Sustainability report 2023/24

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September 2025
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1. Sustainability in AquaGen

AquaGen AS is a breeding company that develops, produces, and delivers genetic material and fertilized eggs to the global aquaculture industry for Atlantic salmon and rainbow trout. The company's operations are based on more than 50 years of targeted development of a diverse breeding material originating from more than 40 rivers. The primary product is fertilized eggs, and secondary products from the breeding work are juveniles and fish at harvest size.

Throughout the entire value chain, from science to table, AquaGen is committed to "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland and Dahl, 1987). In other words, we are talking about sustainable value creation on a triple bottom line; environmental, societal, and economic – simultaneously and over time. Good performance on one bottom line must not come at the expense of another.

Breeding, or genetic selection, is the foundation of all sustainable food production, including aquaculture. The power of our genetics ensures producers worldwide an efficient, safe, and responsible production of fish.

Since 2020, AquaGen has developed a process that describes how we work with sustainability, which is summarized in the management system, and is intended to ensure that we work with sustainability in a holistic and good way, to support the UN Sustainable Development Goals. AquaGen's goals for sustainability are shown in Figure 1 and involve including sustainability thinking in AquaGen's daily operations and in the products we deliver.

Overall goals	• Ensure sustainable value creation on a triple bottom line; socially, environmentally and economically. • Deliver products which facilitate sustainable aquaculture and continuously reduce AquaGen's footprint.
Central guidelines	• Sustainability shall be integrated in everything we do and all business areas. • We focus on the entire value chain; suppliers, own company, customers and customer's customers. • Sustainability shall ensure competitiveness, earnings and growth.

Figure 1: *AquaGen's goals and key guidelines for sustainability.*

This means that AquaGen takes responsibility for sustainability challenges in our own operations and uses the opportunity to help others (customers, customers' customers, partners, and suppliers) with some of their sustainability challenges through our products. Measures that can contribute to this must be identified, measured, reported, evaluated, and regularly followed up.

AquaGen conducted its first materiality assessment in 2022 (Figure 2). Internal and external stakeholders, both upstream and downstream in the value chain, were interviewed to map how we impact the environment and society around us, what are the material topics for AquaGen's priorities, as well as our risks and opportunities. In total, we had 18 conversations with various stakeholders. In 2025, we will conduct a double materiality assessment.

Based on the materiality analysis, a sustainability roadmap (Figure 3) was created, with six ambitions linked to the UN Sustainable Development Goals and three desired improvements for AquaGen.

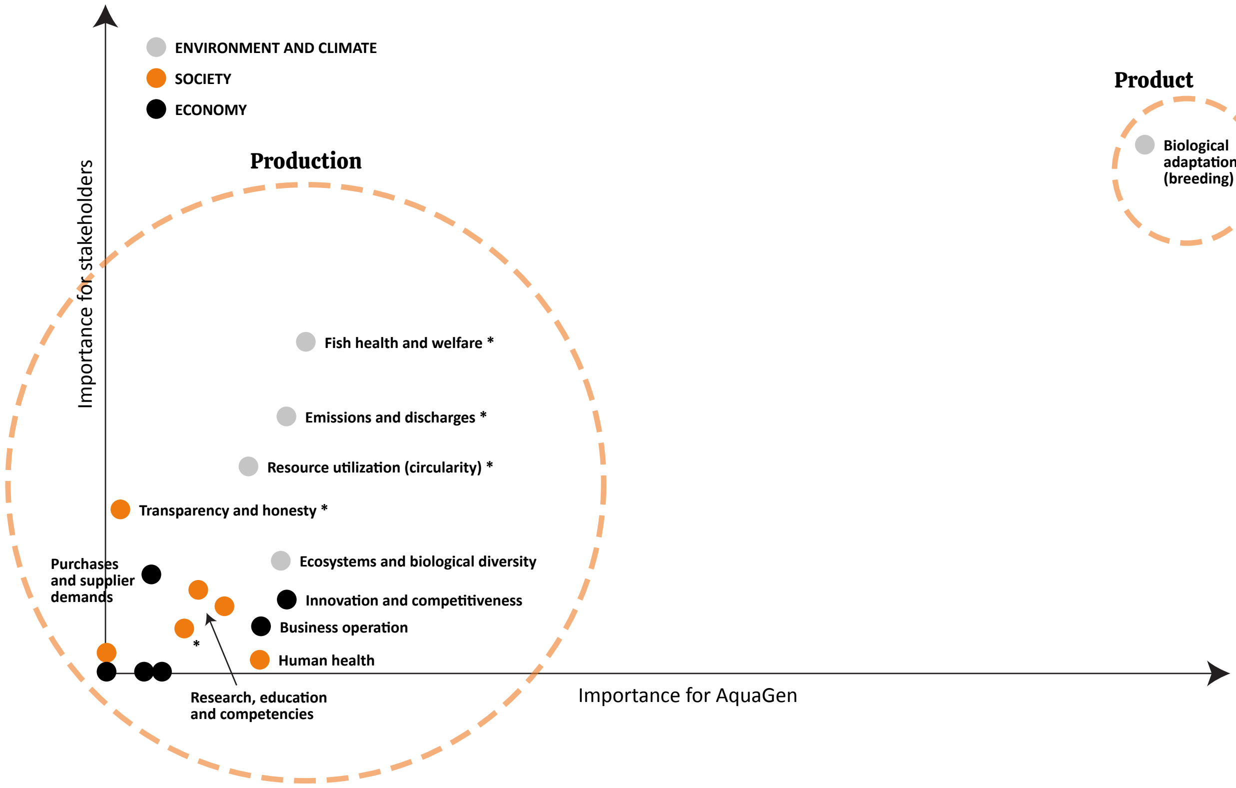


Figure 2: *Materiality assessment for AquaGen's sustainability work, showing how important each impact factor is for us to achieve our goals (x-axis) and for our stakeholders (y-axis). The impact factors marked with * became prioritized ambitions in AquaGen's sustainability roadmap. The asterisk in the bottom left corner indicates the impact factor "Working conditions".*

