

# **SUSTAINABILITY REPORT 2020**



# SUSTAINABILITY IN HARMONY WITH NATURE



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# **SUSTAINABILITY REPORT 2020**

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#### **MESSAGES FROM THE CEO**

2020 was an unusual year for the most of us, with the pandemic hitting and challenging our way of life. The whole world has been affected but, thanks to the persistence and unity shown by our 130 employees, it has not affected our daily operations. That said, we have felt, just like everybody else, the decrease in prices, due largely to a drop in demand, with hotels and restaurants closing around the world.

'Sustainability in harmony with nature' is one of our company values and something we work hard every day to achieve. We operate in an area of beautiful and almost 'untouched' nature and we attach great importance to keeping it that way. Our continuous monitoring of the environmental impact of our operations shows that we are on track to achieve that, while always striving to improve. We feel this to be an important part of sustainable operations.

The environmental impact is, however, just one part of the sustainability. We also operate in an area with small communities that are highly dependent on the industry we are building up. Many people and families depend on our future operations to secure a safe income and high quality of life. To secure that we work with continuous strategical and operational improvement, to secure ourselves a strong economic position. In October 2020, Icelandic Salmon went through an IPO process and was listed on Euronext Growth in Oslo. The capital increase we secured there, places us in a strong position to develop strategically in a sustainable way, both environmentally and economically, and enables us to maintain secure sustainable communities around our operations.



Figure 1. Björn Hembre, CEO

Last but certainly not least, sustainability is also a fundamental part of the product we sell – our salmon. We recognise that our customers really care that we operate in a sustainable way and this, combined with good natural conditions, produces salmon that meets all quality criteria. We are very proud of our salmon and all our employees who helped create this delicious, sustainable, ASC-certified product.

Bjørn Hembre

# THE HISTORY OF ARNARLAX

Arnarlax was founded in 2009, in Bildudalur, a small Icelandic village inside a long fjord called Arnarfjordur. Bildudalur is the hometown of the company's founders, so they knew that the area had excellent conditions for farming salmon in harmony with nature. Arnarlax is Iceland's biggest aquaculture company. Modern salmon farming is relatively new in Iceland, compared to our neighbours in the Faroe Islands, Scotland, and Norway. Arnarlax's vision is to be sustainable in every aspect of its operations and lead the way in terms of cost efficiency, biology, and the development of sea farming in Iceland.

The company successfully completed a private placement in the autumn of 2020 with the following listing on Euronext Growth. At the same time, the mother-company changed its name from Arnarlax to Icelandic Salmon. At the end of 2020, SalMar owned 51% of the shares in the company. Icelandic Salmon is Iceland's largest producer of farmed salmon. The company is fully integrated, with its own hatcheries, sea farms,

harvesting plant and sales force. The natural conditions, with good quality seawater and temperatures on a par with Northern Norway, provide a sound basis for engaging in sustainable aquaculture in Iceland. The company has its headquarters and harvesting plant in Bíldudalur in Iceland's West Fjords region, close to the sea farms located in the surrounding fjords. In addition, the company has two smolt facilities - one in the West Fjords and one in Thorlakshofn, just south of Reykjavik, as well as a sales office in Reykjavik. 2020 has been a demanding year, with the biological challenges related to winter wounds at the beginning of the year making their mark on results in 2020. Biological status has significantly improved in 2021, which paves the way for improved results in 2021. Farming in Iceland is still in an early phase, and during 2020 the company implemented important measures that will yield better biological and economic results in the long term. SalMar, the main owner, together with Icelandic Salmon, strongly believes in sustainable aquaculture production in Iceland.



#### THE LEADER IN ICELANDIC SEA FARMING



Figure 2. the history of Arnarlax

Arnarlax has been at the forefront of the industry for several years. The company is working with neighbouring farmers, local governments, and regulators on improving operations and reducing environmental footprint.

Arnarlax was the first farming company in Iceland to use lumpfish to reduce lice levels and has been working with government agencies to minimise the risk of organic load affecting the seabed underneath.

Arnarlax is determined to continue working with other stakeholders, regulators, and the government towards sustainability in every aspect of its operations.

#### **Standards**

Arnarlax has a strict internal quality system. The system monitors daily quality registrations in departments of Freshwater, Seawater and Harvest plant. As follow-up to these daily registrations, the company conducts an internal audit programme plan throughout the year for these departments. In addition to all daily checks and internal audits, external authorities inspect the operations by means of visits and audits.

## **Certified value chain**

100% of the production of Arnarlax is ASC (Aquaculture Stewardship Council) certified. By choosing ASC-certified salmon, consumers can be assured that they are buying salmon from a responsible farmer.



