



SUSTAINABLE
IMPACT REPORT
2021

This Sustainable Impact Report produced by the Salmon Council provides information on the sustainable management and performance of activities by our member companies: AquaChile, Australis Seafood, Cermaq, Mowi, and Salmones Aysén.

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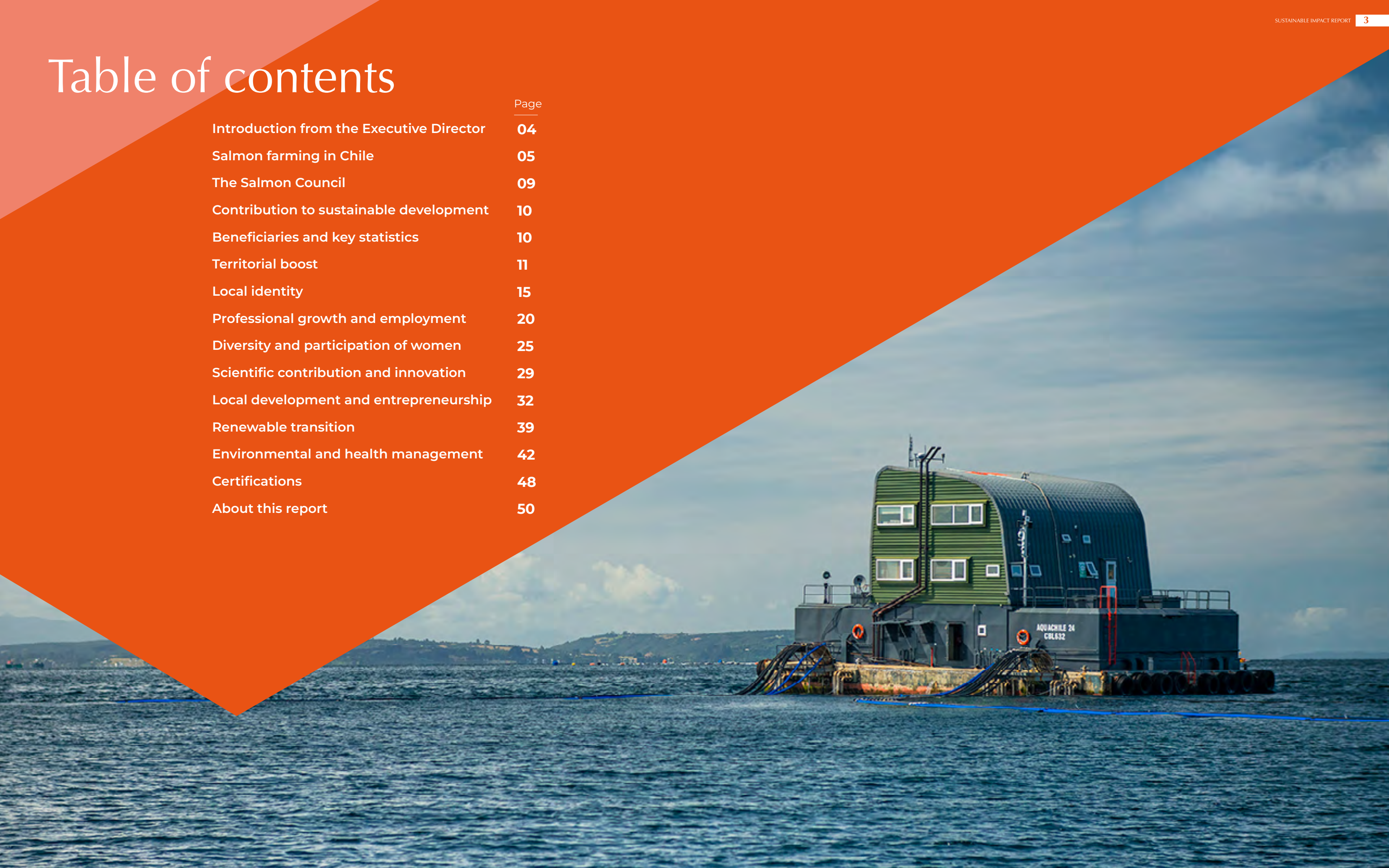


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website here.



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Joanna Davidovich
Executive Director

In order to build a promising future for our aquaculture regions, we must engage in broad dialogue with all actors and formulate a national strategy to jointly promote competitive and sustainable salmon farming within a modern regulatory framework that allows innovation and productivity while protecting the environment.

We are pleased to present our second Sustainable Impact Report, which summarizes the initiatives promoted in 2021 by the member companies of the Salmon Council—AquaChile, Australis Seafood, Cermaq, Mowi, and Salmones Aysén—with the aim of promoting sustainable salmon farming that is in touch with communities and committed to addressing health and environmental challenges. These issues have become a cornerstone of our work since we created our trade association in mid-2020.

Salmon farming has been a driver of economic progress and has created opportunities in the Los Lagos, Aysén, and Magallanes regions. The latter is located in the extreme south of Chile, where the arrival of salmon farming has brought a variety of significant changes.

We are confident that the industry has ample potential to continue contributing to development in the region and achieving the best quality of life for its inhabitants. This will be achieved by promoting local talent and generating quality jobs, greater knowledge, new technologies, innovation, and a strong production chain that involves entrepreneurship and suppliers of various associated goods and services, including transportation and maintenance, supplies and provision, professional services, specialized training centers, and multiple technology ventures.

As a foundation for this, it is crucial that as a country we combine care for the environment and ecosystems with employment opportunities and progress for the population through a variety of economic activities.

Global population growth is driving ever greater demand for food, and it is estimated that by 2050 there will be over 2 billion more people on Earth than there are today. There is also a growing trend towards healthier nutrition and greater environmental awareness. These factors all point to the opportunity currently available to Chile to expand its leadership in the provision of food to the world by means of sustainable aquaculture.

Healthy foods such as salmon have recognized nutritional and environmental benefits compared to other animal proteins, and have a smaller carbon footprint, require less fresh water during production, and are more efficient in their conversion of feed to protein.

There are of course health and environmental challenges to deal with, as salmon are living beings farmed in a natural environment. For this reason there is growing concern on the part of companies to ensure fish wellbeing, and this goes hand in hand with action to protect the environment and the health of the oceans given their vital role in the natural cycle of life.

Salmon farming companies are committed to addressing their future development in a responsible and sustainable manner, incorporating high standards, best practices, and scientific knowledge and innovation.

2021 was a tremendously challenging year during which Chilean salmon farming nevertheless continued to

conduct its economic activities in 40 of the country's districts, while making steady progress toward a more sustainable future.

Evidence of this can be seen in the conversion of diesel-driven power sources to gas on fish farms, the recycling and repurposing of waste, the implementation of programs to level up employee qualifications and training in various areas, increased involvement of women in the industry, and partnerships with fishers, the academic world, and the tourism sector that is so crucial in the southern macro-zone of the country. In addition to this, advances have been made with the shoreline cleanup program and the incorporation of greater science, technology, and innovation to increase productivity and address environmental and health challenges.

December 2021 brought a tragedy to the city of Castro as a fire swept through the Camilo Henríquez neighborhood. The salmon farms quickly responded to the situation, providing tanker trucks to combat the flames and establishing a public-private partnership to contribute resources and offer support as part of a reconstruction process that yielded its first fruits in August 2022 with the delivery of 12 new homes.

In order to build a promising future for our aquaculture regions, we must engage in broad dialogue with all actors and formulate a national strategy to jointly promote competitive and sustainable salmon farming within a modern regulatory framework that allows innovation and productivity while protecting the environment.

Finally, we would like to thank the people themselves: all of the employees, suppliers, and countless other actors involved in the industry who, through their motivation and professionalism, drive the development of sustainable salmon farming. It is with your help that we must build a path toward greater economic progress in the regions and contribute to the development of communities, ensuring care and protection of the environment through initiatives such as those presented in this second Sustainable Impact Report of the Salmon Council.

SALMON FARMING IN CHILE

A history of progress and contribution to the country

Salmon is Chile’s second most exported product after copper. Salmon has been farmed for the past 40 years and has been one of the main drivers of progress and opportunity in the country’s southern macro-zone.

Aquaculture has acquired an important role worldwide and Chile has positioned itself as the world’s second largest producer of salmonids, after Norway, contributing 27% of global production in 2021.

19th century
to present

This period sees the first experimental introduction of salmon into Chilean waters.

1885

Reports indicate the arrival in Chile of salmon and trout eggs, which are the basis of the productive process. During this period, multiple experiments are recorded in the south of Chile, with varying results.

1905

The first Atlantic salmon (*Salmo Salar*) and rainbow trout (*Oncorhynchus Mykiss*) eggs are imported.

1969

A program to introduce Pacific salmon to Chile begins to take shape. Key actors include the Japan International Cooperation Agency, the Japan Fisheries Association, the Agencia Nacional de Pesca de Chile, and Fundación Chile. The latter introduced farming technology involving rafts and cages, a method that had been yielding strong results in Norway, Scotland and other territories in Northern Europe.

1970

The industrial and commercial stage of salmon farming begins in Chile with the arrival of Japanese and Dutch companies.

1980

Salmon farming is a booming industry. Company numbers and production volumes begin to rise. An initially experimental activity is becoming an important source of economic growth, development, and employment, mainly in the southern regions of the country.

