



marineharvest



Marine Harvest

Intrafish Seafood Investor Forum
“The past, the present, the future”

13 September 2018

Forward looking statements

This presentation may be deemed to include forward-looking statements, such as statements that relate to Marine Harvest's contracted volumes, goals and strategies, including strategic focus areas, salmon prices, ability to increase or vary harvest volume, production capacity, expectations of the capacity of our fish feed plants, trends in the seafood industry, including industry supply outlook, exchange rate and interest rate hedging policies and fluctuations, dividend policy and guidance, asset base investments, capital expenditures and net working capital guidance, NIBD target, cash flow guidance and financing update, guidance on financial commitments and cost of debt and various other matters concerning Marine Harvest's business and results. These statements speak of Marine Harvest's plans, goals, targets, strategies, beliefs, and expectations, and refer to estimates or use similar terms. Actual results could differ materially from those indicated by these statements because the realization of those results is subject to many risks and uncertainties.

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A glance at history



A glance at history



History

- *Lack of funding*
- *Anti-dumping*
- *Low political stability*
- *Cry for growth*



Biological disasters



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New ISA outbreak confirmed in the Faroese Islands

According to the local newspaper Nordlysid, an outbreak of the infectious salmon anaemia disease (ISA) has now been confirmed at the Faroe Salmon facility at Hvannasund in the Faroes Islands.

Virus, crisis: Perfect storm hits Chile salmon industry

BY SIMON GARDNER

PUERTO CHACABUCO, Chile

Wed Mar 11, 2009 3:00pm EDT

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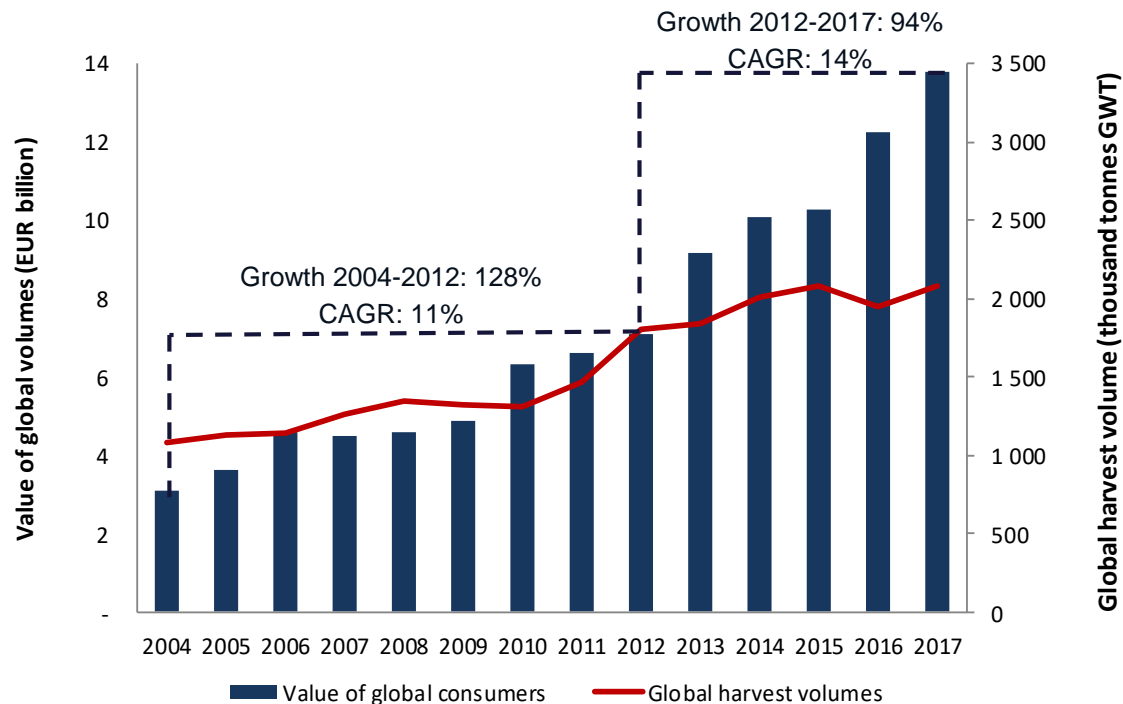
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Chilean workers process farmed salmon in a plant in Puerto Ibanez near the town of Aysén, in the

