Aquaculture in Iceland

Industry status, key players and future direction

Lofoten seminar 2026

STIM

09.06.2026

Why Iceland matters in the global salmon context

Biology and environment

- Cold, stable water temperature
- Low disease and parasite pressure
- Strong fish health performance
- Clean water availability on land and at sea

Regulatory and geopolitical positioning

- European production base outside core EU farming regions
- High regulatory standards and transparency
- Increasing constraints on growth in traditional salmon regions
- Stable political and legal framework
- Strong marketing position between Europe and the US

Structural flexibility

- Combination of sea-based and land-based production
- Unique conditions for water sourcing in land-based
- Access to renewable energy and water
- Platform for alternative growth pathways

Iceland will not be a volume leader – but it is increasingly relevant as a differentiated production platform

Industry structure: Sea-based vs Land-based salmon farming in Iceland

Open net-pen farming in fjords

- Dominant share of current production
- Concentrated ownership
- Limited growth capacity due to regulation
- **Backbone of today's salmon exports**

- Regions: Westfjords and East fjords of Iceland

Fully land-based production

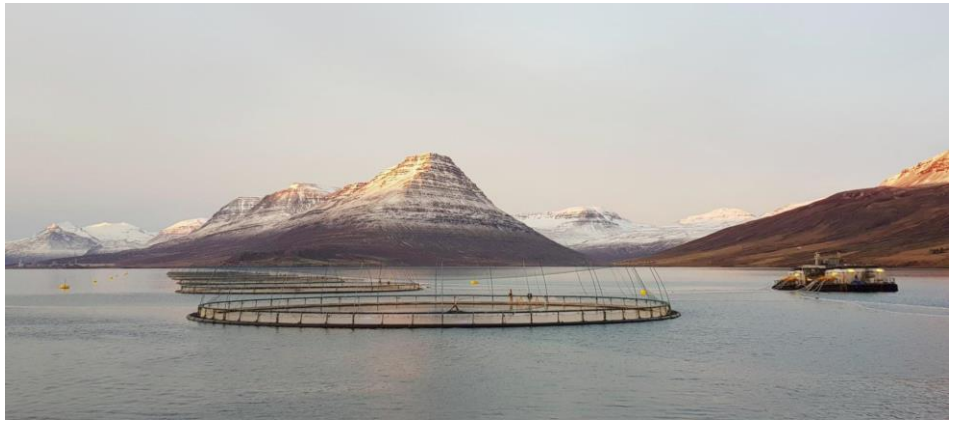
- Relatively small share of current volume
- Rapid project development
- Hybrid flow-through dominant (The Icelandic version)
- **Main source of future capacity growth**

- Regions: Reykjanes peninsula, Hvalfjordur and north-east corner of Iceland

Sea-based farming drives volume today – Land-based farming defines optionality and future growth

Key sea-based salmon farming companies

Name	Largest owner	Location
Arctic Fish	Mowi	Westfjords
Arnarlax hf	SalMar	Westfjords
Háafell ehf & Háabrún ehf	ÍSEF (HG / Icelandic investors)	Westfjords
ÍS47 ehf	Jóhann Magnús Ólafsson	Westfjords
Kaldvík hf	Austur Holding / Måsoval family	East Fjords



Sea-based farming in Iceland: Role and constraints

Production role:

- Established operations
- Cost-efficient production model
- Core regions: West- and east fjords

Limitations

- Limited sites and carrying capacity
- Increasing regulatory scrutiny
- Environmental and social pressure
- Constrained long-term growth outlook

Sea-based farming delivers volume and cash flow today – but offers limited optionality for future growth

Land-based aquaculture: where optionality is forming

Established operators

- Long track record in land-based farming
- Proven biology and operations
- Primarily Arctic char, but salmon production growing fast.