ASC is one of the best-known environmental certifications in the world of aquaculture and certified producers must satisfy comprehensive environmental and social standards, involving over 400 auditing criteria within eight categories. The ASC Standard is difficult to achieve and to retain. It demands substantial resources in respect of documentation and reporting, before, during and after certification. Furthermore, Arnarlax is certified in accordance with the ASC's Chain of Custody scheme.

## **Education programmes**

Arnarlax recognises the importance and value of education and has been among pioneers in educational programmes related to fish farming in Iceland. Together with several educational institutions, Arnarlax has participated in developing education programme and encourages its employees to take part. Arnarlax also runs a trainee programme to recruit young, well-educated people to the company and the industry. In addition, employees who wish to undertake further education are supported economically by the company.

#### Contributing to science and research

Arnarlax is the biggest contributor to a State-controlled Environmental Fund aimed at reducing the potential impact of salmon farming on nature. The fund has granted millions of euros to various projects in recent years.

# Working with agencies and government

Arnarlax is in active dialogue with agencies and regulators on how to reduce the environmental impact of its farming activities and how to increase fish health and bring about other improvements in the industry.

# Dialogue with stakeholders in transparent way

Transparency is a key element to build trust and inspire an honest dialog between all stakeholders. All Arnarlax benthic monitoring reports are available online as well as lice count numbers which are publicly available on the website of Arnarlax within a week from lice counting. Monthly production reports are sent for all active farm sites to the Food and Veterinary Authority (MAST) with information regarding harvesting, feeding, biomass, mortality, lice numbers and treatments among other. The company has numerous meetings with local officials to

strengthen the relationship and understanding. By being transparent, open about the challenges and respectful towards critics, the company can come across solutions that might be beneficial for all stakeholders.

Open and transparent reporting of our performance increases our stakeholders' trust in us. In 2020, we continued our efforts to report through a greater variety of channels. In furtherance of this, Arnarlax has also chosen to commission third-party verification of its sustainability KPIs. The table below shows the various ways Arnarlax reports on sustainability-related matters.

**Table 1. Arnarlax stakeholders** 

Arnarlax stakeholders					
Internal influence	Customer groups	External influence			
Employees	Partners	External customers	Government / regulatory authorities		
Shareholders/investors	Suppliers	New customers	Industry associations		
Board and Group Management Service providers		International customers	Discussion partners		
	R&D partners	National customers	NGOs		
			Research establishments		
			Local communities		
			Media		

**Table 2. Reporting in Arnarlax** 

Reporting method	Comment
Annual report	Integrated report, combining sustainability reporting now for the first time for 2020, with financial reporting.
Quarterly reports	Quarterly update of financial and operational results.
Emission accounting  A separate annual information of emissions from the operation submitted to the Environmental A Iceland (UST)	
Green accounting	A separate annual report submitted to the Environmental Agency of Iceland (UST)
ASC reports	Audit reports from our ASC-certified sites are available at www.asc-aqua.org
MAST & UST reports	Audit reports from the Food and Veterinary Authority (MAST) <u>www.mast.is</u> and the Environmental Agency of Iceland <u>www.ust.is</u>
www.arnarlax.is	Our website is updated regularly. Here you will find relevant information.

#### THE ABC OF SALMON FARMING



Figure 3. The lifecycle of Atlantic Salmon

#### **Broodstock**

The broodstock are the parent fish which provide the eggs and sperm (milt) required to produce new generations. The fertilised eggs take 60 days to hatch when placed in an incubator kept at 8 °C.

# **Eyed salmon eggs**

After 25–30 days in the incubator, the eggs have developed to the stage where the eyes of the salmon are clearly visible as two black dots inside the egg.

#### **Fry**

The egg hatches when the eggshell cracks open, liberating the baby fish (fry) inside. When it hatches, the fry is attached to a yolk sac, which provides it with the sustenance it needs during its first few weeks of life. From now on, the fish's growth and development will depend entirely on temperature.

#### **Initial feeding**

When most of the yolk sac has been absorbed, the fry can be moved from the incubator into a fish tank. They are now ready for initial feeding. The water temperature is kept at 10-14 °C, and the fry are exposed to dim lighting 24 hours a day. The initial feeding period lasts for six weeks. As they grow, the fry is sorted and moved to larger tanks. Well ahead of their 'smoltification', all the fish are vaccinated before being shipped by wellboat to the fish farm's marine net-pens.

#### **Smoltification**

The process whereby juvenile fish transition from a life in fresh-water to a sea-going existence is called smoltification.

During this process, the fish develop a silver sheen to their bellies, while their backs turn a blue-green colour. The gills of juvenile fish also change when they become a smolt.

#### **On-growing**

The farming of fish for human consumption takes place in net-pens – large, enclosed nets suspended in the sea by flotation devices. In addition to a solid anchorage, net-pens require regular cleaning and adequate measures to prevent the farmed fish from escaping. Growth in net pens is affected by feeding, light, temperature and water quality.