2018: A big step forward

- *Tremendous development*
- *Rio+20*
- *Consolidation*
- *More strict regulations*
- *Cost increase mainly driven by sea lice*
- *Part of the industry is again demanding growth in production*



Foundation for sustainable growth

- *We must eliminate the sea lice challenge*
- *The sea lice level should regulate growth or reduction*
- *Reduce escapes*
- *Sustainable feed*
- *The Governments around the world should encourage ASC-certifications*

One portion (140 grams) of Marine Harvest salmon

Selenium (23% of RDI)

Selenium helps cognitive function and fertility for men and women. Lack of selenium leads to weakening of the heart muscles and increased risk of cardiovascular disease.

Iodine (19% of RDI)

Iodine plays a vital role in our metabolism and a deficiency can lead to reduced growth and mental decline. It's particularly vital for pregnant women to aid the growing baby's development.

EPA and DHA (722% of RDI)

EPA and DHA are in cell membranes and help cells function properly. Marine Omega-3 prevent development of cardio-vascular disease.

Protein (49% of RDI)

Protein is a building block in muscles. At least nine amino acids are essential for humans, and all nine are present at balanced levels in our salmon.

Vitamin B12 (303% of RDI)

Helps red blood cells form and keeps the nervous system healthy. A lack of vitamin B12 can cause a form of anaemia.

Vitamin E (65% of RDI)

Plays a role in our immune function and is an important anti-oxidant needed to protect cells.

Total fat (24-39% of RDI)

Salmon is rich in the very long chain fatty acids which are essential for our health and are needed to ensure cells function well.

Vitamin D (50% of RDI)

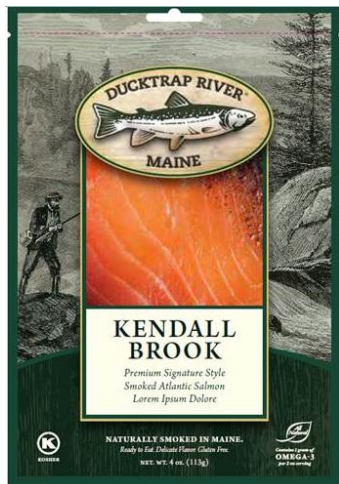
Helps the body absorb calcium. Lack of vitamin D is associated with rickets in children and soft bones in adults.

RDI = Recommended Daily Intake



Market development

- *Product innovation*
- *New channels*
- *New brands*
- *Salmon the main engine in seafood sales*



Responsible, Reliable and Transparent

- *Parts of our industry are still quite immature*
- *We all have to face our impact on environment and surroundings*
- *Our attitude on sea lice have to be indisputable*



The key factors for future growth

Environmental sustainability is the key to future employment and profit, which demands:

- *Long term thinking*
- *Predictable regulatory framework*
- *Strict regulations*
- *Fair and frequent audits and controls*
- *A development driven by R&D*



The key factors for future growth

- *100% ASC*
- *Sea lice solved*
- *Fewer players*
- *Seafood vital for climate friendly food*
- *Your doctor's standard question*



Development licenses in Norway: 5 concept applications

The “Egg” approved (6 licenses) and the “Donut” approved (1.4 licenses)



AQUASTORM

Future production systems in salmon farming

Land-based

Expansions of existing and building of new landbased facilities to shorten production cycle in sea

Cloed tank in sea

The Neptune tank is a 21 000 m3 floating tank with water being pumped in from 30m depth to prevent sea lice and stabilizing temperature

Closed production in sea

We are currently developing different systems for closed production in sea. The Egg (A) is 44 meters high and 33 meters wide, and 90% of the structure will be underwater. The Marine Donut (B) is 3 000 m3 with high circulation. Salmon farming in rebuilt bulkships (C) with 70 000 m3 fish tank volume, is constructed for more open waters.