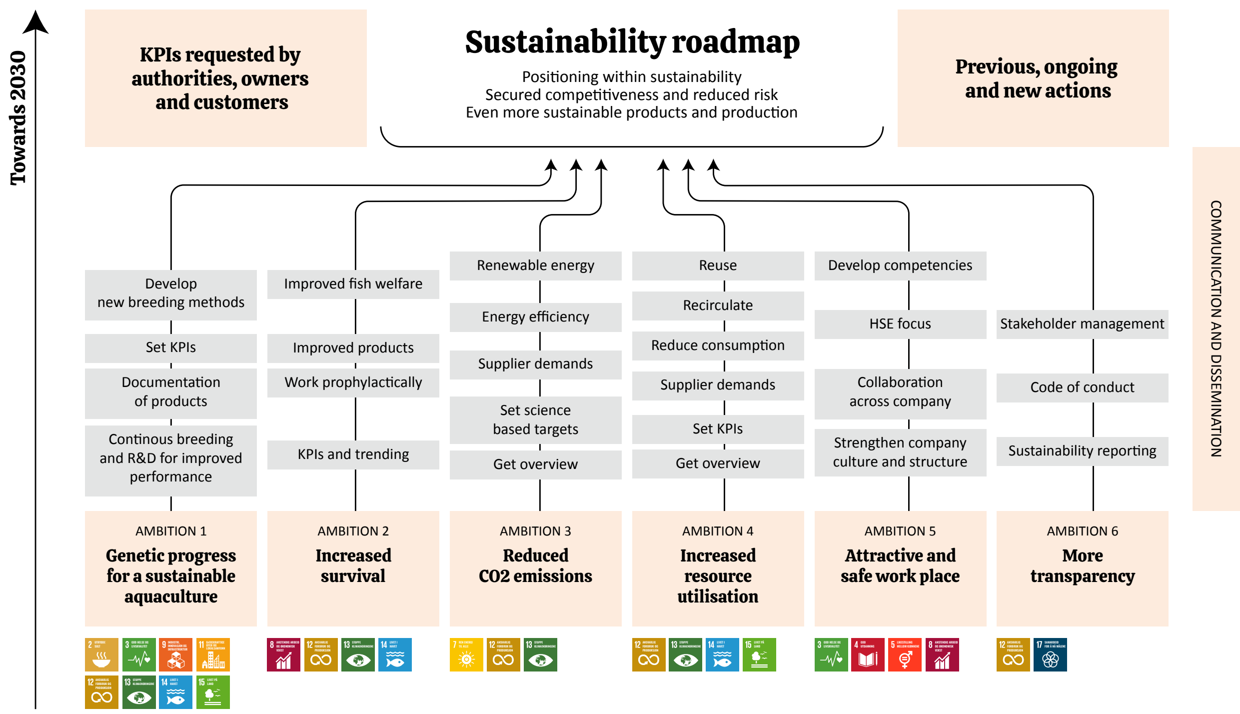


Figure 3: *AquaGen's sustainability roadmap towards 2030, with ambitions, connection to the UN SDGs, focus areas for achieving the ambitions (grey boxes) and desired improvements in relation to sustainability.*

2. About this report

This sustainability report for AquaGen Norway covers the financial year 2023/24 (01.07.23–30.06.24) and is AquaGen's second sustainability report.

AquaGen is not required to report under the EU *Corporate Sustainability Reporting Directive* (CSRD, 2023), since our owners prepare a consolidated sustainability report that includes information from all their subsidiaries. Nevertheless, AquaGen has chosen to further develop its own sustainability report, based on the basic module of The European Financial Reporting Advisory Group's (EFRAG) *Voluntary Sustainability Reporting Standard for non-listed SMEs* (VSME, 2024), and share sustainability information with our main stakeholders.

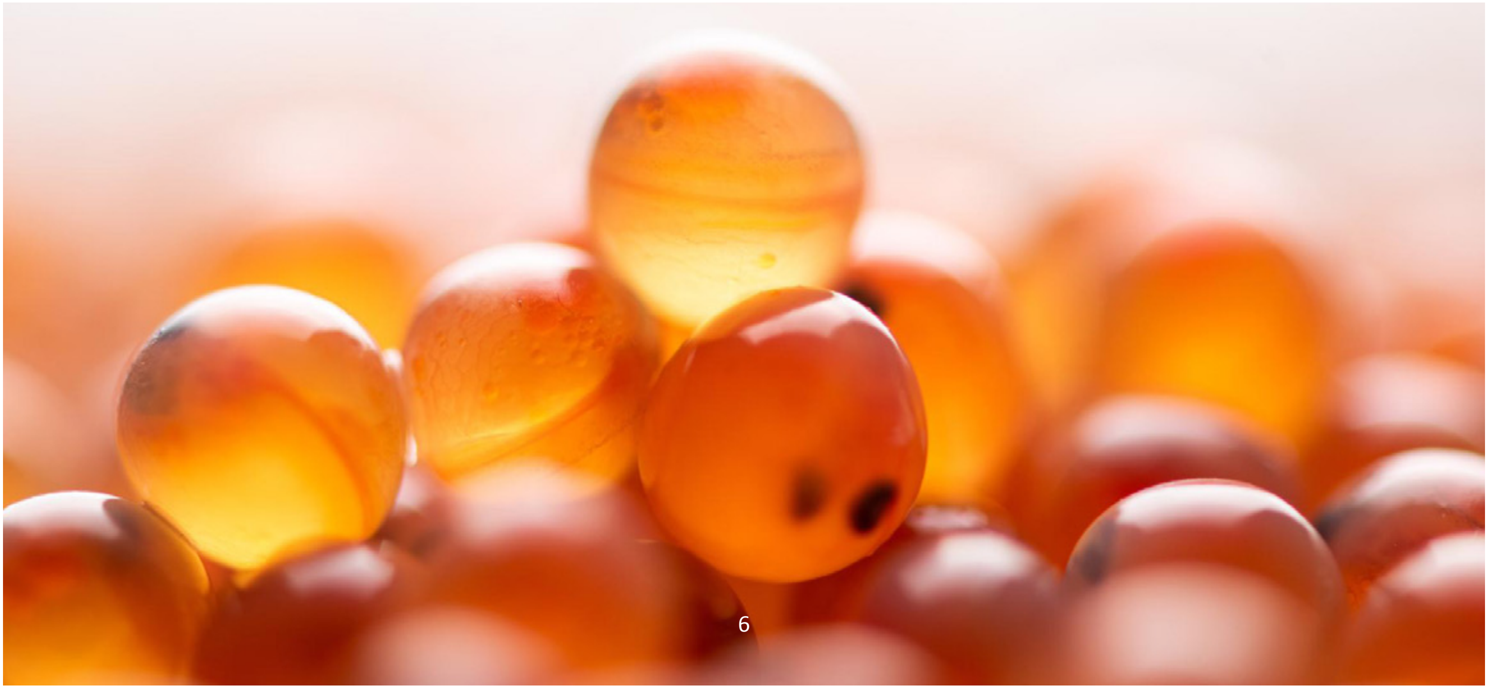
B1 Basis for preparation

The following information is required in the VSME standard's basic module:

- Scope of report: This report covers only information about AquaGen Norway.
- Legal form: AquaGen is a limited liability company, 100% owned by the German company EW Group GmbH.
- Industry codes (NACE):
  - 03.222 Production of juveniles and smolt in freshwater-based fish farming
  - 72.110 Research and development work in biotechnology
- Balance sheet size (converted using Bank of Norway's EUR exchange rate per 30.06 each year):
  - Per 30.06.2024: EUR 141,787,752 (NOK 1,615,884,118)
  - Per 30.06.2023: EUR 133,949,129 (NOK 1,567,740,608)
- Revenue (converted using Bank of Norway's EUR exchange rate per 30.06 each year):
  - Per 30.06.2024: EUR 70,998,672 (NOK 820,052,409)
  - Per 30.06.2023: EUR 66,007,667 (NOK 727,817,042)
- Number of employees: Per 30.06.2024 there were 160 employees (143 permanent and 25 temporary, 140 FTE), compared to 139 permanent and 14 temporary per 31.12.2023 (136.5 FTE).
- Locations: AquaGen AS has its headquarters in Trondheim and production facilities in the municipalities of Heim, Tingvoll, Ørsta, and Steigen (Table 1). The company is the parent of the AquaGen group. The group's operations in Chile are managed through the subsidiary AquaGen Chile SA, headquartered in Puerto Varas. The group's operations in Scotland are managed through the subsidiary AquaGen Scotland Ltd, headquartered in Stirling with a production facility outside Dumfries. Through the subsidiary AquaSearch Ova Aps, AquaGen also produces and sells rainbow trout eggs in Denmark.
- Sustainability-related certifications (see https://aquagen.no/om-aquagen/):
  - ISO 9001: a standard for quality management. The standard requires identifying, managing, measuring, and continuously improving processes in the company.
  - GlobalG.A.P.: an international standard safeguarding food safety, environmental protection, fish welfare and health, as well as employee safety and welfare (GRASP). This is a comprehensive standard, ensuring the end consumers that production is carried out according to strictly defined criteria.
  - Debio: certification for organic aquaculture emphasizing environment, welfare, and good health of farmed fish. Ensures no pathogens, parasites, or medicine residues affect wild organisms. Stocking density must not cause stress or fin biting, and fish must be able to shoal. Feed ingredients must come from organic farming or trimmings from sustainable fisheries.
  - European Forum for Farm Animal Breeders (EFFAB): has developed a Code of Good Practice in animal breeding, including fish breeding and reproduction (Code-EFABAR). Certification ensures that breeding is conducted according to recognized scientific and animal ethics principles.
- Geolocation of owned, leased, or licensed sites (Table 1).