# Harvesting and processing

After approximately 12-24 months after transfer to the farm sites, the first fish are ready for harvesting, depending on the season of the fish. The fish are transported live by wellboat to the harbour next to processing plant. They are then carefully transferred to the plant itself. The fish are killed and bled out using high-tech equipment and always in accordance with the applicable public regulations. After harvesting, the final product is head-on-gutted salmon.

#### **Sales**

The salmon is sold by our sales team fresh whole-gutted and distributed to markets domestically and around the world.



#### THE SECRET OF FARMING A NUTRITIOUS ARNARLAX SALMON

Iceland offers some key factors when it comes to salmon farming. The temperature is in the lower end of optimal conditions for the salmon, long fjords create shelter, while the wind, waves and current ensure that movement of water is sufficient to give salmon access to oxygen-rich seawater. Icelandic waters are free of most of the harmful bacterias diseases and viruses affecting some other farming nations. Access to clean geothermal water makes Iceland one of the best places in the world to produce smolts.

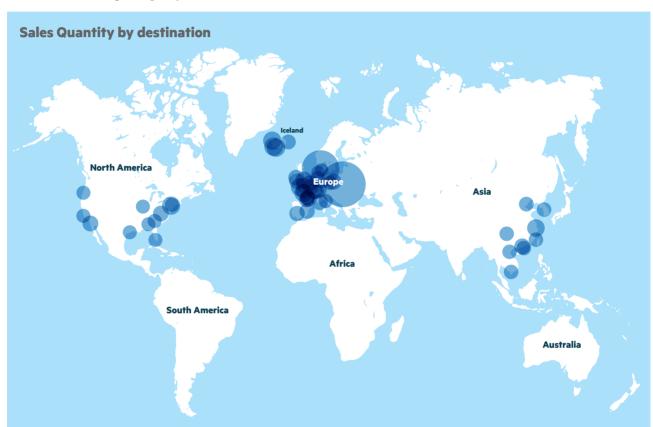
Itall starts with a premium egg that comes from Benchmark Genetics Iceland, an Icelandic company well known for its SAGA salmon stock. All fry are grown into smolts, nurtured, and vaccinated in Arnarlax geothermal hatcheries. The time in the hatcheries is usually around 12 months. The smolts reach 100-300 g, they go through smoltification, which readies them for leaving the freshwater of the tanks and entering seawater, the same natural process undergone by wild salmon.

Since the sea temperature in Iceland falls below 2 °C during the coldest winter months, smolts are put out in sea cages in the summer/autumn months when the temperature is optimal. The low winter temperatures result in slower growth, and low levels of lice.

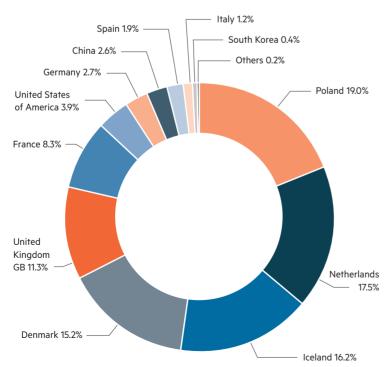
Arnarlax has a comprehensive quality system, monitoring every aspect of operations. The quality system is dynamic, meaning that improvements and adjustments to improve safety and quality are regularly implemented. Harvesting is one of the most important factors when it comes to quality of the salmon. Arnarlax uses sub-zero cooling techniques to optimise freshness and the quality of the salmon. This allows Arnarlax to deliver fresh salmon to customers in Europe, North America or Asia without compromising quality.

# **MAIN MARKETS**

Arnarlax's main markets are Poland, the Netherlands, Iceland, Denmark, and the UK. Other markets are France, the USA, Germany, China, Spain, Italy, and South Korea. In 2020 total of 732 tons went via air freight and total of 8.226 tons via sea freight. To reduce air freight, we have begun shipping our super-chilled salmon to the US east-coast market, instead of transporting it by air.



# **Sales Quantity by country**



Country	Sales Quantity	Avg. delivery time to market (days)
Poland	2,022,696	7,76
Netherlands	1,862,077	5,17
Iceland	1,723,691	1,20
Denmark	1,201,122	5,95
United King- dom GB	883,425	5,45
France	414,972	3,74
United States of America	283,307	5,92
Germany	275,413	4,18
China	275,413	4,18
Spain	203,400	6,21
Italy	130,787	5,14
South Korea	16,071	4,60
Total	10,656,531	4,25

# SUSTAINABILITY IN HARMONY WITH NATURE

'Sustainability in harmony with nature' is the foundation of all of Arnarlax's operations. It is the way we operate as a company and how we behave in the areas surrounding our operations. This includes taking care of our employees, the salmon and the environment, while developing the industry and moving society in a more sustainable direction.