1985

Various projects in the south of Chile involving local and foreign actors make progress in salmon farming, while new knowledge and more sophisticated processes are being developed. Production increases to 1,200 tonnes during the period.

1990-2000

Chilean salmon farming begins to perfect its feeding and waste disposal techniques. These elements are the target of new procedures and upgrades, including higher levels of professional training and the adoption of international standards. In 1991, production reaches 60,000 tonnes and by early 2000 exceeds 300,000 tonnes. The end of the decade is marked by the internationalization of Chilean production around the world.

2007

The ISA virus hits, bringing major repercussions: 60% of farms cease production and jobs are affected. Despite this blow, the industry embarks on a cycle of recovery and learning, seizing the opportunity to implement new and safer practices.

2009

Chilean salmon farming begins to implement safer practices and measures to reverse the ISA crisis and permit continued production, employment, and development.

2010
to date

Chilean salmon farming has changed and become more closely regulated, enabling the industry to achieve resilience in the face of the challenging scenarios that it has faced. Among their growing strengths, companies have implemented more technology and greater innovation, relying on more sustainable processes throughout the salmon production cycle and fostering greater environmental and sustainability awareness in the long term.

FAVORABLE CONDITIONS FOR SALMON FARMING

Chile's 4,300-km coastline, host to considerable biodiversity, provides excellent conditions for aquaculture and, specifically, for salmon farming in the south of the country. These conditions have led to Chile's classification as a key player in the salmon farming industry and one of the leading producers globally.

Advantages of salmon

Salmon has various characteristics that make it a suitable candidate for consumption and sustainable production. Among its competitive advantages over other non-marine animal proteins are its smaller carbon footprint, lower freshwater requirement, and greater feed efficiency. Furthermore, there has been a marked increase in companies' use of innovation and technology to improve production processes.

Conclusions of studies and papers





A number of analyses have highlighted the suitable and indeed advantageous environmental conditions offered by the southern macro-zone of Chile for salmon farming, including:

- ▶ Optimal hydrographic conditions for salmon farming, and reversed seasons compared to other salmon-producing countries and centers of consumption.
- ▶ Salmon farming at sea takes place at appropriate depths, in ideal temperature and light conditions, and in very good quality water.
- ▶ Chile has the necessary oceanographic configuration for the development of salmon farming.

Artora, Ner et. al. (2006), "Upgrading to Compete Global Value Chains, Clusters, and SMEs in Latin America", Interamerican Development Bank y David Rockefeller Center for Latin American Studies Harvard University. (p.127).

PingSun Leunge et. al. (2007), "Species & System Selection for Sustainable Aquaculture", Ed. Wiley-Blackwell (p.416). Published in cooperation with The United States Aquaculture Society.

Vage, Ole Kristian (2005), "El desarrollo de la salmonicultura en Chile entre 1985 y 2000", Master thesis University of Bergen.

				
	SALMON	CHICKEN	PORK	LIVESTOCK
Carbon footprint (Kg COeq/edible portion)	0.6	0.88	1.3	5.92
Feed conversion ratio (Kg of food to increase the weight of the animal by 1kg)	1.2-1.5	1.7 -2	2.7 - 5	6.0 - 10
Edible portion (Edible meat to total body weight)	73%	74%	73%	57%
Water consumption (Lts/Kg of edible meat)	2,000	4,300	6,000	15,400

Source: Global Salmon Initiative, GSI.

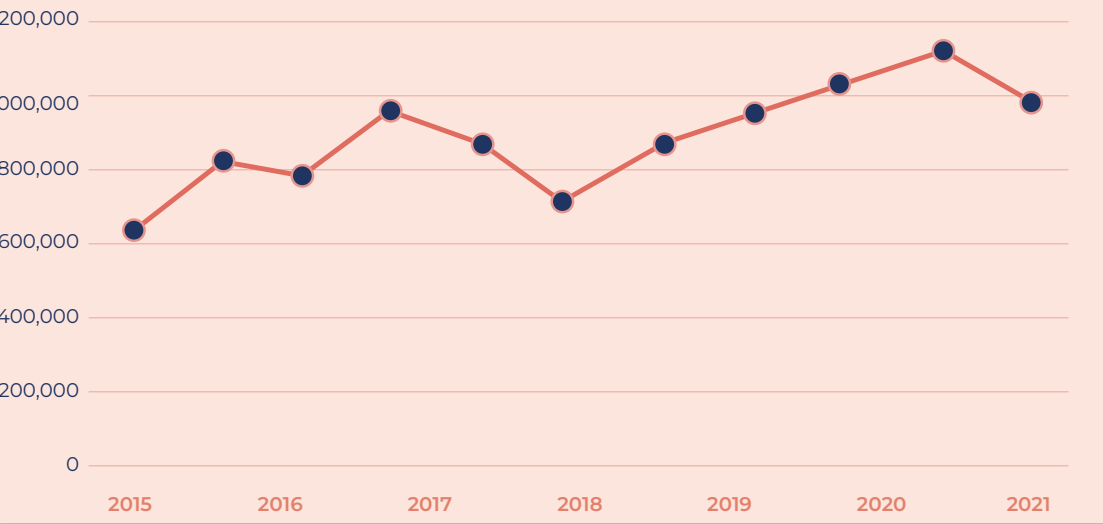
ECONOMIC GROWTH

Salmon farming is the primary aquaculture activity in Chile and is also one of the main productive drivers in the southern macro-zone, where it has generated significant economic development over the past 40 years.

Salmon production

Between 2015 and 2021, average annual salmon production rose by almost 19,000 tonnes (2.7%).

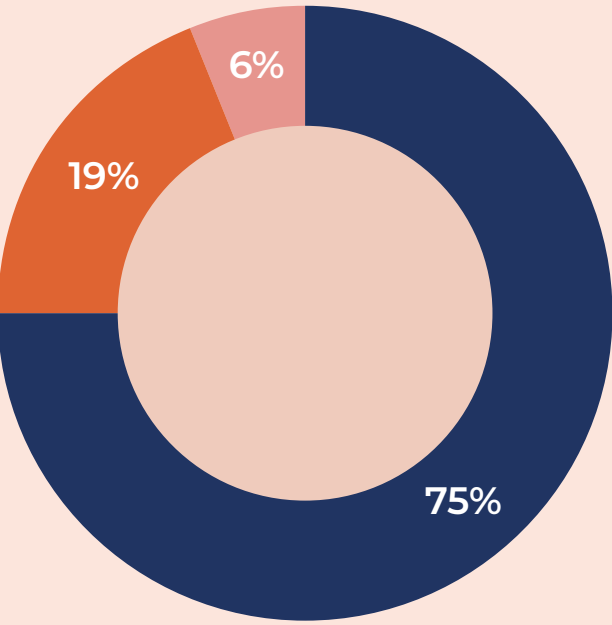
Tonnes of salmon



Source: Sernapesca

Distribution of 2021 harvest

In 2021, Atlantic salmon represented 75% of all farmed marine harvests, while coho salmon and rainbow trout accounted for 19% and 6%, respectively.



- Atlantic Salmon
- Coho Salmon
- Rainbow Trout

Source: Sernapesca

In its latest report (2022), the FAO states that aquaculture has great potential for feeding the world’s growing population.

“Global consumption of aquatic foods has increased significantly in recent years and will continue to rise. World fisheries and aquaculture production is at record level and the sector will play an increasingly important role in the supply of food and nutrition in the future.”

FROM CHILE TO THE WORLD

Although Chile is the world's second largest producer of farmed salmon after Norway, it has been losing global market share since 2015. In 2021, the country contributed 27% of global production, reaching markets on five continents and positioning salmon farming as one of the country's most significant export sectors.

In 2021, export figures once again climbed above US\$5.1 billion (FOB) following pandemic-related disruption to the industry the previous year. Total exports of salmon and trout plunged to US\$4.4 billion in 2020 (14.6% lower than in 2019) in response to COVID-19 restrictions and a drop in sales to the HORECA (hotels, restaurants, and catering) channel.

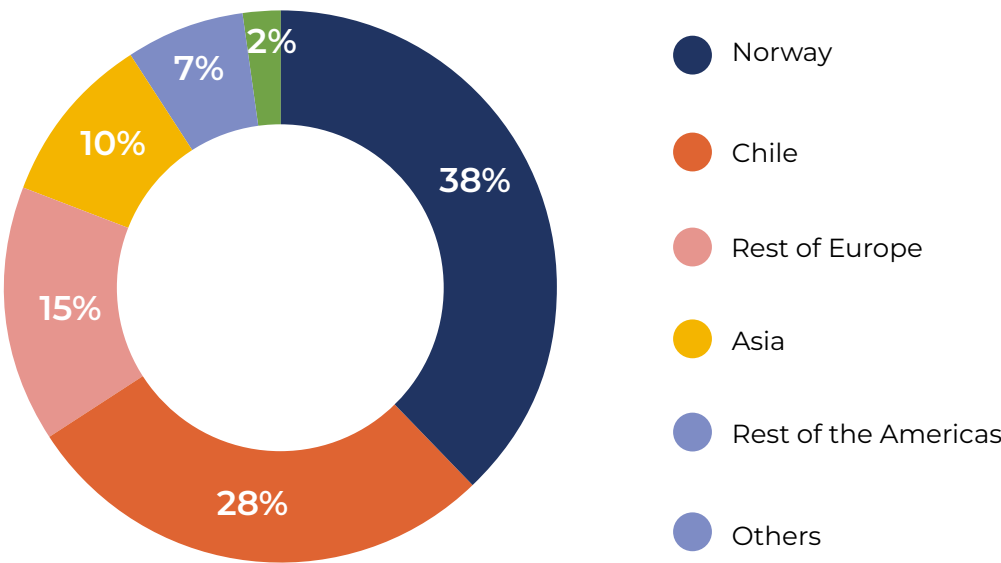
By 2021, thanks to improving shipment results, salmon accounted for 13% of total Chilean non-copper exports, almost double the 2007 figure of 7.5% prior to the ISA crisis.