LOCATION	LOC.NO.	PARTNER	ADDRESS	POSTAL CODE	MUNICIPALITY	COORDINATES
Trondheim			Havnegata 9	7010 Trondheim	Trondheim	63.441° N, 10.403° E
Tromsø			Stortorget 1	9008 Tromsø	Tromsø	69.651° N, 18.961° E
Kristiansund			Vågeveien 6	6509 Kristiansund	Kristiansund	63.646° N, 7.436° E
Bergen			K. Chr. Fred. pl. 3	5006 Bergen	Bergen	60.226° N, 5.193° E
Ås			Oluf Thesens vei 6	1433 Ås	Ås	59.666° N, 10.760° E
Vestseøra	24096		Industriveien 13	7200 Kyrksæterøra	Heim	63.295° N, 9.09° E
Trøan Bjørklibukta	13677		Lernesstranda 651	7200 Kyrksæterøra	Heim	63.332° N, 9.123° E
Stokkvika	19015		Hollaveien 778	7200 Kyrksæterøra	Heim	63.334° N, 9.181° E
Kistvika	13573		Lernesstranda 1001	7200 Kyrksæterøra	Heim	63.384° N, 9.171° E
Forrahammaren	33697		Vennastrandvn 2001	7200 Kyrksæterøra	Heim	63.350° N, 9.233° E
Hafsmo	29697		Hollaveien 778	7207 Snillfjord	Orkland	63.367° N, 9.245° E
Rimstad	18000		Rimstadvegen 12	6630 Tingvoll	Tingvoll	62.903° N, 8.191° E
Honnhammarvika	12897		Honnhammervn 709	6630 Tingvoll	Tingvoll	62.863° N, 8.156° E
Merraberget	12904		Meisalstranda 510	6460 Eidsvåg	Molde	62.784° N, 8.278° E
Barstadvik	10183		Barstadvik 17	6174 Barstadvik	Ørsta	62.360° N, 6.264° E
Bogen	10503	NST	Åsjordveien 230	8285 Leines	Steigen	67.737° N, 14.894° E
Kråkåsen	34037	NST			Steigen	67.740° N, 14.897° E
Sandøya	35417	NST			Steigen	67.738° N, 14.753° E
Sjølseng	12917	Nofima			Sunndal	62.667° N, 8.525° E
Hønsvikgulen	12898	Lerøy			Heim	63.105° N, 8.171° E
Kattholmen	14042	Salmar			Frøya	63.871° N, 8.679° E
Espnestaren	32677	Måsøval			Frøya	63.678° N, 8.667° E
Fjølværet Ø	26775	Måsøval			Frøya	63.819° N, 8.636° E
Lamøya	12993	Måsøval			Frøya	63.733° N, 8.855° E
Langøya Kvaløya	12380	Måsøval			Frøya	63.792° N, 8.607° E

Table 1: *Overview of AquaGen's locations in Norway (data from https://www.barentswatch.no/akvainfo/ and others).*



B2 Practices, policies, and future initiatives for transition towards a more sustainable economy

Table 2 summarizes AquaGen's practices for reducing negative impacts and strengthening positive impacts, policies on sustainability topics, future initiatives in these areas, and metrics set to monitor the implementation of policies and any achieved progress towards the goals.

	DOES THE COMPANY HAVE EXISTING PRACTICES/ POLICIES/ INITIATIVES THAT ADDRESS SUSTAINABILITY TOPICS? (yes/no)	**ARE THEY PUBLICLY AVAILABLE?** (yes/no)	**DO THE POLICIES HAVE ANY TARGET FIGURES?** (yes/no)
Climate change	Yes	No	No
Pollution	Yes	No	No
Water and marine resources	Yes	No	No
Biodiversity and ecosystems	Yes	No	No
Circular economy	Yes	No	No
Own workforce	Yes	Yes	No
Worksforce in the value chain	Yes	Yes	No
Affected local communities	Yes	No	No
Consumers and end users	Yes	Yes	No
Governance	Yes	Yes (economy)	Yes (economy)

Table 2: *AquaGen's practices for reducing negative impacts and strengthening positive impacts, policies on sustainability themes, future initiatives within sustainability themes and targets set to monitor the implementation of the policies and any progress achieved in achieving the goals.*

This report includes information on metrics linked to ambitions in AquaGen's sustainability roadmap, which was created based on the materiality assessment conducted in 2022 (Figure 3). The financial year 2022/23 is AquaGen's baseline year, i.e., the year we compare against when assessing the development of sustainability areas.

3. Environmental metrics

B3 Energy and greenhouse gas emissions

This section in the VSME standard corresponds to AquaGen's ambition 3 *Reduced greenhouse gas emissions* in the sustainability roadmap (Figure 3). The main goal for this ambition is to gain an overview of and reduce AquaGen's emissions of greenhouse gases (CO_2, CH_4 and N_2O) associated with our operations. This is the second year we have prepared a climate account based on the GHG protocol. The account is still under development and is estimated to currently cover about 85–95% of AquaGen's greenhouse gas emissions.

ENERGY CONSUMPTION	RENEWABLE		NON-RENEWABLE		TOTAL	
	2023/24	2022/23	2023/24	2022/23	2023/24	2022/23
Fuel (Scope 1, MWh)			2600	3 535	2 600	3 535
Electricity (Scope 2, MWh)	14 480	13 116			14 480	13 116
Total	14 480	13 116	2600	3 535	17 080	16 652
Feed (Scope 3, kg)					4 908 503	4 817 521
Travel (Scope 3, km)					1 034 793	

Table 3: *AquaGen's energy consumption for 2023/24 and 2022/23, divided into Scope 1, 2 and 3 (feed and travel).*

GREENHOUSE GAS EMISSIONS (t CO_2eq)	RENEWABLE		NON-RENEWABLE		TOTAL	
	2023/24	2022/23	2023/24	2022/23	2023/24	2022/23
Fuel (Scope 1)			689	937	689	937
Electricity (Scope 2)	48	43			48	43
Subtotal	48	43	689	937	737	980
Feed (Scope 3)					8 295	8 238
Travel (Scope 3)					109	
Total	**48**	**43**	**689**	**937**	**9141**	**9 218**

Table 4: *AquaGen's calculated greenhouse gas emissions (t CO_2eq) for 2023/24 and 2022/23, divided into Scope 1, 2 and 3 (feed and travel). Conversion factors to CO_2eq (0.265 for diesel and 0.257 for petrol) are from the Norwegian Environment Agency (https://www.miljodirektoratet.no/ansvarsomrader/klima/for-myndigheter/kutte-utslipp-av-klimagasser/klima-og-energiplanlegging/tabeller-for-omregning-fra-energivarer-til-kwh/), from Fjordkraft for electricity (0.0033 with a guarantee of origin for renewable electricity), and from Skretting for feed (1.69 kg per kg feed). Data for emissions from travel are from Berg-Hansen, our travel agency.*

Our owners have set a target of achieving full climate-neutral energy consumption by 2040 and reducing greenhouse gas emissions per egg by 5% per year. To achieve this, we must map our emissions and set verifiable *science-based targets* in line with the Paris Agreement of 2015. Other focus areas for reducing emissions include energy efficiency, use of renewable energy in our production, and imposing requirements on our suppliers (especially feed). Table 3 and 4 summarize AquaGen's energy consumption and greenhouse gas emissions, divided into Scope 1, 2 and 3.