This year, Arnarlax presents for the first time its sustainability report. The numbers stated in this report has undergone third-party verification.

The bulk of this report is divided into the three central pillars on which Arnarlax rests its thinking about sustainability throughout the value chain.

Tabel 3. Arnarlax sustainability focus summarized



#### **Fish**

Good fish welfare is the foundation of Arnarlax business.

We work systematically to create an environment in which the salmon thrives and remains healthy.



# **Environment and technology**

Arnarlax believes in preserving the seas for future generations.

We minimise our footprint with measures and routines throughout the entire value chain.



# **People and society**

Arnarlax acts as a responsible corporate citizen.

We believe in creating local value and safe workplaces and support the local communities where we operate.



# **FISH**

Our goal is to produce sustainable and healthy protein for a growing global population.

Sustainable salmon farming therefore takes place on the fish's terms. This means that the salmon must come first in all aspects of our work.

Arnarlax is working systematically on initiatives and procedures relating to fish welfare. At the same time, we know that every single decision we make relating to fish health also has a financial, social- and environmental impact throughout the value chain. Fish welfare is a good example of Arnarlax's thinking and shows why sustainable aquaculture must always begin with the salmon.

# Fish - KPI's

Table 4. Biological KPI's

	Arnariax KPIs	Target	2020	2019
Survival	12-month rolling survival rate <sup>1</sup>	>97%	90.5%	91.2%
Antibiotics	Grams of active pharmaceutical ingredients (API) per tonne produced	0	0	0
Lice treatments	Total number of treatments at all active sites	<3 per cycle	2	2
	Birds – Accidental mortality	0	0.71	0.67
Interaction	Birds – Euthanised	0	0.29	0
with wildlife	Marine mammals – Accidental mortality	0	0	0
	Marine mammals – Euthanised	0	0	0
Fish seems	No of incidents	0	0	1
Fish escapes	No of escaped fish	0	0	185,885²
	Certification of marine ingredients in fish feed <sup>3</sup>	100%	99%	
	Certification of soya ingredients in fish feed <sup>4</sup>	100%	100%	
Feed	FFDR (fishmeal) <sup>5</sup>	<1.2	0.63	
	FFDR (fish oil)5	<2.52	1.98	
	Economic feed conversion ratio	<1.13	1.43	
Certification	Share of active site certified <sup>6</sup>	100%	86%	100%

<sup>1 12-</sup>month rolling mortality measured in accordance with the Global Salmon Initiative methodology

<sup>2</sup> The incident occurred at the Gileyri hatchery, where fry weighing approx. 2 g escaped

Fish meal, certified in accordance with Marintrust, MSC or equivalent.

<sup>4</sup> Certified in accordance with ProTerra RS or equivalent.

<sup>5</sup> Target in accordance with ASC certification requirements.

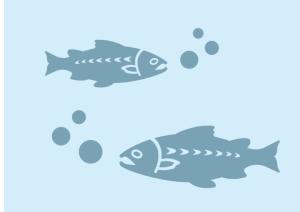
Sites certified in accordance with ASC.

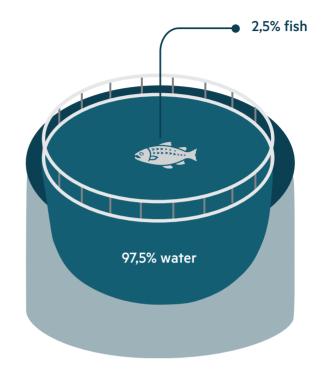
#### Fish welfare

Good fish welfare requires systematic efforts to ensure that fish welfare is safeguarded by providing them with optimal conditions throughout their lifecycle.

#### **How Arnarlax promotes fish welfare**

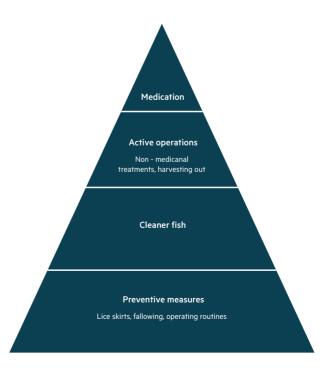
- » Dedicated fish health personnel
- » Close follow-up and monitoring of fish welfare indicators
- » Use of sites affording optimal biological conditions
- » All smolt vaccinated before transfer to seawater farms
- » Systematic efforts as regards smolt quality at our hatcheries, by focusing on stable supplies of good quality water, a good tank environment for the fish, optimal oxygenation, good grading and vaccination procedures, temperature control and general fish health
- » All delousing treatments carried out by a dedicated team, with a risk assessment performed before each operation
- » Strict routines for transport between different sites to prevent the spread of disease
- » Keeping numbers of sea lice down
- Plenty of space for the fish maximum density:25 kg/m3 (2.5%) in summer and 13 kg/m3 in winter
- » Zero use of antibiotics





# Keeping numbers of sea lice down

Salmon lice are a natural seawater parasite. As fish farmers, it is our task to make sure that the salmon can coexist with the lice. Salmon lice can impair the quality of the salmon's flesh and can, in the worst cases, lead to disease and death. Arnarlax therefore works preventively to keep lice numbers down.