Chilean exports (USD billion)



Source: Banco Central de Chile

Salmon harvest per-country (2020)



Source: Food and Agriculture Organization (FAO).



THE SALMON COUNCIL

The Salmon Council was created in 2020 between AquaChile, Cermaq, Mowi, and Salmones Aysén, which were joined in mid-2021 by Australis Seafood.

The organization’s objective is to promote the development of a sustainable production chain that champions business integrity along with labor, environmental and social best practices. It seeks not only to achieve a positive impact with its products, but also to ensure that the salmon industry contributes value to the country across all of its operations. The Salmon Council aspires, first and foremost, to benefit the places in which its member companies are located and to contribute to the formulation of regulations that, along with protecting the environment and ensuring sustainability, allow the development and evolution of this productive activity.

Member companies



CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

To ensure a positive impact on stakeholders and the environment, the Salmon Council's member companies run programs and initiatives every year that contribute to economic, social, and environmental sustainability.

For this report, initiatives implemented during 2021 were analyzed in order to assess how the salmon industry and its associates are contributing to the achievement

of the United Nations' 2030 Agenda, to which Chile has subscribed, joining other countries in addressing the most urgent challenges of sustainability. The Agenda is based on 17 Sustainable Development Goals (SDG) defined by the organization.

The analysis identified eight categories, which effectively contribute to 11 of the SDGs, as shown in the following table.

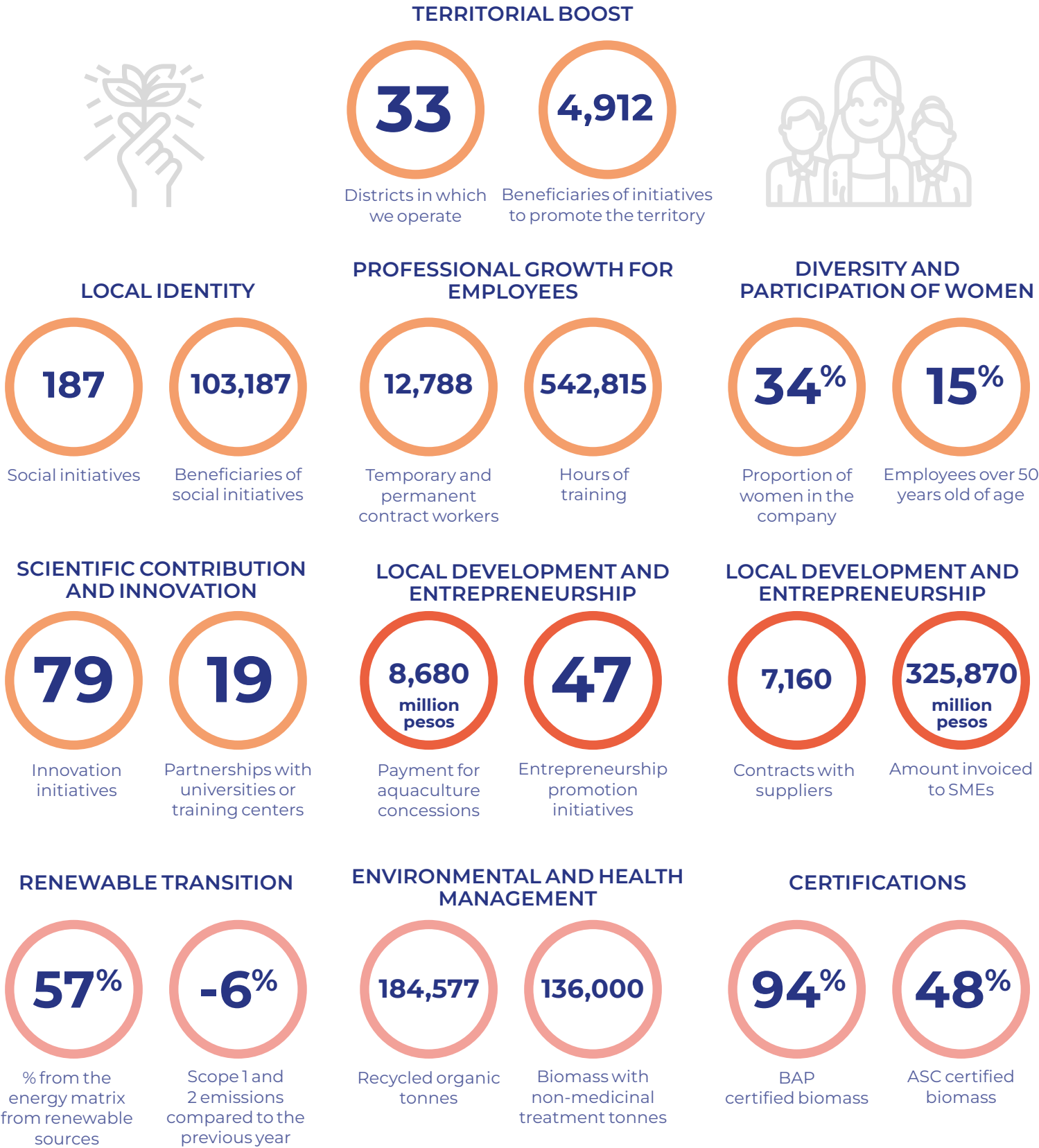
CATEGORIES OF IMPACT	CONTRIBUTION TO SUSTAINABLE DEVELOPMENT GOALS			
Territorial boost	<div><div>8 DECENT WORK AND ECONOMIC GROWTH</div><div>11 SUSTAINABLE CITIES AND COMMUNITIES</div></div>			
Local identity	<div><div>2 ZERO HUNGER</div><div>4 QUALITY EDUCATION</div><div>8 DECENT WORK AND ECONOMIC GROWTH</div></div>			
Professional growth and employment	<div><div>8 DECENT WORK AND ECONOMIC GROWTH</div></div>			
Diversity and participation of women	<div><div>5 GENDER EQUALITY</div><div>10 REDUCED INEQUALITIES</div></div>			
Scientific contribution and innovation	<div><div>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</div><div>17 PARTNERSHIPS FOR THE GOALS</div></div>			
Local development and entrepreneurship	<div><div>8 DECENT WORK AND ECONOMIC GROWTH</div></div>			
Renewable transition	<div><div>7 AFFORDABLE AND CLEAN ENERGY</div><div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div><div>13 CLIMATE ACTION</div><div>14 LIFE BELOW WATER</div></div>			
Environmental and health management	<div><div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div><div>13 CLIMATE ACTION</div><div>14 LIFE BELOW WATER</div></div>			

To learn more about the United Nations Sustainable Development Goals, visit the following link.



BENEFICIARIES AND KEY STATISTICS

Results by category of social, economic, and environmental impact derived from the actions of the five member companies in 2021.



TERRITORIAL BOOST

TERRITORIAL BOOST

The Salmon Council sees it as a priority to engage in activities that help create value and provide a boost to the territories in which its members operate. Each year, the member companies make ever greater efforts to get to know and establish relations with the various actors involved in the value chains of which they are a part.