Scope 1 includes direct emissions from owned or controlled sources, i.e., fuel for trucks, cars, boats, other vehicles, generators, etc. For AquaGen, this means emissions from the consumption of diesel and petrol, totaling 689 t CO_2eq in 2023/24 compared to 937 in 2022/23. Since 2022, all sea sites and feed barges have been connected to the power grid, which reduced diesel consumption from 348,972 liters in 2022/23 to 256,658 liters in 2023/24, giving a 27% reduction in greenhouse gas emissions. Further reductions can be achieved by phasing in electric boats and cars.

Scope 2 includes indirect emissions from the production of purchased energy, e.g., electricity, gas, oil, etc. For AquaGen, this only includes emissions from electricity with a guarantee of origin (a financial certificate that guarantees an equivalent amount of electricity is produced from renewable sources). In 2023/24, these emissions totaled 48 t CO_2eq, compared to 43 t in 2022/23. Without guarantees of origin, our Scope 2 emissions would have been 5,821 t CO_2eq.

Scope 3 includes all indirect emissions in our value chain not included in Scope 2, both upstream and downstream. Scope 3 is still incomplete, and we are working on improving data collection and quality. Emissions from purchased feed totaled 8,295 t CO_2eq in 2023/24, a small increase from 8,238 in 2022/23, despite the supplier reducing CO_2eq by 0.02 kg per kg feed in the same period. Feed is the largest source of emissions in Norwegian aquaculture, accounting for up to 80% of total emissions from a salmon sold in Paris (Winther et al., 2020). Composition of the feed and how we use it therefore have the greatest impact on AquaGen's greenhouse gas emissions, by far. New this year are data for 109 t CO_2eq from 1.03 million km of air travel.

Since 2020, Kystmiljø has collected AquaGen's silaged dead fish and broodstock carcasses, and since 2023, sludge from facilities with effluent treatment requirements (Profunda). The silage and sludge are converted to biogas, corresponding to a reduction in greenhouse gas emissions of 619 t CO_2eq in 2023/24 (544 t in 2022/23). Since 2016, Nofir has collected used nets from AquaGen, which are either recycled or incinerated. In 2023, no nets were collected, but in 2024 the collected nets corresponded to a reduction of 48 t CO_2eq.

Emission intensity (greenhouse gas emissions per revenue) in 2023/24 was 128.7 t per million EUR, compared to 139.7 t in 2022/23.

In 2022, greenhouse gas emissions per produced egg were calculated at 0.028 kg CO_2eq, which is less than 0.1% of the emissions of a Norwegian farmed salmon at harvest. The calculations were made using life cycle assessments (LCA). We have not yet calculated the effect of our breeding work (improved growth, feed efficiency, and survival) on reducing emissions from aquaculture production in our own facilities or at customers, but trials to collect such data have started.

B4 Pollution of air, water and soil

The aquaculture industry is subject to several reporting requirements on emissions and pollution, mainly from the Pollution Regulations. AquaGen's emissions and discharges for 2023/24 were as follows:

- Use of feed and medicines (reported monthly to the Directorate of Fisheries):
  - Feed consumption: See Table 3.
  - Medicinal use:
    - Vaccines: All fish transferred to sea are injected with a multivalent vaccine – about 450,000 in our own hatchery.
    - Sea lice treatments: 7 of 14 de-lousing operations in 2023/24 were medicinal (Salmosan, Ectosan, Alphamax, and Ektobann) (5 of 25 in 2022/23). No preventive use of Slice was carried out in 2023/24 (2 sites in 2022/23).
    - Antibiotics: None used in 2023/24 (nor in 2022/23).
    - Other medicinal use:
      - 30,300 L formalin against fungi/parasites on eggs and broodstock.
      - 326 kg Finquel/tricaine, 253 L benzocaine, and 273 L Aqui-S (anesthetics).
- Nutrient emissions are calculated based on feed consumption and feed composition. In 2023, AquaGen purchased 3,679 t of fish feed from Skretting. Biological feed conversion ratios in the same period varied from 1.09 to 1.24 in our facilities (1.15–1.29 in 2022). Skretting has developed an emissions model (digitally available to customers) that can calculate emissions of nutrients from feed waste and feces. For 2023, gross emissions were calculated at 142 t nitrogen (N), 24 t phosphorus (P), and 290 t organic material (C).
- Environmental surveys of organic load and discharges to sediments (MOM surveys) are regulated through discharge permits according to NS9410-2016. MOM-B shows how the seabed under or near the facility is affected, while MOM-C provides an overview of seabed impact in the distant zone of the facility. Maximum organic load usually occurs when 75–90% of the total feed in a production cycle has been distributed. The frequency of surveys depends on how much the site is affected, or what condition class it receives (1 – Very good to 4 – Very poor). For MOM-B, the frequency is about every 2 years, and for MOM-C about every 6 years.
  - Åkerblå conducts AquaGen's environmental surveys, which are sent to the County Governor in the relevant county.
  - In general, AquaGen receives condition class 1 on MOM-B and -C, with the occasional condition class 2, which reverts to condition class 1 after a fallowing period. We generally have little impact on the recipient environment compared to conventional fish farming operations, because we operate with relatively low biomass at our sites.
- Emissions of copper and zinc:
  - AquaGen uses external services for washing and treating nets and impregnation products that are approved by Debio (organic certification), so copper emissions are close to zero.
  - Zinc from feed or equipment has not been quantified.
- Waste management:
  - In 2023, Kystmiljø collected 38 t sludge from Profunda, currently the only AquaGen site with effluent treatment requirements, and transported it to a biogas production facility (see B3).
  - In 2023, Kystmiljø collected 1,054 t silaged dead fish and broodstock carcasses from AquaGen's sites and transported it to a biogas production facility (see B3).
  - In 2023, Nofir did not collect used nets from AquaGen, but in 2024, 13.8 t of used nets were collected, of which 8.6 t were recycled, and 5.3 t went to energy recovery.
  - Other waste streams have not yet been quantified at AquaGen.
- Accidental discharges and deviations are reported in AquaGen's deviation system, and the respective municipalities and Norwegian Coastal Administration are notified. This is described in contingency plans, in accordance with the Aquaculture Operations Act. For 2023/24, AquaGen had no such incidents.
- Emissions of gases (NOx, SOx, particles, HC, CO) from AquaGen's own operations and through transport of eggs, salmon, and feed occur but have not been quantified.

B5 Biodiversity

In accordance with the salmon license allocation regulations, none of AquaGen's land-based or sea-based facilities (owned, leased, or managed) are located in or near biodiversity-sensitive areas (see https://www.protectedplanet.net/en).

The total area used by AquaGen, the area of sealed surfaces, and the area of nature-oriented areas have not been mapped.

B6 Water

All AquaGen's land-based facilities are in areas with abundant freshwater availability (see https://www.wri.org/aqueduct). All facilities operate in accordance with licenses for water extraction from the Norwegian Water Resources and Energy Directorate (NVE).

In 2023/24, AquaGen used a total of 7.1 million m^3 of freshwater in its production facilities (compared to 8.2 million m^3 in 2022/23), of which 0.45 million m^3 was well water. A total of 2.3 million m^3 of freshwater was recycled, and 7.1 million m^3 was discharged into the sea after treatment.

B7 Resource use, circular economy and waste management

This section in the VSME standard corresponds to AquaGen's ambition 4 *Improved resource utilization* in the sustainability roadmap (Figure 3). In addition, AquaGen's ambition 1 *Improved genetics* and 2 *Increased survival* are also described here, as both are closely linked to resource utilization, both in AquaGen's own operations and in the aquaculture industry in general.

More efficient use of resources reduces greenhouse gas emissions and the need for new resources, slows biodiversity loss, and reduces pollution loads. Aquaculture, like any other industry, contributes to emissions through the consumption of energy, goods, and services. Improved resource utilization can significantly reduce these emissions.