Lice numbers were lower in 2020 than in 2019 in almost every category, the sole exception being the juvenile load, which was slightly increased (Table 1).

Arnarlax follows the maximum permitted number of the ASC standard, which is 0.1 adult female lice per fish, in the sensitive period. All lice numbers are reported to the Food and Veterinary Authorities in Iceland and published on Arnarlax's website within a week from the lice count.

As regards delousing treatments, Arnarlax follows the global level given in the ASC standard, which allows three lice treatments per each production cycle (Table 2). This has never been fully utilised. The main strategy for reducing the number of chemical treatments is to take preventive measures, such as lice skirts, fallowing and use of cleaner fish.

Table 5. Average level of different stages of lice in 2019 and 2020

Year	Juveniles	Movables	Adult females	Caligus
2019	0.28	1.01	0.53	3.67
2020	0.35	0.39	0.19	3.09

Table 6. Number of treatments allowed per cycle in different countries according to the ASC standard

Regon	Entry Level (WNMT)	Global Level (WNMT)
Canada (BC)	1	
Chile	9	
Faeroes	6	
Ireland	3	3*
Norway	5	
Scotland	9	



#### Sustainable feed

Fish feed must have the correct nutritional content, consistency and taste. However, for Arnarlax it is equally important for feed to be gentle on the environment. We require our feed suppliers to ensure that the ingredients they use are certified, so we can confidently sell a product that has been sustainably produced. This means that the feed ingredients are not genetically modified, have not been produced in areas threatened by deforestation, and do not depend on endangered fish stocks.

Arnarlax uses an all-round feed that optimises production and promotes good fish health – in other words, a high-value salmon feed that ensures good growth, a low feed factor and meets the fishes' nutritional needs. In 2020, around 17,000 tonnes of feed were used in our operations.

In addition to monitoring their ingredients, Arnarlax also checks the nutritional value of the ingredients used at its hatcheries and sea farms. This is verified through their fat, protein, phosphorous and fibre content. Arnarlax performs routine controls on the feed's physical quality upon receipt in order to identify any non-conformance.

## How we safeguard our fish feed

- » All fish feed used by Arnarlax is certified.
- » All fish feed used is deforestation-free, not genetically modified and not dependent on endangered fish stocks.
- » Arnarlax has dedicated personnel who work with feeding the fish.
- » Arnarlax has chosen to maintain a strategic partnership with our feed suppliers, with whom we work to include sustainable ingredients in the feed we use.

#### We use certified ingredients

- » All feed is Marine Trust certified.
- » Over 99% of the marine ingredients comes from certified fish stocks.
- » We use ProTerra certified soya, which is the strictest certification scheme used to promote the sustainable farming of soya.

# Safe and healthy food

Arnarlax produces healthy tastes delicious. Our salmon is based on first-class, sustainable raw materials and their quality is maintained throughout the whole value chain until the salmon reaches the customer.

It is our responsibility to ensure our customers feel safe when they eat salmon from Arnarlax and know that it has a healthy nutritional content. For this reason, we are certified in accordance with the strictest requirements and guidelines for sustainable aquaculture, including the Aquaculture Stewardship Council (ASC).

# How we provide safe and healthy food to all our customers

- » Local harvesting makes it possible for Arnarlax to offer first-class, fresh super-chilled products.
- » We ensure good fish welfare and the correct nutritional content in the fish feed we use, which provides healthy food for human consumption.
- » Our value chain is certified.
- » Thorough training at all levels and training in routines and procedures is important to maintain the high quality of Arnarlax salmon.

#### **Extra fact**

» In 2020 our harvested fish had Omega 3 level above 3,0 g/100g product

We perform regular internal audits and welcome audits and inspections by regulatory authorities, certification agencies and customers.

## **ENVIRONMENT - SUSTAINABILITY IN HARMONY WITH NATURE**

Growing salmon is one of the most sustainable ways ofproducing protein, in terms of carbon emissions, water, land use, etc. However, production comes with several challenges, as for all commercial food production.

Arnarlax is aware of those challenges and is constantly working on minimising their impact, using innovative solutions, environmental certifications, and strategic monitoring.

