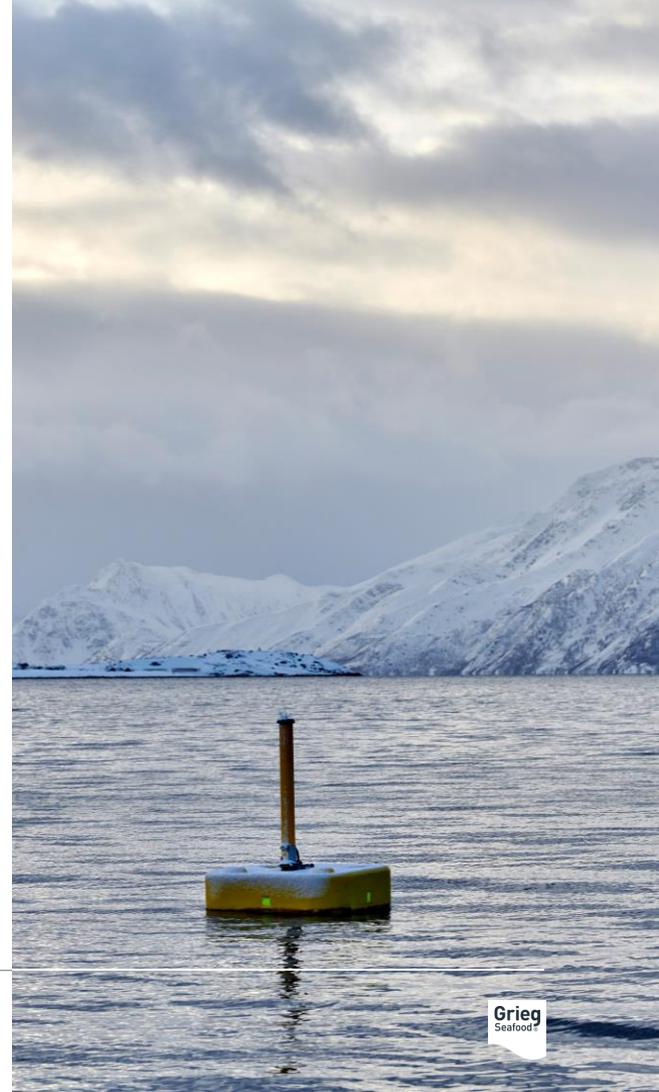
## Initiatives: validation of mitigation strategies & preventative tools

- Analyse own data sets to identify causal variables
- Validation of diets with selected raw materials and functional ingredients
- Novel vaccines, validation trials ongoing
- Bathing in beneficial bacteria skin flora mix, to compete with winter ulcer associated bacteria

## Results

- No single factors stood out from the data analyses (multifactorial)
- Avoid ALL risk of mechanical caused skin damage at low temperatures
- Multidisciplinary routines established in our company to avoid risks
  - Risk evaluation of the time of transfer
  - Water quality in smolt and post smolt facilitates

## Joint forces & future initiatives



# Optimizing post-smolt production

Post-smolt production is a novel way to farm salmon. We are developing knowledge and experience on how to optimize the rearing conditions to best meet the biological needs of the fish

## Initiatives

- Systematic examination and statistical analyses of a panel of freshwater parameters, to identify explanatory factors for performance results at harvest
- Experience based knowledge, systematic collecting and sharing of information
- Collaboration with industrial- and academic partners
- Input to founding bodies and research calls

## Results so far and implications

Based on the information gathered: aim to establish a recommendation on best practice and focus on continuous improvements in production



# Exploring novel production areas

## “Low emission value chain for offshore aquaculture”

- 17 leading industry organization and academic institutions collaborate
- Entire value chain in focus:
  - Digitalization
  - Electrification
  - Post-smolt production in closed conditions
  - Feed for offshore conditions
  - Logistics solutions
  - Surveillance and early detection of fish health issues
- Founded by Norwegian Research Council

[www.gronnplattform.stiimaquacluster.no](http://www.gronnplattform.stiimaquacluster.no)



ROOTED IN NATURE

Capital Markets Day 2022

# Concluding remarks

## Global growth

Ambition of 120-135,000 tonnes  
harvest by 2026

## Cost improvement

Cost leader in our  
operating regions

## Value chain repositioning

From raw material supplier to  
strategic partner

## Sustainability