The main principles of a circular economy are according to the Ellen MacArthur Foundation (https://www.ellenmacarthurfoundation.org/) and the European Commission (https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en):

- Eliminate waste and pollution through process improvements and by making design choices that ensure applicability, reuse, reparability, dismantling, and remanufacturing.
  - AquaGen's most important process improvement to reduce waste and pollution in its own production is the establishment of a feeding centre, which ensures that fish are fed optimally for growth and that as little feed as possible is wasted.
- Circulate products and materials (to their highest value). Reuse and recycling are key to circulation, and this is strengthened when circularity is considered already in the design phase. The use of biomaterials and recycling them through the biological cycle can also be considered.
  - Kystmiljø collects AquaGen's surplus products (silaged discarded eggs, dead fish, and broodstock carcasses) and materials (sludge), which are converted to biogas. Used nets are sent to recycling by Nofir. Volumes for 2023/24 are listed under B4.
  - Waste sorting is carried out to varying degrees in AquaGen's facilities but has not yet been mapped and quantified.
- Regenerate nature whenever possible. Human activities should aim to rebuild nature and improve or rehabilitate important ecological functions (e.g., drainage, habitats, temperature regulation, etc.) that may have been lost due to previous human activities.
  - AquaGen has not had any such activities during the reporting period.

Improved genetics

Improved genetics is ambition 1 in AquaGen's sustainability roadmap (Figure 3), and it affects large parts of the aquaculture industry through AquaGen's products. AquaGen's owners have a clear ambition for continuous development, improvement, and documentation of our products, and that at least 3–10% of the revenue should be reinvested in breeding and R&D activities.

Breeding involves refining desired traits in a stock, resulting in many improvements for the economy, environment and animal welfare. Through breeding, we can help farmers produce fish with faster growth, better feed efficiency, and higher disease resistance. This means the fish can grow faster and in a healthier way, leading to greater yield in a shorter time and reduced costs associated with feed and medical treatment. High growth rates reduce the time fish are exposed to infectious diseases and parasites in the sea, lowering mortality while increasing turnover rates in farming and improving infrastructure utilization.

Selection for faster growth indirectly selects for better feed efficiency, and AquaGen has also conducted long-term research to select directly for improved feed efficiency. By optimizing feed use, we can reduce the amount of feed needed to produce a given amount of fish. This lowers greenhouse gas emissions from feed production and transport. Feed is also a major cost driver and has a significant environmental impact. By breeding fish with better feed efficiency, farmers can reduce the amount of feed required, saving resources and reducing the environmental burden. Better feed efficiency also means less feed waste, lowering pollution and eutrophication in aquatic environments. Effective resource utilization also involves minimizing the use of natural resources such as fishmeal and fish oil, which often come from wild fish stocks, where overfishing can threaten marine ecosystems.

Climate change affects sea temperatures, water quality, and ecosystems. Improved resource utilization through breeding can help produce fish better adapted to varying environmental conditions. This includes fish more resistant to temperature changes, hypoxia (low oxygen), and other stress factors associated with climate change. Breeding can thus be a measure for climate change adaptation.

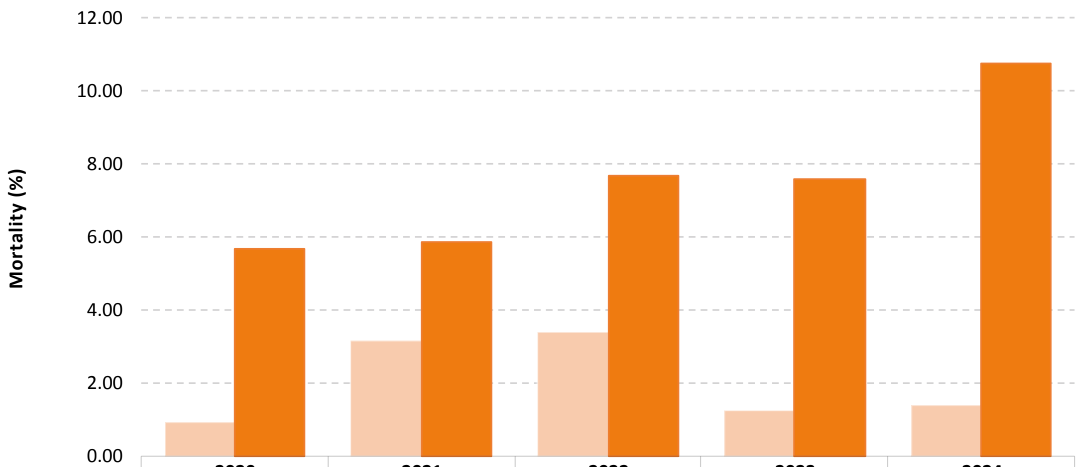
Increased survival

Increased survival is AquaGen's ambition 2 in the sustainability roadmap (Figure 3) and applies both to AquaGen's own production and to the broader aquaculture industry through the impact of AquaGen's products. Increased survival is one of the most important performance indicators in aquaculture for several reasons that affect both environmental and economic sustainability, for example better resource utilization, lower greenhouse gas emissions, and less biological waste, which in turn reduces the risk of pollution and negative impacts on nearby ecosystems.

Higher survival is also closely linked to good animal welfare. Fish that live under good conditions and are less exposed to disease and stress have a higher chance of survival. Better animal welfare practices are both an ethical responsibility and a requirement from consumers and regulators. Higher survival also provides greater economic benefits.

AquaGen monitors three performance indicators related to survival and resource utilization: mortality, growth (thermal growth coefficient, TGC), and feed efficiency (biological feed conversion ratio, bFCR).

Mortality is the sum of fish lost due to death, destruction, and wastage. Mortality target in the freshwater phase is max 5% up to 5 g, and thereafter max 3% up to 100 g smolt, totally max 8% up to sea transfer. Mortality during the first 30 days at sea counts as part of the freshwater phase and should preferably be max 2%. For the second month at sea, the mortality target is max 1%, and thereafter max 0.5% per month, in total max 9% to harvest size. Furthermore, the target is a max 15% cumulative mortality up to transfer of the broodstock to freshwater tanks. Data for freshwater mortality are not shown in this report due to the large number of groups, making it difficult to present representative figures. Figure 4 shows average mortality for our sea groups up to harvest at 5.5 kg in Heim and Tingvoll from 2020 to 2024. Data from Profunda are excluded due to volume limitations, and data from Steigen are excluded because most of the sea production there takes place at partner facilities in Nordnorsk Stamfisk.



	2020	2021	2022	2023	2024
Loss first 30 days FW (%)	0.90	3.17	3.40	1.27	1.40
Loss sea minus 30 days (%)	5.67	5.86	7.68	7.58	10.77

Figure 4: *Average mortality in the sea phase at AquaGen's facilities in Heim and Tingvoll for 2020-2024.*

Growth (TGC): No growth targets are defined for TGC in freshwater – the goal is to produce good smolt (approximately 100 g by mid-April, S1). The following TGC targets are defined for the sea phase:

- Heim: 3.40 and 3.30 for S1 and S0 salmon respectively, and 3.65 for S1 and S0 rainbow trout (smolt to harvest).
- Tingvoll: 3.35 and 3.30 for S1 and S0 salmon respectively, and 3.65 for S0 rainbow trout (smolt to harvest).
- Steigen: 3.4 (last year before broodstock).
- Profunda: 3.0.