**Table 7. Environment - KPI's** 

		Target	2020	2019
	Scope 1+2 (GHG †CO2e) 35% reduction from 2018-2030	35% reduction from	392	1549
Greenhouse gas (GHG)	Intensity Scope 1+2 (kgCO2e/tonne produced)	2018-2030 <sup>1</sup>	29	113
emissions	Scope 3 (GHG †CO2e)	35% reduction from 2020 to 2030	47.005	958
	Intensity Scope 1+2+3 (kgCO2e/tonne produced)		3.488	182
Consumption of fresh-	Conumption (1.000 m3)		5.505	5.456
water	Intensity (litres per kg produced biomass)		405	397
Site environment	MOM-B score < 2	100%	100%	100%

<sup>1</sup> Subject to approval by the Science Based Targets Initiative

#### **Environmental policy**

Arnarlax has an active environmental policy based on sustainability in every aspect of its operations. There is good cooperation between companies within the same industry and farm sites in joint fjords. This cooperation is known as ABM (Area Based Management) and aims to share information regarding: 1) diseases and handling of fish, 2) output plans, 3) fallowing periods, 4) monitoring in relation to diseases, and 5) lice monitoring.

# The main objectives of the environmental policy are:

- · full compliance with regulations and standards;
- zero escapes;
- optimal feed ratios, reducing organic load on the bottom;
- full openness to using alternative products that may be more environmentally friendly;
- increasing the share of waste that goes to recycling.

#### Risk assessment

Iceland has taken a somewhat unique approach to genetic mixing between farmed and wild salmon. Iceland has legally enacted the use of a unique genetic risk assessment that estimates the potential risk of genetic mixing between farmed and wild salmon and limited the permitted production of farmed salmon based on the outcome of that model.

A large portion of the coastline is also closed off for fish farming. The result is that all of Iceland's major salmon rivers are far away from fish-farming activities.

It is safe to say that the Icelandic authorities are taking a conservative approach when it comes to fish farming and the possible effect on the wild salmon stock. The risk assessment is up for evaluation every third year.

# **Carrying capacity**

Before fish farming is allowed in Iceland, the Icelandic Marine and Freshwater Research Institute conducts a carrying-capacity assessment estimating how much biomass there may be at a farming fjord. This is done to minimise the risk of organic waste accumulating at the bottom of the fjords. The Institute is monitoring the fjords to ensure that production does not excess the carrying capacity.

#### **Environmental assessment**

All Arnarlax farming activity has been through an environmental assessment process. That process includes stakeholder participation and involvement of the Environmental Agency of Iceland, the Food and Veterinary Authority (MAST), the Planning Agency and the Marine and Freshwater Research Institute, among other specialists. The outcome is an extensive environmental report describing the impact of the farming activity, mitigating measurements, and how the environment should be monitored.

# **Monitoring**

After the farming has started, all the sites are monitored from the bottom and up. Oxygen levels are monitored

daily and a third party conducts research in our threshold fjord Arnarfjordur up to three times a year. Benthic samples are conducted by a third party from the bottom under the cages twice for each generation to see if organic materials are accumulating under the cages. The Food and Veterinary Authority (MAST) also takes fish samples twice a year from the farm sites to search for heavy metals and dioxins, parasiticide residues, antibiotics, etc.

#### **Certifications**

As mentioned above, Arnarlax's production of salmon is 100% ASC (Aquaculture Stewardship Council) certified.

# **Green accounting**

Each year, Arnarlax submits a green accounting report to the Environmental Agency of Iceland, including information on power usage and usage of oil, water and seawater. The report also covers all chemicals, waste, medicine usage and emissions involved in the company's operations.



# **Greenhouse gas emissions**

Here is an overview of Arnarlax's greenhouse gas (GHG) emissions. Carbon accounting is a fundamental tool in identifying tangible measures to reduce GHG emissions. The annual carbon accounting report enables the organisation to benchmark performance indicators and evaluate progress over time.

The input data is based on consumption data from internal and external sources, which are converted into tonnes CO2-equivalents (tCO2e). The carbon footprint analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). The GHG Protocol is the most widely used and recognised international standard for measuring greenhouse gas emissions and is the basis for the ISO standard 14064-I.

The carbon inventory is divided into three main scopes of direct and indirect emissions:

**Scope 1** includes all direct emission sources. This includes all use of fossil fuels for stationary combustion or transportation, in owned and, depending on the

consolidation approach selected, leased, or rented assets. It also includes any process emissions, from e.g. chemical processes, industrial gases, direct methane emissions etc.

**Scope 2** includes indirect emissions related to purchased energy; electricity and heating/cooling where the organisation has operational control.