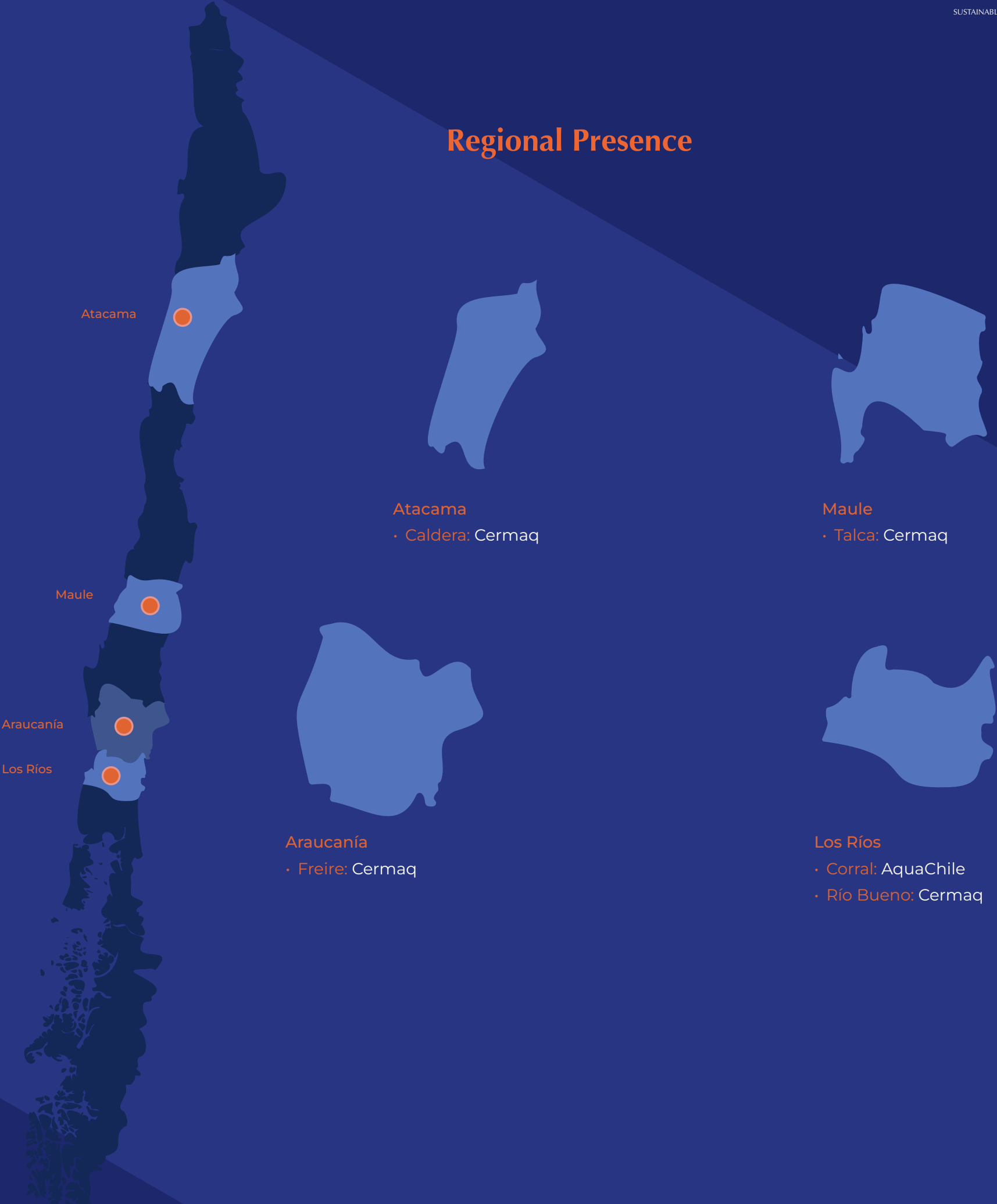
Regions where our member companies are operating



Districts with aquaculture concessions in 2021



Regional Presence





Los Lagos

- Calbuco: Salmones Aysén / AquaChile / Australis Seafood / Cermaq / Mowi
- Quemchi: Salmones Aysén / AquaChile / Cermaq / Mowi
- Puerto Montt: Salmones Aysén / AquaChile / Cermaq / Mowi
- Curaco de Vélez: Cermaq / Mowi
- Hualaihué: AquaChile / Cermaq / Mowi
- San Juan de la Costa: Salmones Aysén
- Puerto Varas: AquaChile / Cermaq
- Puerto Octay: AquaChile
- Quellón: AquaChile / Cermaq / Mowi
- Puyehue: Mowi
- Cochamó: AquaChile
- Castro: AquaChile / Cermaq / Mowi
- Dalcahue: AquaChile / Cermaq
- Chonchi: AquaChile / Cermaq / Mowi
- Puqueldón: AquaChile / Mowi
- Queilen: AquaChile / Cermaq
- Chaitén: AquaChile / Cermaq / Mowi
- Osorno: Cermaq
- Quinchao: Cermaq / Mowi
- San Pablo: Cermaq
- Llanquihue: Cermaq / Mowi
- Ancud: Cermaq / Mowi
- Purranque: Cermaq



Aysén

- Aysén: AquaChile / Cermaq / Mowi / Australis Seafood
- Cisnes: Salmones Aysén / AquaChile / Cermaq / Mowi / Australis Seafood
- Guaitecas: AquaChile / Mowi / Cermaq



Magallanes

- Natales: AquaChile / Australis Seafood / Cermaq
- Punta Arenas: Australis Seafood / Cermaq
- Río Verde: AquaChile / Australis Seafood / Cermaq

RELATIONSHIP WITH FISHERMEN AND COASTLINE USERS

	2020	2021	VAR
Number of initiatives involving coastline users	35	39	11.4%
Number of beneficiaries	1,117	4,912	340%



FIRST-PERSON IMPACT | TERRITORIAL BOOST

JUNTOS CON LA PESCA ARTESANAL

Juntos con la Pesca Artesanal is an initiative devised by Australis Seafood that sought to facilitate and deliver a maritime concession to the Walter Montiel Fishermen’s Union of Puerto Chacabuco in the Aysén Region.

Australis Seafood has maintained a relationship with the union since 2018, and when the need arose to support them in obtaining the concession, Australis was pleased to assist. The concession was granted in 2021 and impacts the many union members and their families.

Following delivery of the concession, Australis Seafood has continued its work with the union, specifically in supporting the construction of a floating dock which will help the fishermen in their day-to-day work.



“We are the first union to obtain a maritime concession in the region”

“In 2013 our union made a request for the maritime concession in Ensenada Baja, in Puerto Chacabuco, Aysén Region, but only in 2019 did they send us the observations, giving us a very short response window. We were very concerned given the importance of this concession for many families and decided to contact Australis. Fortunately, we were warmly received by the company, which decided to support us and hired consultants who guided us throughout the process and the paperwork, and the concession was delivered in February 2021. We are very happy and grateful to Australis. We are the first union to obtain a maritime concession in the region. Having our own place to leave our boats, where we can disembark, is the main benefit of the maritime concession. But in addition, an 80-meter floating dock will be built, financed by Australis Mar, and that will give us a place to receive our clients and tourists—a safe place to embark and disembark, to offer artisanal tourism. Completion of this project—which was one of our union’s dreams—will have a positive economic impact, since we will be able to engage in other activities besides extraction, promoting artisanal fishing tourism, taking tourists to explore fjords or go sport fishing, and other activities. Australis saw an opportunity to bond with us and the Aysén community, and with this support we breathed life into our union.”

Sigifredo Sánchez
President of the “Walter Montiel” Fishermen’s Union of Independent Workers

LOCAL IDENTITY

LOCAL IDENTITY

Salmon Council members work alongside the communities within their areas of influence toward the preservation of their gastronomic, social, historical, and cultural heritage. As such, they conduct initiatives that strengthen education, promote the consumption of salmon, and highlight the importance of native peoples.



Social initiatives



Beneficiaries of social initiatives



Social initiatives compared to the previous year

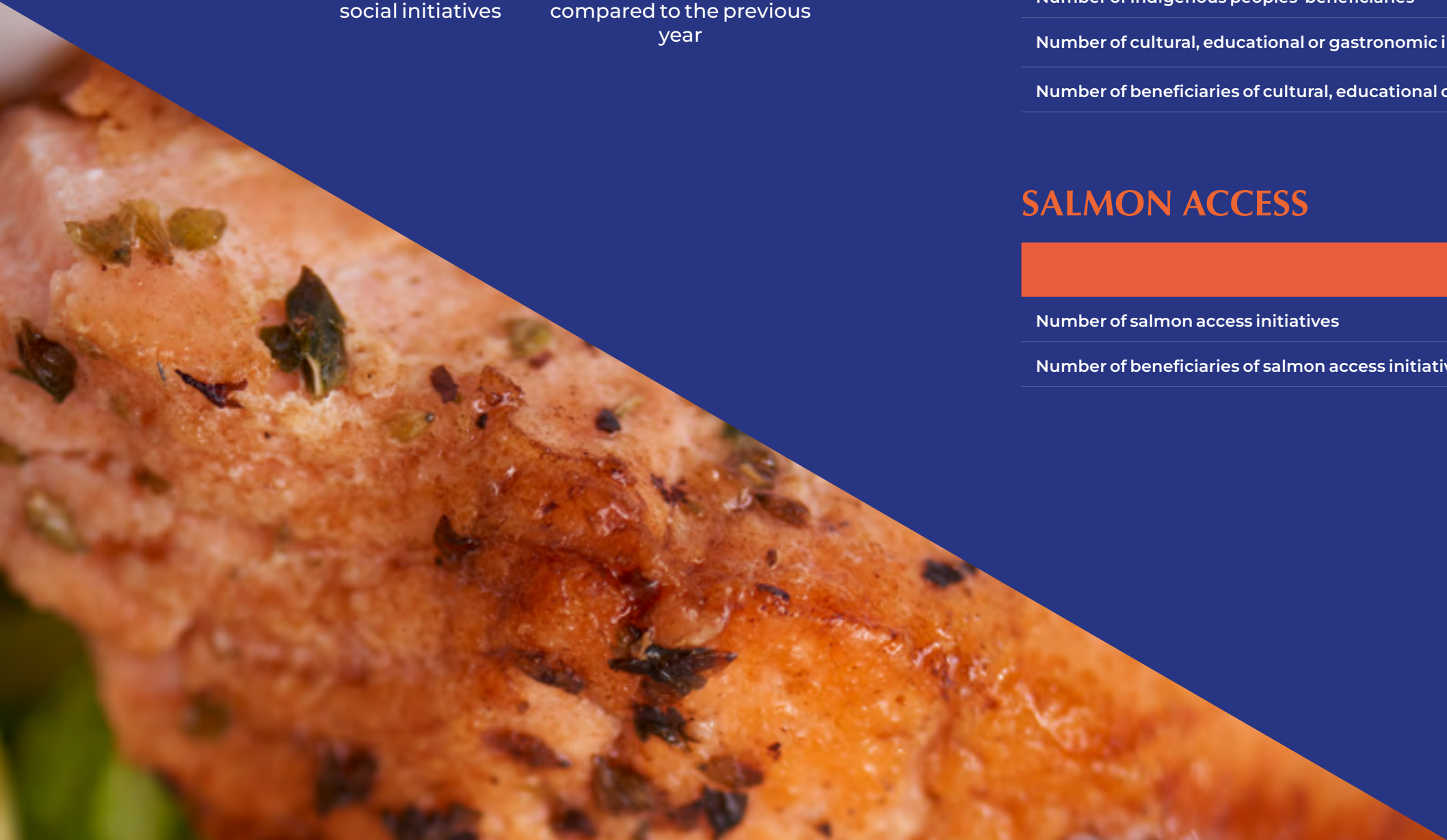
CONTRIBUTION TO IDENTITY, GASTRONOMIC, AND CULTURAL HERITAGE

	2020	2021	VAR
Number of initiatives with Indigenous peoples	39	56	44%
Number of Indigenous peoples' beneficiaries	5,724	9,028	58%
Number of cultural, educational or gastronomic initiatives	68	112	65%
Number of beneficiaries of cultural, educational or gastronomic initiatives	9,519	50,759	433%

SALMON ACCESS

	2020	2021	VAR
Number of salmon access initiatives	8	19	137%
Number of beneficiaries of salmon access initiatives	114,699	43,396	-62%*

*During 2021, one of the member companies' agreements with Junaeb was terminated.