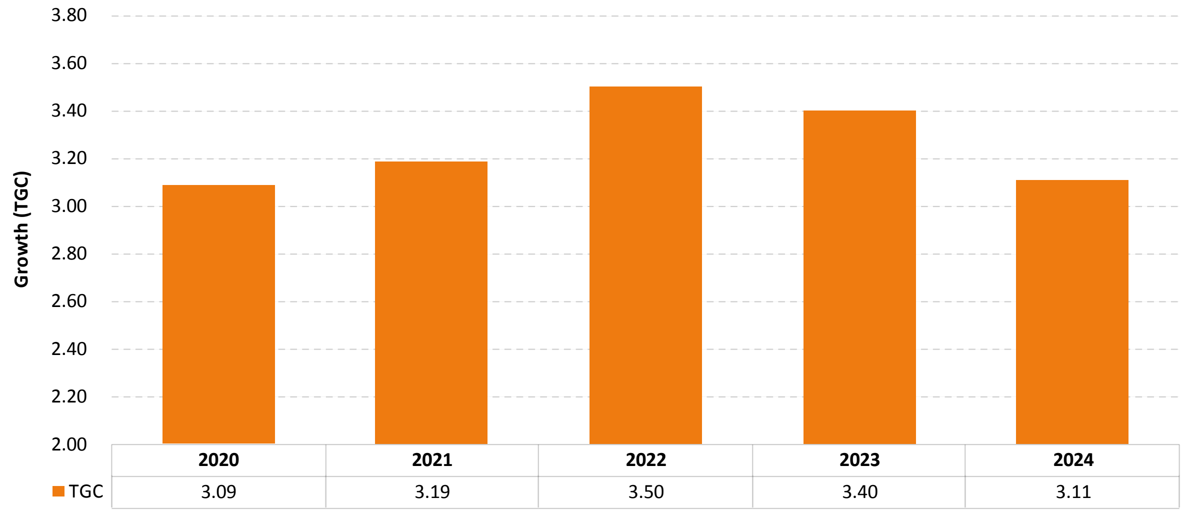


Figure 5: *Average growth (TGC) in the sea phase in AquaGen's facilities in Heim and Tingvoll for 2020-2024.*

Figure 5 shows the average TGC for our sea groups up to harvest at 5.5 kg in Heim and Tingvoll from 2020 to 2024. Data from Profunda are not included because volume restrictions hinder target achievement, while data from Steigen are not included since most of the sea production takes place at our partners in Nordnorsk Stamfisk.

<u>Feed efficiency (bFCR)</u> is closely related to growth. No bFCR targets are defined for the freshwater phase, where the focus is on producing the best possible smolt. For Heim, Tingvoll, and Steigen, the target bFCR for the sea phase is 1.15 up to 5.5 kg, increasing to 1.25 from 5.5 to 10 kg and 1.35 from 10 kg to broodstock transfer. For Profunda, the target is 1.25. Figure 6 shows average bFCR for our sea groups up to harvest at 5.5 kg in Heim and Tingvoll from 2020 to 2024. Data from Profunda are not included because volume restrictions hinder target achievement, while data from Steigen are not included since most of the sea production takes place at our partners in Nordnorsk Stamfisk.

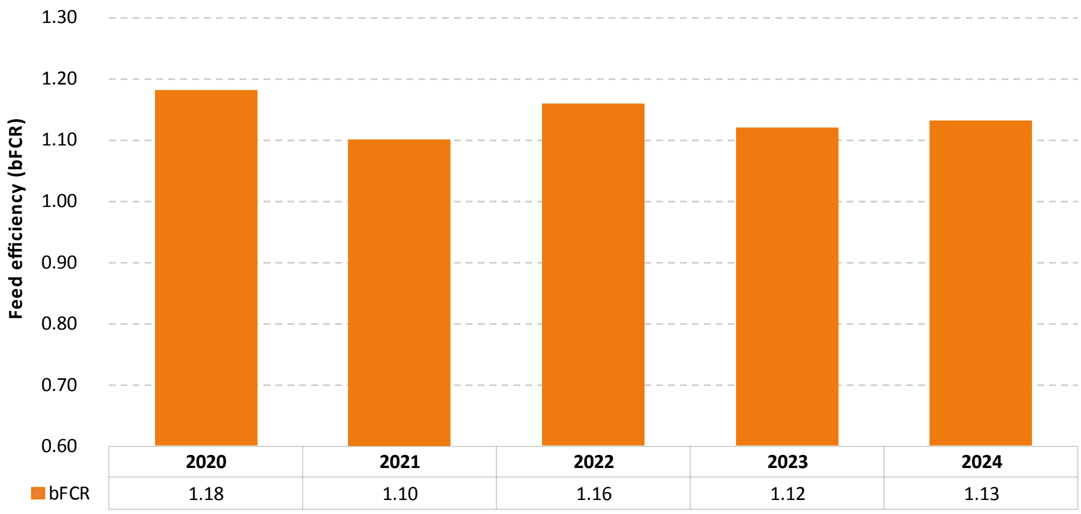


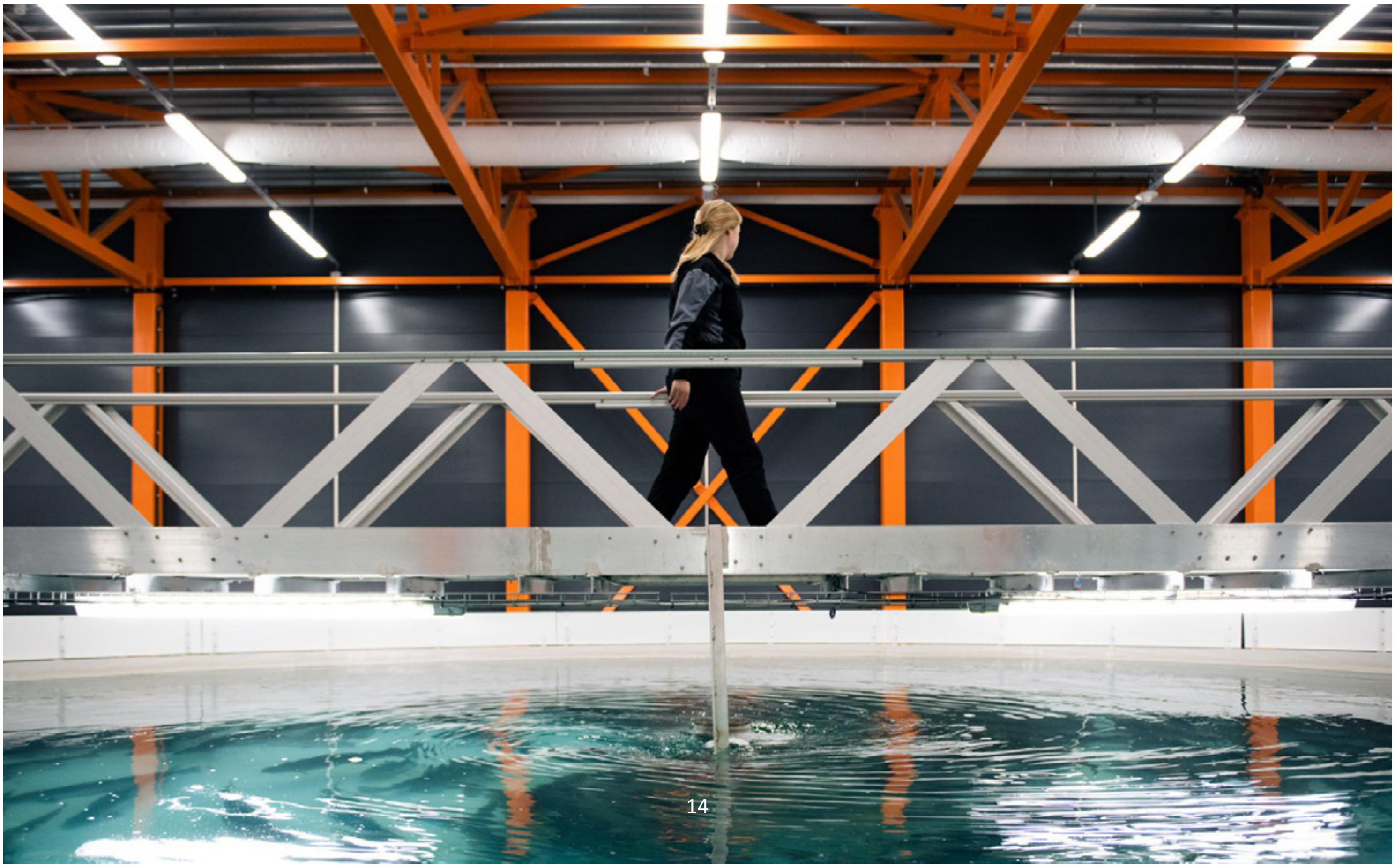
Figure 6: *Average feed efficiency (bFCR) in the sea phase at AquaGen's facilities in Heim and Tingvoll for 2020-2024.*