**Scope 3** includes indirect emissions resulting from value chain activities. The scope 3 emissions are a result of the company's upstream and downstream activities, which are not controlled by the company, i.e. they are indirect. Examples are business travel, goods transportation, waste handling, consumption of products like feed etc.

Arnarlax operations consumed 153.995 litres of fossil fuel (6 TJ) and 5.015 MWh of electricity (18 TJ) in 2020. All electricity in Iceland derives from geothermal sources. This is exploited by the hatcheries, which use geothermal heat exchangers to warm their intake water. All the electricity used by our operations is therefore from renewable sources.

**Table 8. Greenhouse gas emissions** 

Energy consumption (TJ)	2020	2019	
Direct (Scope 1) - fossil fuel	6	23	
Indirect (Scope 2) - electricity	18	14	
Scope 1+2	24	37	
Greenhouse gas emissions (GHG †Co2e)			
Direct (Scope 1) - fossil fuel	392	1.549	
Indirect (Scope 2) - electricity	0	0	
Scope 1+2	392	1.549	
Scope 3	47.005	958	
Total	47.397	2.507	
Intensity <sup>1</sup>			
Energy intensity (GJ/tons produced)	1,8	2,7	
Intensity of GHG emissions (kgCO2e/tons produced) - Scopes 1+2	29	113	
Intensity of GHG emissions (kgCO2e/tons produced) - Scopes 1+2+3	3.488	182	

<sup>1</sup> All intensities are calculated with tons produced biomass, gross growth in sea.

# **Freshwater consumption**

Aquaculture generally has a low freshwater requirement compared with other types of food production. The fish live a large part of their lives in the sea and do not depend on supplies of fresh water. Arnarlax's freshwater consumption derives largely from its onshore hatcheries and its harvesting plant.

#### We use fresh water only from low-risk areas

In large parts of the world, access to fresh water is a challenge. Arnarlax uses fresh water only from areas where the risk of water shortages, or the risk of poor water quality, is low. The water risk map produced by the World Resource Institute<sup>1</sup> provides a good overview of the water risk in various areas. All the areas in which Arnarlax operates are defined as low risk.

#### **Waste management**

Waste is a resource which we must take care of and which can be reused to make new products. In 2020, Arnarlax began sending plastic from Seawater department to Pure North Recycling, which recycles plastic locally in Iceland into valuable plastic material for domestic and international plastic production. Arnarlax is currently in the process with Pure North to evaluate the amount of plastic that can be recycled in its operations.

#### We help to reduce marine pollution

- We ensure that obsolete plastic equipment is recycled by delivering it to established return schemes and collecting other waste for delivery to municipal waste handling systems.
- We contribute to beach cleaning/collection of plastic waste through funding, as well as participating ourselves.

## We exploit every part of the salmon

By-products are exploited to the full. All offcuts from the production are sent for further processing, resulting in 100 per cent of the raw materials being utilised. All material is sent to third party production site through closed pipeline from our harvesting plant. That means that there is no need for input factors relating to its transport and handling.

All fish that die during production are processed on site by Arnarlax and delivered to a company that use them as ingredients in the feed industry.

#### **Water treatment**

All water from the harvest plant is cleaned and disinfected in our water treatment system before being released into the ocean to ensure biosecurity.



https://www.wri.org/aqueduct

#### **PEOPLE AND SOCIETY**

We who work at Arnarlax care about our colleagues, our partners and the local communities in which we operate. For us, it is important to behave as a responsible corporate citizen because we believe that this has a positive impact on our own operations and society at large.

With total of 130 employees employees in 2020, during two shifts, Arnarlax is a major employer and an important member of society. This position gives rise to multiple responsibilities to people, society and industry. Ethical business practice is a key value for Arnarlax. We aim to operate in an honest, proper and trustworthy manner, and take pride in showing off what we do.

# **Working with local communities**

Arnarlax recognises the importance of a good and meaningful relationship with the local community and understands its role and responsibility as one of the biggest companies in the region. Arnarlax participates in various community projects and is for example a proud sponsor of public transport, volunteering activities, schools, local sports teams and clubs. Arnarlax knows that dynamic communities attract good and competent people and foster innovation and drive.

# Workforce

Arnarlax has been blessed with skilled and capable people from all over the world working on the common goal of delivering world-class salmon in harmony with nature. Employees' ideas and innovative thinking are a crucial driver of Arnarlax's performance and the company welcomes forward-thinking and honest dialogue. The safety of our people is a top priority and active measures are taken to reduce accidents by using a dynamic quality system and functioning Health & Safety committee.