FIRST-PERSON IMPACT | LOCAL IDENTITY
TURISMO SALMONERO

Turismo Salmonero is an initiative run by Mowi in the Aysén region. Its purpose is to create awareness of the salmon farming process among local people, social leaders, and the authorities. The program combines the area's two primary economic activities: salmon farming and tourism. The former is seen as a potential attraction that could become a destination in itself for the thousands of travelers who visit the Aysén Region in summer. In addition, tourism has come to represent an unmissable opportunity to publicize the activity that has been the engine of development in the southern macro-zone.

Although the project was implemented in January 2022 in time for the summer months in the town of Puerto Chacabuco, work began on its design early in 2021. In the program's first season it has succeeded in teaching more than 80 people about the salmon production cycle.



Visits to the facilities of local communities in 2021



Beneficiaries



“The experience changed the impression that Turismo Salmonero participants have of salmon farming”

“I worked as a guide and tour operator as part of a historic citizen outreach initiative called Mowi Salmon Tourism. I was invited to become involved primarily because of my knowledge of the Aysén Fjord, and it was a great experience for me to be part of a project through which salmon farming has truly partnered with tourism in the southern macro-zone of Chile.
We sailed 26 miles to the Mowi PFA plant, where I provided the tourists with information about the characteristics of the area and its stories. They then learned about the plant and its operation, and the professional staff who work at the facilities joined in the conversation. We also toured the Puerto Chacabuco processing plant, where visitors were shown the final part of the salmon production process and invited to sample a variety of produce. My role during the tour also consisted of encouraging questions about the production process and the fjord itself in order to create a more interactive tour, and we gave small awards to those tourists who were responsive. The experience changed the impression that Salmon Tour participants have of salmon farming, including the authorities, neighborhood leaders, and local people. Everyone was grateful to see with their own eyes how the salmon industry operates in Aysén. I am excited to have participated in Salmon Tourism; it was a historic initiative and I am hugely grateful for the opportunity that Mowi gave me. Although the process required a lot of learning, I grew as a tour operator and was able to expand my knowledge and employment opportunities.”

Peter Flores
Tour operator and guide, salmon tourism for citizens



FIRST-PERSON IMPACT | LOCAL IDENTITY

COMPROMISO MAGALLANES

On March 24, 2021, AquaChile signed the *Compromiso Magallanes* with the community of Magallanes, which seeks to strengthen the company's ongoing relationship with the region.

The agreement was signed by Sady Delgado, general manager of AquaChile, in the presence of local figures in the city of Puerto Natales. These included Lucia Uribe Caro and Luisa Caro Pérez, representatives of the Kawésqar K'skial Community; Amil Caro and Cinthya Montiel, representatives of the Kawésqar Juana Pérez Community; María Francisca Dubo and Kely Valencia, representatives of the Kawésqar Community Residents of Puerto Natales; and Gabriela Tonko and Juan Carlos Tonko, representatives of the Kawésqar Community Residents of Puerto Edén.

The agreement seeks to promote operations that are sustainable and respectful of the environment and that make a valuable contribution to regional development and communities. Specific objectives include the creation of at least 600 direct, high-quality jobs, and for over 95% of these to be filled by residents of the region; the creation of 200 indirect jobs with service companies and suppliers, with preference given to inhabitants of the region; and prioritization in purchasing and service contracting from suppliers based in Magallanes. Regarding access to salmon, the agreement states that the Kawésqar Magallanes communities will have preferential access to AquaChile's products, while their entrepreneurs will have privileged access to salmon as a raw material.



“Salmon farming is an important source of employment for the people of Natales and contributes to the preservation of our ancestral culture”

“I have always lived in Puerto Natales and the first contact we had with salmon farming was through the company that became AquaChile—they were the first to invite us to learn about the process. From then on, we began to establish links with the industry as a whole, which endure to this day. Part of the K'skial community—to which I belong—works in partnership with the industry and we maintain a signed agreement with aquaculture companies that we value highly. The K'skial community maintains continuous dialogue with Aquachile and we have developed various initiatives, including cultural activities, which contribute to greater appreciation of our culture. We also benefit from the preferential price of salmon, since it allows us to access the product for family consumption and improves overall accessibility. In addition, the scholarships available encourage children to earn good grades and continue on to higher education. We must acknowledge the fact that salmon farming is a source of employment for many members of indigenous communities and service providers. In fact, I am a supplier to the industry, and thanks to this, our SME alone provides employment for more than 50 families. Salmon farming is extremely important for the region and we will be there checking that the industry is doing things correctly, is responsible, and is able to take care of the territory as a whole.”

Lucía Uribe
President of the Kawésqar K'skial community
Natales industry service provider



FIRST-PERSON IMPACT | LOCAL IDENTITY
PUNTO DE VENTA VECINO

Punto de Venta Vecino is an initiative run by AquaChile. It has been in operation since 2014 and provides access to salmon at a preferential price to residents and workers in the district of Curarrehue.

The salmon is sold by a *lof* of the Mapuche communities of Catripulli, and profits are reinvested in local development initiatives within the six communities that make up the *lof*.

The project's operations are based in the town of Catripulli, but its impact spans the entire community, since all inhabitants of the Curarrehue district pay the preferential price. As such, the initiative covers an area home to around 7,000 inhabitants.

Today, AquaChile's salmon is a regular part of the diet of the district's inhabitants and thanks to the income generated from sales, the communities have together acquired a site on which to establish a Mapuche tourism project.



Beneficiaries



“The outlet has meant that salmon is more affordable for the district’s inhabitants, encouraging new eating habits, especially among vulnerable families and the elderly”

“The Salmon Punto de Venta Vecino has been a very good initiative for us, helping us to incorporate salmon into the diet of residents and communities in the Curarrehue district. The project was launched in 2018 between AquaChile and the Lof Cuenca Cabedaña. A commercial partnership was created so that the six communities that make up the Lof could jointly manage the business and generate economic resources for investment in social projects within those same communities.

In general terms, the Lof buys the product from AquaChile at a reduced price, which in turn means that the communities can sell it to their residents at a preferential price. This has meant that salmon is more affordable for the district’s inhabitants, thus encouraging new eating habits, especially among vulnerable families and the elderly, whose diets included little fish prior to the initiative.

We have built all of this thanks to our permanent and ongoing relationship with AquaChile. This relationship takes the form of meetings to promote projects in the areas of infrastructure, environment, culture, equipment, training, inclusivity, and social action, all of which is aimed at improving the quality of life of communities in the area.”

Jorge Del Río
President of Huiñoico indigenous community
Director of the Cuenca Cabedaña Lof Association
Secretary of the Lof Cuenca Cabedaña Trade Association

PROFESSIONAL GROWTH AND EMPLOYMENT

PROFESSIONAL GROWTH AND EMPLOYMENT

The Salmon Council's member companies are an important source of employment in areas far from large urban centers. This is because they hire people who live in the regions where their operations are located, particularly in Chile's southern macro-zone. The organization has fostered initiatives that favor local hiring and professional development with the help of courses and training, and that work to protect the health, safety, and well-being of people.



Employees in December 2021 (temporary and permanent)



Increase of minimum wage paid by member companies compared to last year



Difference between the minimum wage paid by companies and the legal minimum



Hours of employee training

DIRECT EMPLOYMENT GENERATION

Region	Permanent	Temporary	% of workers who live in the district where they work
Los Lagos	5,366	3,202	97%
Aysén	992	34	70%
Magallanes	1,408	261	79%
Other regions	1,386	139	N/A
Total	9,152	3,636	N/A

STABILITY AND INTERNAL MOBILITY

	2020	2021	VAR
Annual turnover rate %	11.40%	5%	-56.1%

SALARY

	2020	2021	VAR
Ratio vs. legal minimum	1.3	1.45	12%

TRAINING

	2020	2021	VAR
Trained workers	7,788	10,459	34%
Yearly training hours	376,428	542,815	44%
Number of workers who have completed studies supported by corporate benefits	192	162	-16%

OCCUPATIONAL SAFETY

	2020	2021
Number of internal and external deaths within the company's facilities	2	3
Lost time injury rate	11.80%	9.2%
Serious accident rate*	N/A	133

*This indicator was not calculated in 2020.