Present salmon farming technology

- 1 Present smolt production → Open production as today or more exposed

Future innovations for salmon farming

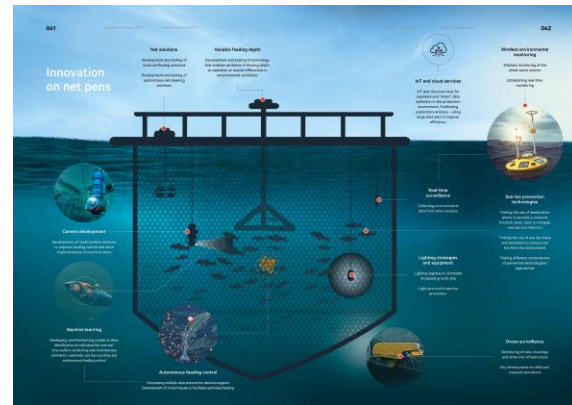
- 1 Present smolt production → Closed on land or in sea → Open as today or more exposed
- 2 Present smolt production → Closed production on land or in sea

0 - 150 g

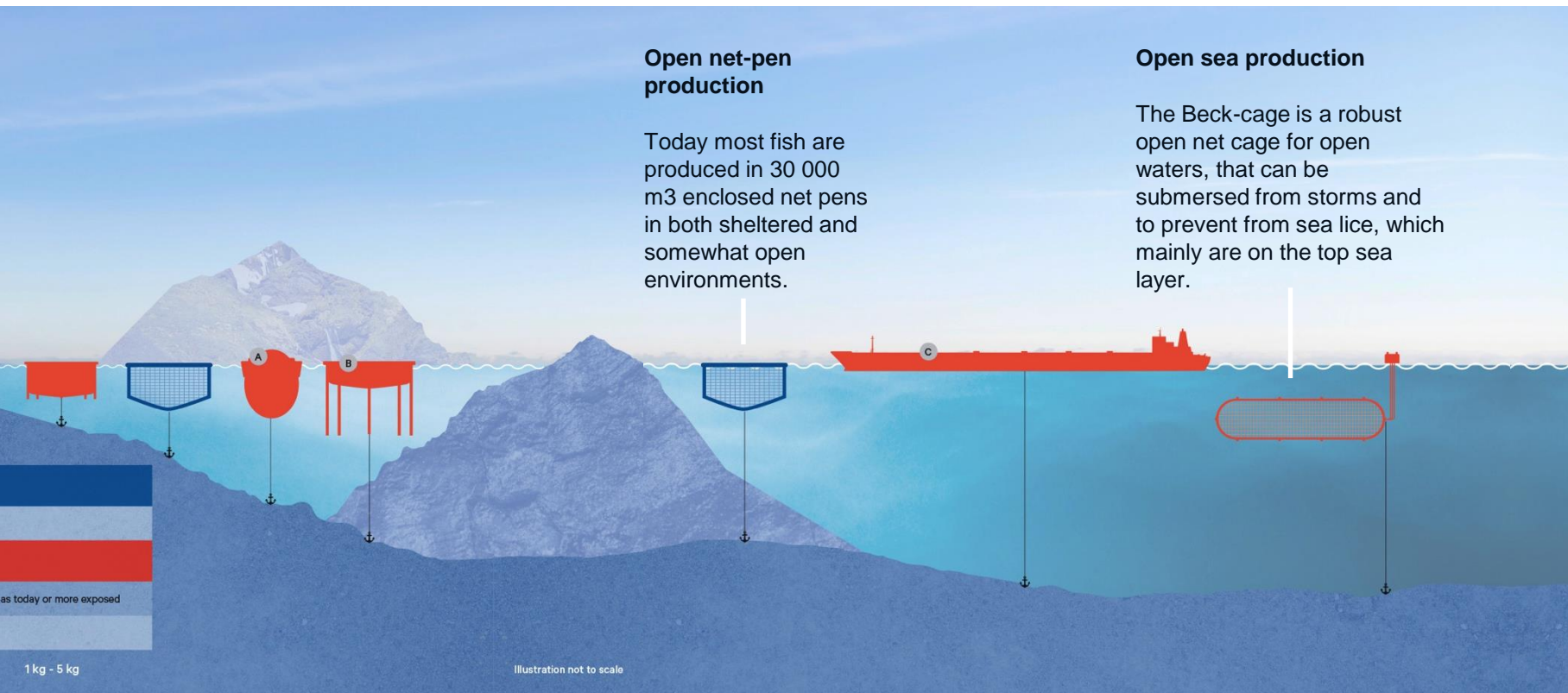
150 g - 1 kg

1 kg - 5 kg

Illustration not to scale



Future production systems in salmon farming



Thank You!