Table 9. People and society - KPI's

		Target	2020	2019
	No. of full-time equivalents (FTE)		110	110
Employees	No. of women		24%	22%
	No. of fatalities	0	0	0
	LTI's	0	9	
Safety & sickness absence	H-factor	<6	39	
	Sickness absence	<4.5%	4.3%	4.1%
	No. of violations	0	0	0
Regulatory compliance	Fines in ISK	0	0	0

## THE UN GOALS FOR SUSTAINABILITY

The United Nation Sustainable Development Goals are a collection of 17 global goals designed to serve as guidance towards a more sustainable future for all. Farming salmon in a sustainable way contributes to many of these goals and five of them are closely linked to Arnarlax's operations.

#### 2 - Zero hunger

Arnarlax contributes to improving the world's food production.



#### 3 - Good health and wellbeing

Salmon is a nutritious food, packed with quality protein and essential fatty acids such as Omega 3.



#### 5 - Gender equality

Arnarlax has a gender equality policy and is working on getting equal pay certification.



# 12 - Responsible consumption and production

Farming salmon in sea cages is one of the most sustainable ways of producing animal protein for human consumption, in terms of feed and water usage.



#### 13 - Climate Action

A large part of the world's greenhouse gas emissions is caused by food production. Farming salmon stands out from other animal protein production for its low level of carbon emissions and usage of water.



# 14 - Life below water

We aim to utilise the sea areas in which we operate in a sustainable manner. We aim to contribute to reducing marine debris and discharges, by reducing and handling our own waste properly and by engaging in all the local coastal communities of which we are a part.





























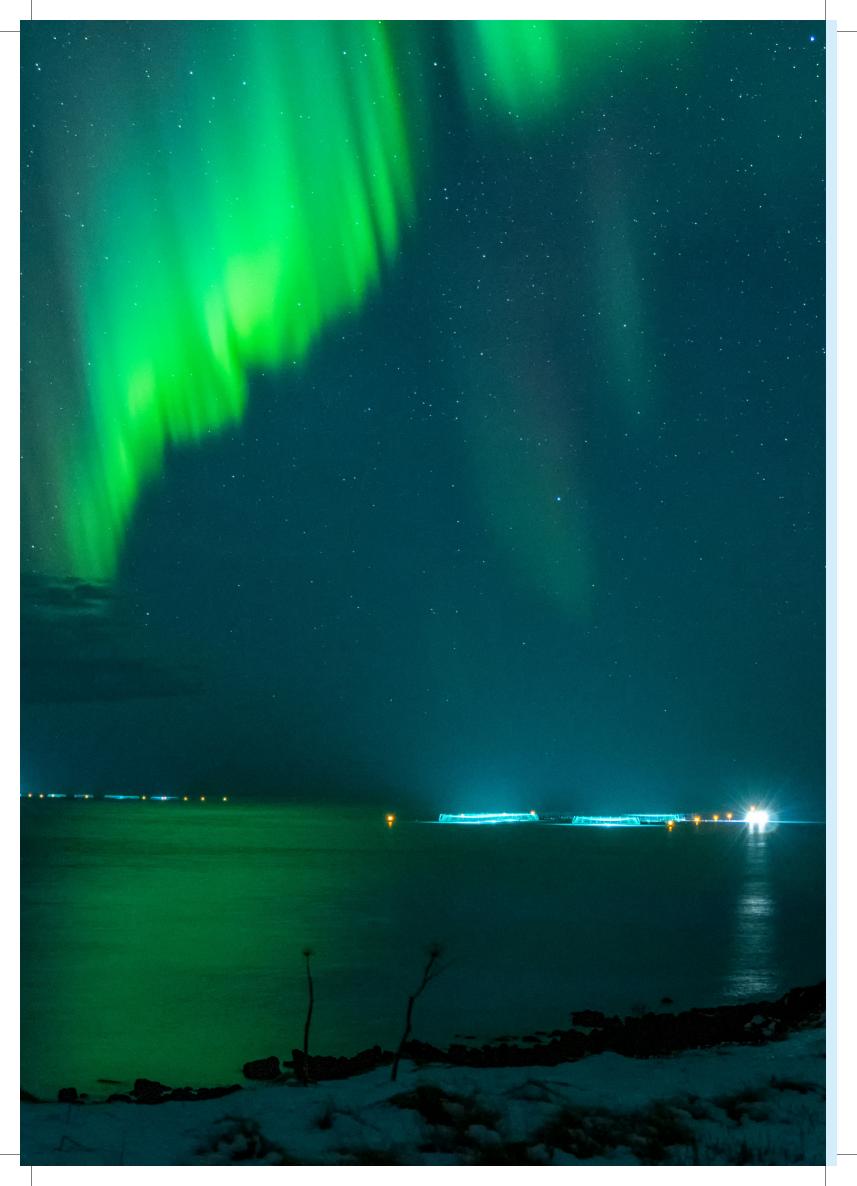












# SUSTAINABILITY IN HARMONY WITH NATURE

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