New salmon projects

- Significant capital deployment
- Different system design than typical global RAS
- Focused on scalability under Icelandic conditions

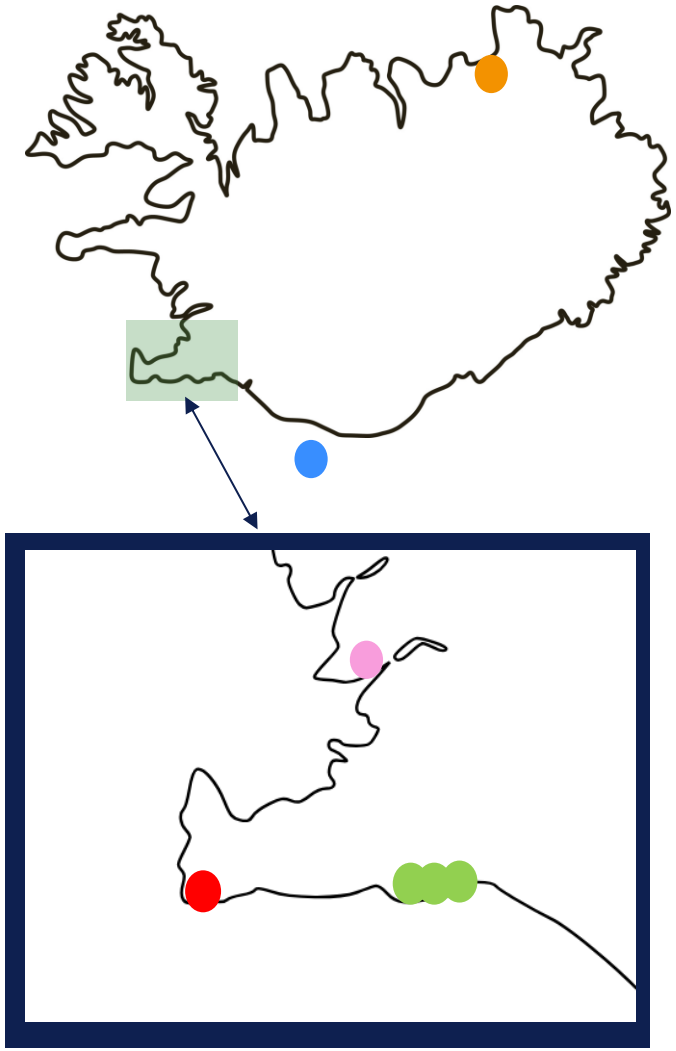

First Water facility in Thorlakshofn


Samherji Silfurstjarnan

Land-based farming is no longer experimental in Iceland – it is becoming institutionally relevant

Key Land-based salmon farming companies

Name	Largest owner	Location	Status
Aurora fish farm	Icelandic investors	Hvalfjordur	Early-stage / permitting
First Water	Stoðir hf and Icelandic investors	Thorlakshofn	Operational / scaling up
GeoSalmo	Bull Hill capital	Thorlakshofn	Operational / Under construction
Laxey	Oskarsson family	Vestmannaeyjar	Operational / scaling up
Silfurstjarnan	Samherji	Kopasker	Operational / scaling up
Eldisgarðurinn	Samherji	Reykjanes	Under construction
Thor Salmon	IS Haf Investments	Thorlakshofn	Operational / scaling up



The Icelandic land-based salmon farming sector is not built around one blueprint, but around different risk profiles, system designs and growth paths

Species and production mix - what actually drives the industry?

Arctic Char

- Smaller share of total volume
- Primarily land-based production
- Strong biological performance
- Premium, niche positioning