FIRST-PERSON IMPACT | PROFESSIONAL GROWTH AND EMPLOYMENT
MOBILITY AND TRANSFER

Intercambio y Crecimiento Profesional is a Mowi program that promotes the development and transfer of knowledge between the company’s various teams of people through the acquisition of new work and social and personal experiences provided by the internal exchange of professionals between the company’s business units around the world.

The initiative has been in operation since the company was established in Chile in the mid-1980s. Chilean workers can opt to undertake an exchange to countries such as Canada, Scotland, Ireland, the Faroe Islands, and Norway.

On average, two or three members of Mowi’s Chilean team travel to a business unit abroad each year.



Members of Mowi’s Chilean team
travel to a business unit abroad
each year.



“Each of these trips has given me new tools; I have discovered different cultures, I have created networks that facilitate work, and they have without a doubt been steppingstones for my professional development within the company”

“I have been working at Mowi for 22 years and the company has provided me with a professional growth path. I have shared this path with several colleagues who have also grown professionally in the long term thanks to the tools and opportunities made available to us. I arrived with very basic English, which I began to improve on my own, and the company then helped me to develop it further. I had always thought about exploring new business units, and Mowi gave me the opportunity through the Mobility and Transfer Program. In 2018 I went to Norway on a 3-month exchange, where I worked at a local fish farm. Later, I traveled to Canada. These experiences have enriched me greatly. During the six months since the end of June I have been at Mowi Canada East with my family, again in order to transfer our experience and bring knowledge to Chile from abroad. Each of these trips has given me new tools; I have discovered different cultures, I have created networks that facilitate work, and they have without a doubt been steppingstones for my professional development within the company. It gives me great satisfaction to be part of Mowi. I feel that it is my home, my second family. I feel loved and supported. I think that Mowi has something for each of us, especially those who have persevered, and that is reflected in people’s long careers at the company.”

Martín Rivera
Technical Coordinator at Mowi



FIRST-PERSON IMPACT | PROFESSIONAL GROWTH AND EMPLOYMENT
MARINE AND FRESH WATER DIPLOMA

This *Desarrollo de Carrera* training program for Marine and Fresh Water employees at Cermaq Chile is designed to build professional value within the team and the company as a whole.

The program is aimed at technical personnel and center managers, and is intended to standardize knowledge and skills through the promotion of development opportunities within the company. Staff have the opportunity to complete a diploma at a prestigious Chilean university according to their existing area of knowledge. Thus, in addition to generating significant added value, Cermaq enables its employees to apply for new vacancies within the same company once the training plan has been completed.

The initiative was launched in 2021 and today there are more than 180 employees from farms and fish farms enrolled on the diploma course.



Marine and Fresh Water
Diploma participants



“I am proud to be a salmon farmer; it’s where I want to be”

“Salmon farming has entered a phase of maturity: along with efforts to achieve sustainable production, it has put a focus on people, and this has involved more training for its employees. I see it as very positive that a company like Cermaq should take the decision to support the professional trajectory of its employees. I personally have completed various courses and certifications, but in the last two years the options have grown enormously and increased in scope. A good example is the Aquaculture Management Diploma at the Universidad Austral, which has been taken by more than 170 people from the company. There can be no doubt that the company and its managers have given me the tools I needed to grow and get where I am today. I have been in the industry for over 20 years and spent 10 as a fish farm manager at Cermaq. I have worked in different areas and I am very happy with my professional growth. In addition, I would like to highlight Cermaq’s efforts to create spaces for employees to undertake remedial studies and achieve their elementary and high school qualifications—I constantly see the enthusiasm with which staff take advantage of this opportunity, and that makes me very proud. I am also proud of the social role that salmon farming has taken on with its communities, forming a long-term bond and looking to the future in order to benefit everyone. I am proud to be a salmon farmer; it’s where I want to be.”.

César Juárez
Cermaq Fish Farm Manager



FIRST-PERSON IMPACT | PROFESSIONAL GROWTH AND EMPLOYMENT CONTINUITY OF STUDIES PROGRAM

Helping young people and adults to complete their elementary and high school qualifications and boost their employability is the primary objective of the “Together, Strengthening your Dreams” program, run by Salmones Aysén in support of its workers.

The initiative was launched in 2017 within the company’s Organizational Development sector and began with three students. In the years since then, the program has yielded consistently positive results in terms of personal and professional growth.

In 2018 and 2019, face-to-face classes took place at various of the organization’s marine and freshwater fish farms, led by a teacher who guided the learning process and organized examinations on the dates specified by the Ministry of Education.

In 2020 and 2021, in the midst of the pandemic, classes were held online, and in 2022 tablets were provided to each student in order to improve study efficiency and help them to complete the program. Between 2017 and 2021, 103 employees signed up to the program and 80 of them achieved their goal, which makes the company extremely proud.

In 2022, 23 employees are registered and eager to complete their studies with the help of the program.

SALMONES AYSÉN

80

Employees who have
completed the program
between 2017 y 2021



“This achievement has given me confidence and made me eager to continue growing. I want to thank the company for giving me and other people the opportunity to complete our studies”

“I always wanted to finish my studies, but before this opportunity was made available by Salmones Aysén, I saw it as an issue because it clashed with my working hours. When I heard about the company’s remedial studies program I became interested, but I was afraid that I would not have enough time to do it. However, the company allowed me to take online classes, and that saved me both time and money that I would otherwise have spent traveling.

I struggled to get back into the school routine at first, but I persevered. I nearly gave up at one point because of internet connection problems, but Salmones Aysén always supported me in completing my final two years of high school. It was a demanding process, but now I’m happy—I tried very hard. I was nervous during the final exam: we were given three chances to pass, and after the first round the teacher told me that I had done it. I was very pleased, as were my two children and partner. They were confident that I was going to complete my studies. In fact, my family and friends were impressed by my effort to overcome the challenge.

This achievement has given me confidence and made me eager to continue growing. I want to thank the company and my boss for giving me and other people the opportunity to complete our studies. I hope that the opportunity to continue studying is made available to many others, because age isn’t a barrier. If you want to, you can do it.”

Gloria Silva
Worker at Salmones Aysén

DIVERSITY AND PARTICIPATION OF WOMEN

DIVERSITY AND PARTICIPATION OF WOMEN

Commitment to diversity and inclusivity is important to salmon farming. Participation of women has been a tradition in the industry and has grown in recent decades. Over time, Salmon Council member companies have expanded their action on the issue with the help of knowledge and support provided by public and private policies, ensuring that their employees feel recognized and supported regardless of their gender and diversity and generating a working environment of integrity and respect.



of employees are women



of leadership roles are held by women

	2020	2021
Percentage of women who work at member companies	35.70%	34%

	2021
Percentage of women in leadership roles	20%
Percentage of women as members of the board	19%

	2021
Percentage of employees over 50 years of age	15.2%
Percentage of employees over 30 years of age and under 50 years of age	60.5%
Percentage of employees under 30 years of age	24.3%
Percentage of foreign employees	12%

	2020	2021
Percentage of employees with reduced mobility	0.90%	0.4%





FIRST-PERSON IMPACT | DIVERSITY AND PARTICIPATION OF WOMEN
FEMALE LEADERSHIP IN THE SALMON INDUSTRY

Mowi promotes the employment of women within the framework of action to enhance the professional development of all of the company's people. The company is keen for positions to be filled by people with the relevant skills and level of interest, regardless of their gender.

As such, Mowi operates recruitment and promotion processes for people with a proactive mentality, and this drives the job growth of applicants based not on their gender, but on their capacities, interests, abilities, previous experience, academic qualifications, and motivations.

This approach, which is applied at all of Mowi's centers of operation, has driven an increase in the proportion of women in positions that have traditionally been held by men. At the end of 2021, Mowi's female workforce stood at 27%.



Female personnel at Mowi



“The transformation must always originate from us; I am a woman, I am a leader—the change starts with me”

“I feel really proud of what I have achieved. It has not been an easy road. When you are a professional woman at sea, in this area, people often have a hard time believing in your skills and professionalism. I probably get questioned 10 times more often than a male colleague in my position in Chilean society. That happens a lot, but Mowi has created the conditions to prevent it. Rather incredibly, it is common for us to work with women at Mowi. Besides the two women in charge of seawater centers today, there are many others who work as center assistants and qualified technicians. Salmon farming generates a lot of employment in the southern regions of Chile and women are part of that. In fact, the processing plants have a significant female workforce. We now have the challenge of increasing the number of women in positions of greater responsibility, but I think I am a good example of how Mowi creates the conditions for women to develop professionally. I love my work and I see myself having a long career at the company. In order to achieve this growth, two important factors are support within the working environment and the sharing of domestic roles at home. My husband and I share responsibilities. For example, when our children were born, I gave him my parental leave, and he is their registered guardian at school. Sometimes people question the fact that the father goes to school meetings or presentations but not the mother, but my children have their father to accompany them, and he fulfills the same role as me as a mother. This is what we need to encourage. We women must promote change; we will continue to have multiple roles, but we must share them. The transformation must always originate from us; I am a woman, I am a leader—the change starts with me.”