Additionally, sea lice are important to monitor because of their major impact on survival during production in sea cages. AquaGen's goal is to never exceed the permitted limits for mobile female lice. The limit is 0.5 per fish throughout most of the year up to harvest size, and 0.2 in weeks 16–21 to protect migrating wild smolt. All broodstock producers have a lice limit of 2 in the last 6 months before transfer to freshwater tanks, as it is undesirable to de-louse such large fish and they are not significantly harmed by 2 lice per fish. Dispensation periods longer than 6 months must be applied for. AquaGen also aims to avoid de-lousing, but realistically there will be about two treatments per cage per year, one in autumn and one in spring. AquaGen uses cleaner fish preventively, but we are phasing this out gradually as alternative technology is introduced.

YEAR	NO. LICE COUNTS (CAGES)	NO. LICE COUNTS ABOVE PERMITTED LIMIT (CAGES)	% LICE COUNTS ABOVE LIMIT	NO. LICE TREATMENTS (CAGES)
2020	304	10	3,3	42
2021	297	3	1,0	46
2022	279	14	5,0	69
2023	293	10	3,4	68
2024	282	15	5,3	37

Table 5: *Development in the number of lice counts, counts above permitted limit, and treatments for AquaGen 2020–2024.*

Table 5 shows developments in the number of lice counts, number of counts above the permitted limits, and treatments for all AquaGen's facilities from 2020 to 2024. In 2024, 5.3% of the counts (at cage level) were above the permitted limit, an increase from 2023. Most treatments in 2024 were non-medicinal (Flatsetsund de-louser). AquaGen plans to invest in laser technology against lice and is conducting a pilot project to evaluate its effect.



4. Social metrics

The VSME standard's sections B8, B9, and B10 correspond to AquaGen's ambition 5 *Attractive and safe workplace* in the sustainability roadmap (Figure 3).

AquaGen's work for good social practices is embedded in our management systems and integrated into our efforts within HR, HSE, and corporate social responsibility. AquaGen is certified according to GlobalG.A.P. (Global Good Agricultural Practice), an international standard that safeguards food safety, environmental protection, fish welfare and health, as well as employee safety and welfare. This is a comprehensive standard that ensures consumers that production is carried out according to strictly defined criteria, and every year we are audited according to GlobalG.A.P.'s Risk Assessment on Social Practice (GRASP).

B8 Workforce – General characteristics

Motivated and engaged employees are crucial to AquaGen's success. For us, it is important to ensure that employees thrive at work and feel safe and well taken care of in the workplace.

Table 6 summarizes the number of employees (headcount and full-time equivalents), temporary and permanent employees, gender distribution, as well as employee turnover.

INDICATOR	30.06.2024	31.12.2023	31.12.2022
Permanent employees, men Permanent employees, women **Total permanent employees**	96 (67%) 47 (33%) **143**	94 (68%) 45 (32%) **139**	91 (68 %) 43 (32%) **134**
Full time equivalents (FTEs) permanent, men Full time equivalents (FTEs) permanent, women **Total FTEs**	95 45 **140**	92,8 43,7 **136,5**	90,1 40 **130,1**
Temporary employees	**25**	**14**	**10**
Permanent employees resigned	**10**	**9**	**18**
Permanent employees recruited	**15**	**14**	**17**
Apprentices	**8**	**10**	**10**
Nationalities	**6**	**7**	**5**
First aid injuries Injuries requiring medical treatment Absence injuries **Total incidents with health consequences**	11 3 2 **5**	10 1 5 **6**	9 8 1 **9**
Sick leave days (self-certified) Sick leave days (doctor-certified) Sick leave days (child illness) **Total sick leave days**	319 (0,8%) 2266 (5,9%) 80 (0,2%) **2380 (6,7%)**	341 (1%) 1598 (4,5%) 175 (0,5%) **2114 (5,94%)**	519 (1,5%) 1404 (3,9%) 186 (0,5%) **2109 (5,88%)**
Workdays per year (permanent employees)	35 750	35 547	35 863

Table 6: *Overview of selected HR/HSE indicators for AquaGen.*

B9 Workforce – Health and safety

According to SINTEF's HSE survey in aquaculture 2023 (https://www.sintef.no/contentassets/c3d21b265d7f4b-69bae91f7f74afb6d1/hms-undersokelsen-i-havbruk-2023.pdf), employees in aquaculture have the highest occupational risk in Norway, after fisheries. We must therefore always work preventively to avoid accidents. AquaGen works proactively with HSE, and all employees are covered by the company's management system, which describes safety rounds, emergency drills, employee surveys, etc. All incidents, near-incidents, and proposed improvement measures must be reported in the company's deviation system for continuous improvement.

Table 6 summarizes the number of work-related accidents and resulting sick leave days. AquaGen had no fatalities due to work-related injuries or occupational health issues in the financial year 2023/24.

B10 Workforce - Remuneration, collective bargaining and training

AquaGen has a remuneration policy with principles of a holistic salary development, that all employees have opportunities for professional and salary development, equal pay for equal work, salary growth in line with society in general and relevant labor markets in particular, and the right to annual local salary negotiations. The company pays above minimum wage and aims for salaries to reflect, as far as possible, market levels, education, and individual qualifications and responsibilities, regardless of background.

On average for all AquaGen employees combined (including the CEO), female employees earned 96% compared to male employees in 2023/24. By function women earned:

- 86% of men's salary (incl. CEO) in the top management group
- 76% of men's salary (incl. management) in research functions
- 107% of men's salary (incl. management) in sales and marketing functions
- 98% of men's salary (incl. management) in administration and support functions
- equal to men in production management (incl. management)
- 95% of men's salary (incl. management) in production-related functions

AquaGen is a member of The Confederation of Norwegian Enterprise (NHO), The Federation of Norwegian Industries (Norsk Industri), and The Norwegian Seafood Federation (Sjømat Norge). Approximately 60% of the workforce is organized in the trade unions Fellesforbundet (The United Federation of Trade Unions) or Tekna (The Norwegian Society of Graduate Technical and Scientific Professionals), giving them the right to collective salary negotiations under the collective agreements. The company practices harmonized settlements, meaning that non-organized employees receive equivalent salary adjustments as unionized employees.

AquaGen has a policy for competence development, describing how the company facilitates targeted and strategic competence building. For production employees, certain courses/ competencies are legally required. The costs for this are covered by the company and documented in the competence monitoring system. Competence enhancement measures are discussed and followed up in annual appraisal interviews. During 2023/24, about 90% of the employees had appraisal interviews, but the number of training hours was not recorded.

5. Governance metrics

AquaGen is a responsible company in the aquaculture industry, and our approach to corporate governance and economy is a central part of our sustainability work. Good corporate governance ensures long-term value creation, strengthens trust among our stakeholders, and lays the foundation for responsible operations in line with laws and societal expectations.