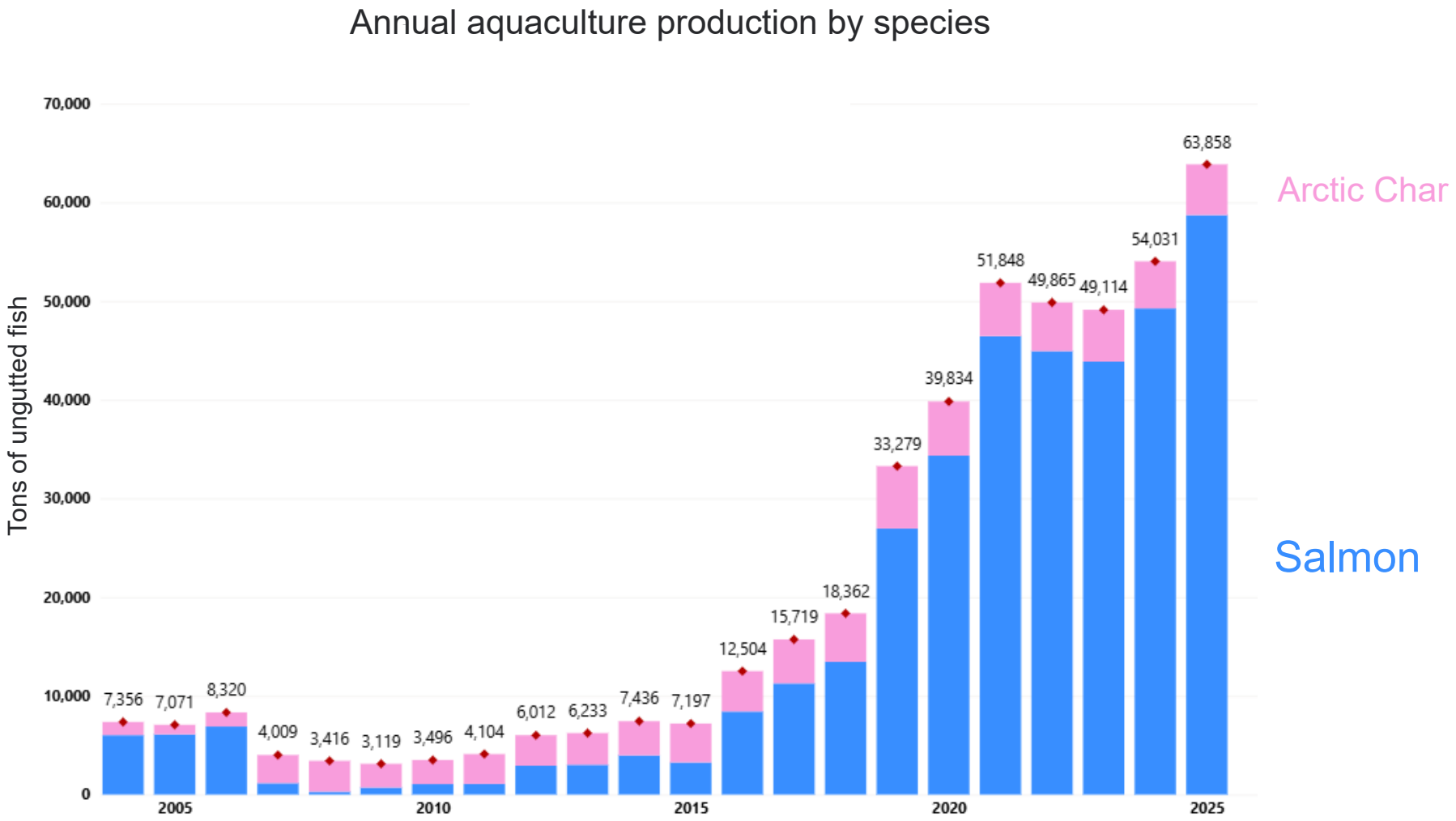
Other species marginal

Atlantic salmon

- Dominates total production volume
- Drives exports and industry economics
- Defines Iceland’s role in the global market

Salmon drives scale and system dynamics — char adds differentiation.

Production growth and scale



Source: Mælaborð fiskeldis | Matvælastofnun

Atlantic salmon: backbone of the industry

Land-based farming: its role going forward

Strategic role

- Complement to sea-based production
- Adds flexibility and optionality
- Supports growth under tighter regulation

Trade-offs

- Higher capital intensity
- More operational complexity
- Longer ramp-up time

Why it matters now

- Increased regulatory pressure
- Higher focus on risk and control
- Need for alternative growth paths
- Iceland will likely outperform other countries in land-based

Land-based farming does not replace sea-based production – it expands the strategic toolbox.