We work systematically to ensure transparency and risk management throughout the organization. This includes clear responsibilities, internal control routines, and a holistic approach to sustainability in investment and financing decisions. Economic solidity and efficient use of resources give us the room to invest in forward-looking solutions and continuous improvement, both economically and environmentally.

AquaGen's economic governance is also closely linked to our sustainability goals, where profitable growth goes hand in hand with responsibility for employees, fish welfare, and carbon footprint. In this way, we are building a stronger, more transparent, and sustainable business for the future.

Increased transparency

This section describes AquaGen's ambition 6 in the sustainability roadmap (Figure 3). Transparency and honesty build trust, which is especially important in the aquaculture industry, where environmental impact, animal welfare, and resource management must be carefully balanced to maintain both ecosystems and economic interests. For AquaGen, this means complying with laws and regulations, being honest and responsible, communicating about what we do, and being open to audits by others.

Key guidelines for AquaGen's sustainability work include considering the entire value chain: suppliers, our own company, customers, and customers' customers. AquaGen is ISO 9001 certified and continuously improves and develops. In line with this, we will continue working to become better in transparency, traceability, and integrity throughout the value chain. Public publishing of our sustainability report, done for the first time with this report, is part of this.

In accordance with the Norwegian Transparency Act, AquaGen conducts regular due diligence assessments of our suppliers and partners, to identify, prevent, and limit negative consequences for human rights and working conditions. The statement is published at www.aquagen.no.

Animal welfare

This topic is highly important for AquaGen and the aquaculture industry as a whole. AquaGen operates according to the requirements of the Aquaculture Operations Regulations, and health checks are performed by external fish health personnel at all our facilities every month (12 health checks per site per year). In addition, extra health checks are conducted when unexpected mortality occurs. Prior to all operations involving fish handling, the fish health personnel prepare a health assessment.

The number of registered deviations related to increased fish mortality in 2024 was 29 (34 in 2023, and 25 in 2022), of which 4 incidents were linked to de-lousing. GLOBALG.A.P. places emphasis on animal welfare, and the certification involves annual external audits. In 2024, none of the 13 audit findings were related to fish welfare (1 of 16 in 2023).

The company is a member of the European Forum for Farm Animal Breeders (EFFAB) and is certified under their *Code of Good Practice for Animal Breeding* (Code-EFABAR), covering fish breeding and reproduction. This certification ensures that breeding is carried out in accordance with recognized scientific and animal ethics principles.

The breeding work itself can have both positive and negative effects on animal welfare; positive because we breed for resistance to pathogens that cause infectious diseases, thus creating more robust fish and reducing mortality in aquaculture. And negative effects because we conduct disease trials with approximately 5,000 fish per year, and because data collection at our facilities involves extra handling of the fish, which can cause stress.

B11 Convictions and fines for corruption and bribery

AquaGen has a procedure for whistleblowing of unacceptable conditions (e.g., danger to life or health, corruption or other economic crime, unsafe working environment, risk to climate or environment, misuse of authority, breach of data protection), available to employees in the personnel handbook, on the intranet, and in the management system. The procedure encourages reporting of unacceptable conditions, defines responsibilities, describes how to report and receive cases, and how whistleblowing cases are handled and followed up. In 2023/24, the company had no whistleblowing cases.

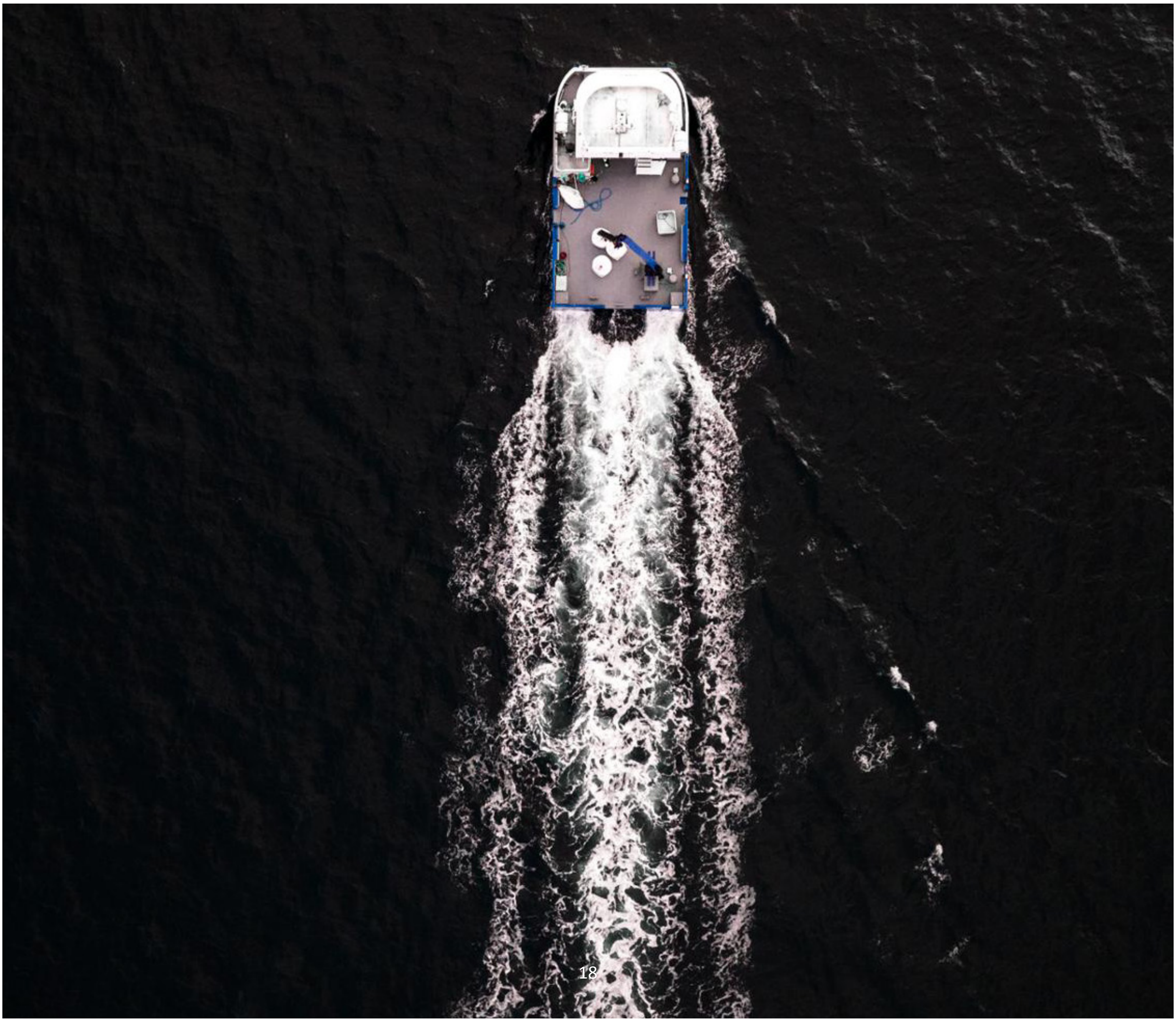
Corruption and bribery are not accepted at AquaGen, and the company has never had convictions or fines related to this.

6. Conclusions

This is AquaGen Norway's second, and first publicly available, sustainability report, which reports on performance indicators requested by our stakeholders. The indicators are linked to ambitions and focus areas identified in AquaGen's sustainability roadmap toward 2030, which was created based on the materiality assessment conducted in 2021.

The report shows that AquaGen is doing, and has done, a lot related to sustainability. However, the improvement work is continuous, and there are many sustainability challenges to address going forward.

The report has been written according to the basic module of the VSME standard. The plan is to further develop the report and to include more AquaGen companies in future reports.



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