Land-based aquaculture in Iceland: a different approach

Global norm

In most regions, land-based salmon farming is built around highly complex full RAS systems, designed to maximize water reuse where water is scarce

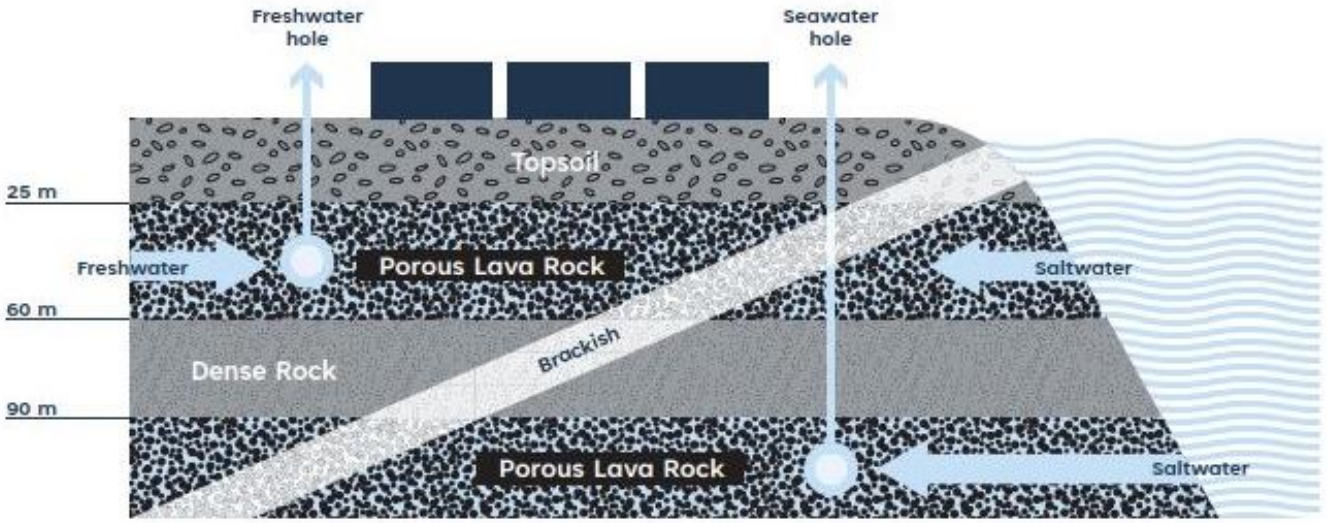
Icelandic approach

In Iceland land-based farming has developed around flow-through systems, enabled by access to large volumes of high-quality groundwater and seawater at optimal temperatures, collected through boreholes. That combined with partial recirculation in newer systems is the Icelandic approach

Key implications of the Icelandic land-based model

System design

- Generally lower system complexity
- Fewer control layers than full RAS facilities
- Different balance between control and simplicity



(27) GeoSalmo: Posts | LinkedIn

Biology and operations

- Historically strong biological performance
- Lower system stress under Icelandic conditions
- Predictability prioritized over optimization

Resource trade offs

- Higher water use
- Lower treatment intensity
- Model only works were groundwater (both fresh & sea) and energy is abundant

This model works because Iceland´s natural inputs are special – not because the trade-offs disappear

Salmon stocking in Icelandic rivers

Long-Standing practice

- Release of hatchery-reared juveniles for decades
- Closely linked to recreational salmon fishing
- Part of a broader ecosystem conversation

Industry contribution

- Applying aquaculture expertise beyond farming
- Improving smolt quality and timing (e.g, smoltification)
- Supporting more robust and viable releases

Current context

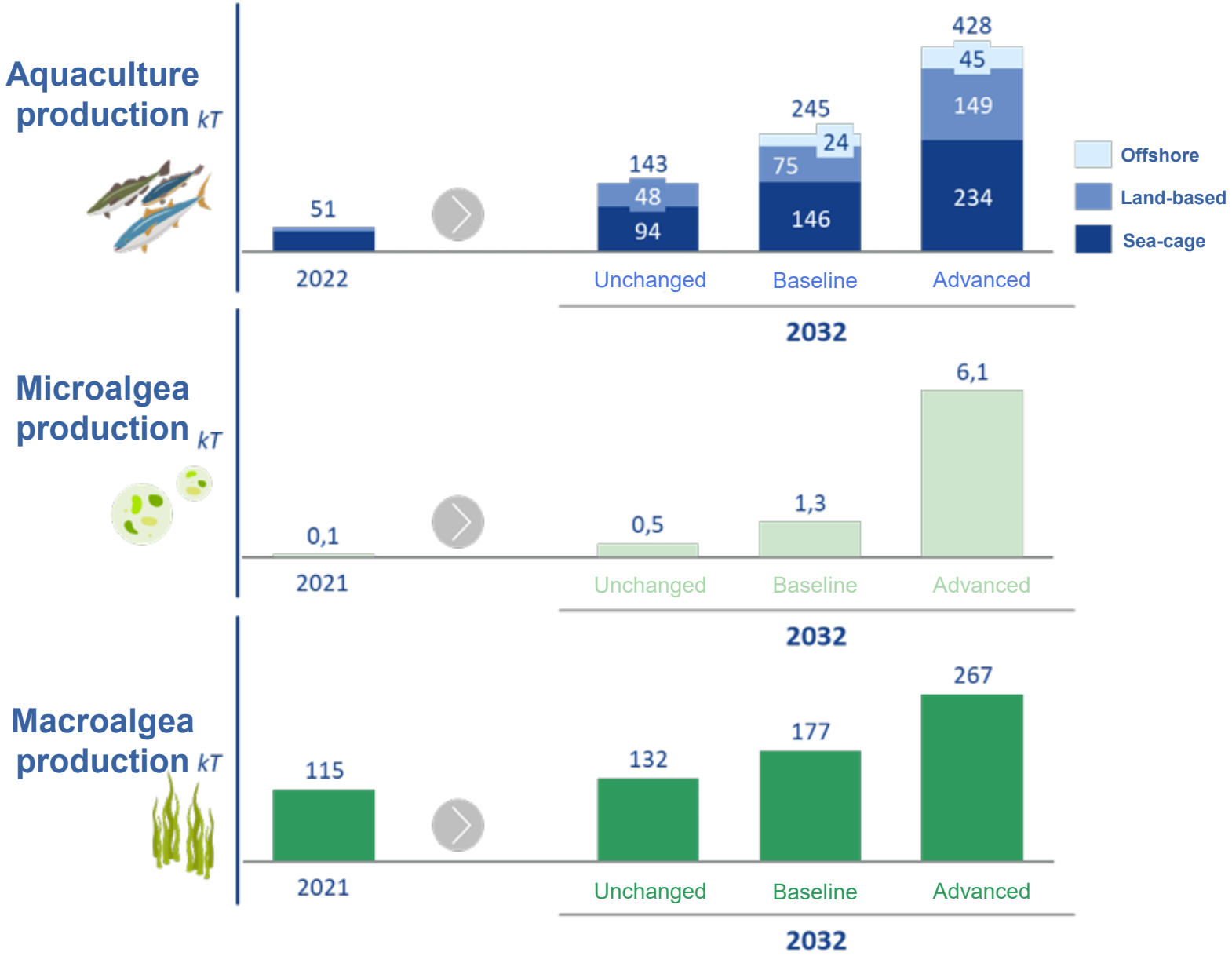
- Wild Atlantic salmon stocks are under increasing pressure
- Growing focus on genetics, stock interaction and sustainability
- Increased expectation on industry responsibility

Rannsóknarskýrsla um erfðablöndun laxa | Hafrannsóknastofnun

The knowledge developed in aquaculture can and should be used beyond farming.

Future growth scenarios (BCG 2023)

Production capacity by scenarios, charts and timeline



Key takeaways from the Ministry's 2023 report

Long-term growth potential exists

- Iceland has strong biological and natural conditions
- Aquaculture can grow significantly
- Scale is possible, but not automatic

Land-based farming plays a larger role over time

- Especially in higher-growth scenarios
- Partly due to constraints on sea-based expansion
- Offers additional growth paths under tighter regulation

Outcomes depend on choices, not ambition alone

- Regulation, execution quality, and capital discipline are decisive
- Higher growth scenarios also carry higher complexity and risk
- Biology enables growth – governance and execution determine outcomes

Iceland's aquaculture future is shaped by decisions

Executive status check

- Aquaculture in Iceland is still a relatively young industry, but has scaled rapidly
- Production is concentrated among a few large players and closely linked to global salmon groups
- Sea-based farming drives today’s volume, while land-based defines future flexibility
- The key question is how growth, regulation, and public trust are balanced going forward

The next phase is not about whether to grow, but how to grow responsibly

Bjarki Már Jóhannsson
Key account manager – Iceland
Bjarki.johannsson@stim.is