María Soledad Sepúlveda
Manager at Puelo MOWI Fish Farm



FIRST-PERSON IMPACT | DIVERSITY AND PARTICIPATION OF WOMEN
TOGETHER + DIVERSITY

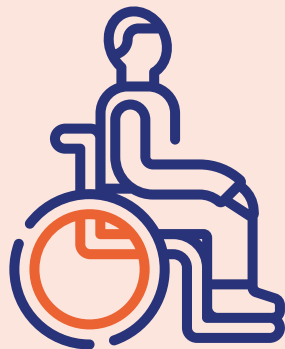
Australis Seafood's "Together + Diversity" initiative seeks to boost gender diversity and inclusion of people with disabilities, working closely with the Diversity Committee to promote these values across the company and across the country from Biobío to Magallanes.

It is part of a larger project that dates back to 2019, when Australis Seafood joined the Ministry of Women's Gender Parity Initiative, which works to promote equality for women. In 2020 the company formed the Diversity Committee and signed a commitment to standard 3262.

During 2021 "Together + Diversity" oversaw the training of 18 people in sign language communication techniques, and 13 people in inclusive care with a focus on raising awareness about labor inclusivity. New benefits were implemented for all male and female workers, giving them fully-paid postnatal parental leave (regardless of the limits established by law) over an extended period of 10 days. In addition, a survey of seawater centers with available accommodation was carried out to promote the hiring of women.



Beneficiaries



“I am very proud of our progress on inclusion and diversity”

“My involvement in the diversity and inclusivity course that ran at Australis in 2021 was a great experience. It was very enriching; we all shared our experiences on the subject and, as a company, promoted the need for empathy in order to integrate employees with a disability, whatever it may be. With the help of very specific examples, we were able to appreciate that adaptation to people with disabilities implies putting in place the support necessary in order for them to perform to the best of their ability, and requires detailed knowledge of the regulations that exist in our country in order to address the challenges that arise. I am very proud of how far we have come in terms of inclusivity and diversity. In the past, many issues were taboo or the target of prejudice, but today we must be more open to listening to and understanding people, to putting ourselves in the other’s shoes. For Australis, diversity and inclusivity is a value that we workers live by.”

María Soledad García
Australis Seafood Administration Manager

SCIENTIFIC CONTRIBUTION AND INNOVATION

SCIENTIFIC CONTRIBUTION AND INNOVATION

Innovation and the contribution made by science are the basis of all productive activity. Salmon Council member companies promote the formation of partnerships with study centers and run a variety of research projects that enable them to improve their practices and progress towards more sustainable and environmentally friendly processes.



No. of innovative and scientific initiatives in 2021



Initiatives developed with academic institutions

SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT*

	2021
Innovative and scientific initiatives total	5
Internal innovative and or scientific initiatives	76

*This indicator summarizes the affiliated companies' initiatives that generate development or internal/external well-being.

COLLABORATION WITH ACADEMIA

	2020	2021
University or training center partnerships per year	24	19
Professional apprenticeship given per year	105	183
Research projects	2	2





FIRST-PERSON IMPACT | SCIENTIFIC CONTRIBUTION AND INNOVATION UTILIZATION OF NUTRIENTS ACROSS SPECIES

This initiative, part of Cermaq Chile's sustainability strategy, was launched in 2021 in partnership with the Universidad Austral and Incar. Their aim is to investigate the relationship between mussels and salmon and to see whether the nutrients generated by salmonids contribute positively to mussel production. The project studies intensive farming of salmonids and mussels and explores the likely influence of spatial and temporal variation of hydrographic and environmental characteristics in the Los Lagos Region in southern Chile.

Cermaq initiated collaboration with the world of academia, making the Chidhuapiñ cultivation center in Calbuco available for researchers to conduct sampling. Each analysis requires a detailed evaluation of currents at different stages of the tide, a study of the oceanographic conditions of the water column in strategic sectors, sampling of mussels at points near and far from the salmon farms, and a sampling of food and salmon feces.



“Knowledge is vital to measuring the impacts of the various productive activities”

“Knowledge is vital to measuring the impacts of the various productive activities, and under that premise our study seeks to evaluate whether the residual nutrients present in the water column as a result of the salmon farms’ fattening process can be effectively assimilated by mussels in fattening centers that share the use of the water column. This investigative process, based in the Los Lagos region, is supported by Cermaq who, in partnership with Mowi and the Association of Mussel Farmers of Chile, are allowing the use of some of their production sites for the collection of samples and data for the analysis process.

If this transfer is taking place and mussels are indeed consuming nutrients derived from salmon fattening, this information would be pertinent to a reconsideration of the spatial distribution of salmon and mussel farming in the region.

This could be the basis of progress in the sustainability of the industry and contribute to decisions concerning coordination of the salmon and mussel production processes. The study would also provide information on the trophic pathway by which nutrient transfer would occur, as well as how this process would be influenced by the time of year and oceanographic conditions.

All human activity has an impact on the ecosystem in which it occurs, but in order to mitigate this impact we must first identify it. Knowledge is a first step towards making appropriate decisions and implementing courses of action.

This research has been made possible by the collaboration of researchers from various institutions and research areas. Dr. Carlos Molinet (UACH-INCAR), Dr. Doris Soto (INCAR), Naval Engineer Manuel Díaz (UACH), Dr. Patricio Díaz (i-mar, U. Lagos), Dr. Chris Harrod (U. Antofagasta), Dr. Ana Fariás (UACH), and Dr. Iván Pérez-Santos (i-mar, U. Lagos) are members of a large group who seek to provide objective and advanced knowledge on aquaculture in order to improve sustainability.”

Stefany Camelo-Guarín

PhD © in Aquaculture Science / Universidad Austral de Chile, UACH
Centro Interdisciplinario para la Investigación Acuícola, INCAR

“We hope to construct a model that will provide data for the design of salmon and mussel farms”

“Based on this research, which addresses many variables, we hope to construct a model that will provide data to support the improved design and spatial distribution of salmon and mussel farms. This should facilitate the circulation and better use of nutrients, minimizing impacts on ecosystems as much as possible.

In the Chilean salmon farming industry we see receptiveness, interest, and willingness to collaborate in the development of this research. For more than 25 years we have been carrying out studies in relation to this productive sector and it has been important to safeguard the impartiality of the research in order to generate relevant knowledge and transparency and thus progress towards sustainability in aquaculture.”

Dr.. Doris Soto

Main researcher

Centro Interdisciplinario para la Investigación Acuícola, INCAR



LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

LOCAL DEVELOPMENT
AND
ENTREPRENEURSHIP

LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

Provision by Salmon Council member companies of support and development tools to suppliers and entrepreneurs enables hundreds of people to transform their dreams into concrete ideas and projects. Furthermore, through the payment of taxes and licenses, they contribute to the growth of communities in the areas surrounding their operations.

TAXES AND LICENSES

	2020	2021
Money paid annually for licenses (aquaculture included) (million pesos) *	10,100	12,247
Money paid annually in tax (million pesos)	10,540	13,227

*Refers to the amount paid in municipal licenses and permits associated with maritime concessions, water rights, real estate, etc., exclusive of tax payments. It also includes aquaculture licenses.

CONCESSIONS AND AQUACULTURE LICENSES*

	2021
Money paid in aquaculture concession licenses (million pesos)	8,680

* Article 84 of the General Law on Fisheries and Aquaculture (18,892). For more information [click here](#)

SUPPLIERS


	2021
SMEs suppliers	2,564
Non-SMEs suppliers	983
Suppliers	3,547

CONTRACTS WITH SUPPLIERS

	2020	2021
Number of contracts	7,486	7,160

ENTREPRENEURSHIP

	2020	2021
Number of initiatives to boost entrepreneurship	27	47
Number of beneficiaries from initiatives to boost entrepreneurship	946	1,091
Average payment time to SMEs	35 days	37 days



LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

Socioeconomic contribution of Los Lagos Region

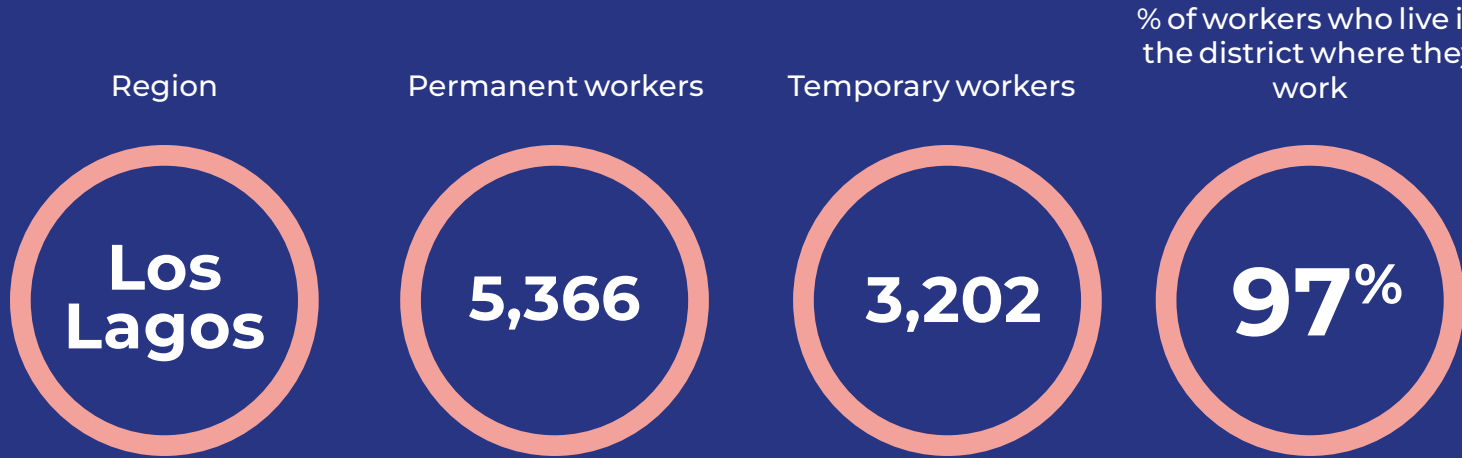
AQUACULTURE LICENSES
(Million of Chilean pesos)



SUPPLIERS

	2021
Number of SMEs suppliers	1,195
Amount invoiced to SMEs suppliers (million pesos)	206,612
Number of non-SMEs suppliers	218
Amount invoiced to non-SMEs suppliers (million pesos)	838,006
Number of contracts with suppliers	2,924

LOCAL EMPLOYMENT



OUTSOURCING

	2021
Number of employees of service companies in the region*	5,965

* Service companies operating in member companies' facilities.

LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

Socioeconomic contribution of Aysén Region

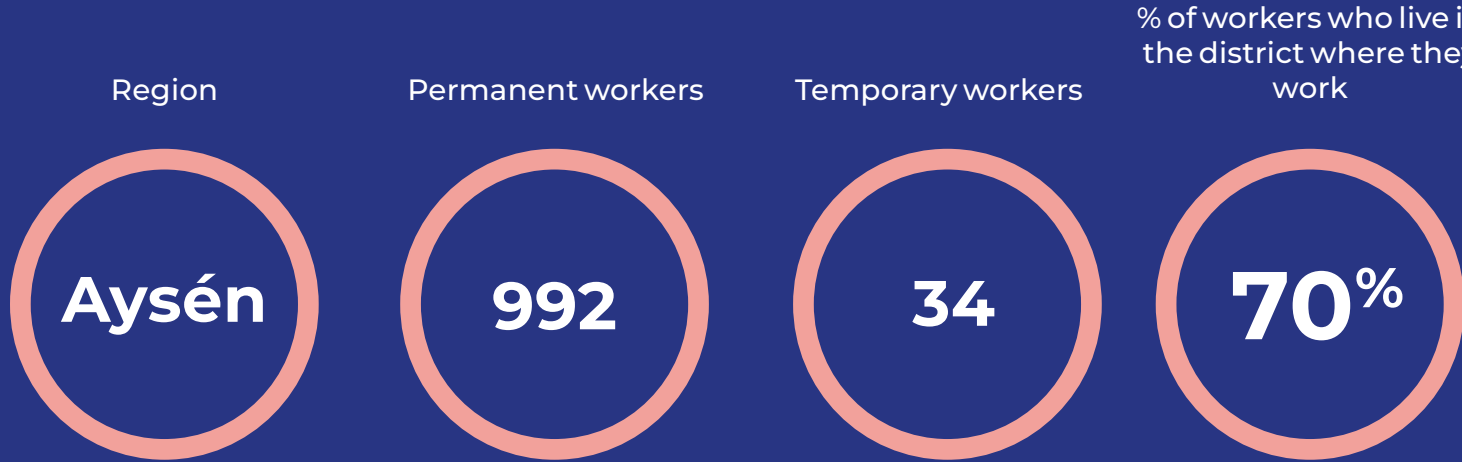
AQUACULTURE LICENSES
(Million of Chilean pesos)



SUPPLIERS

	2021
Number of SMEs suppliers	184
Amount invoiced to SMEs suppliers (million pesos)	30,442
Number of non-SMEs suppliers	10
Amount invoiced to non-SMEs suppliers (million pesos)	9,442
Number of contracts with suppliers	384

LOCAL EMPLOYMENT



OUTSOURCING

	2021
Number of employees of service companies in the region*	3,586

* Service companies operating in member companies' facilities.

LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

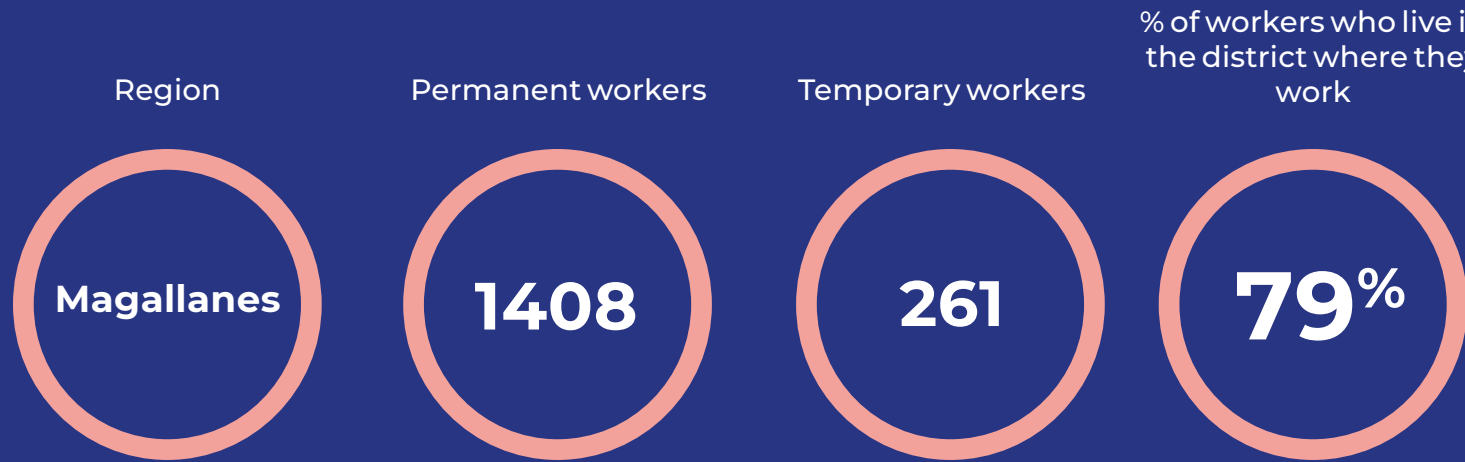
Socioeconomic contribution of Magallanes Region



SUPPLIERS

	2021
Number of SMEs suppliers	221
Amount invoiced to SMEs suppliers (million pesos)	26,593
Number of non-SMEs suppliers	40
Amount invoiced to non-SMEs suppliers (million pesos)	39,132
Number of contracts with suppliers	426

LOCAL EMPLOYMENT



OUTSOURCING

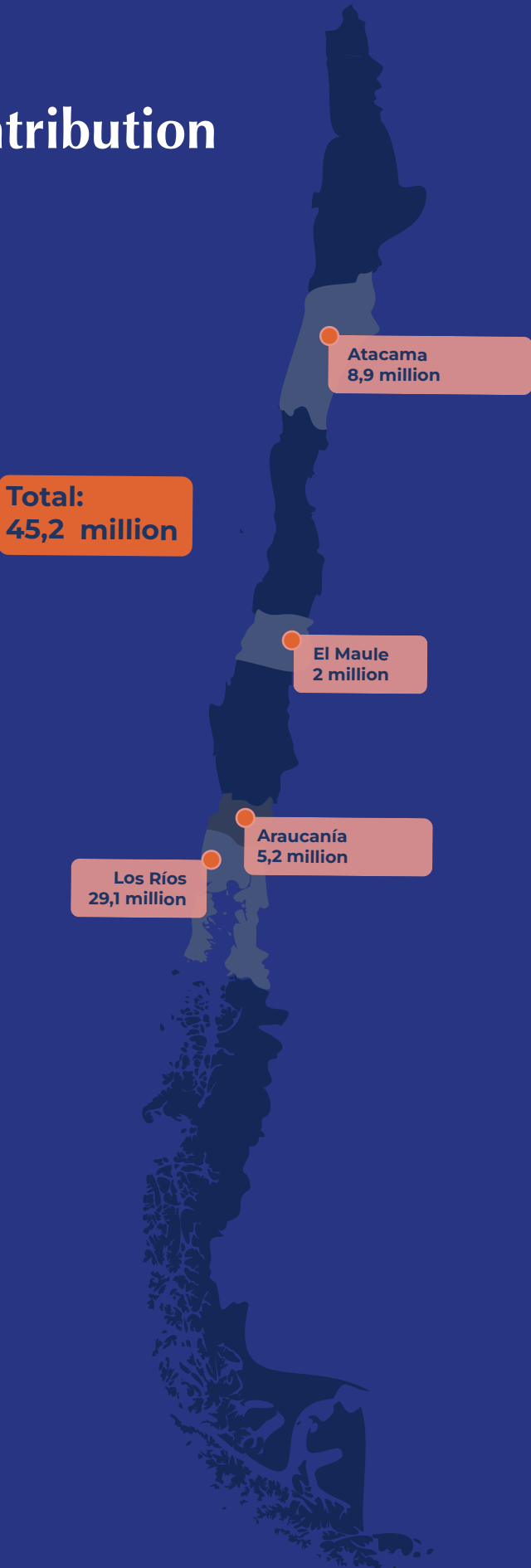
	2021
Number of employees of service companies in the region*	13,047

* Service companies operating in member companies' facilities.

LOCAL DEVELOPMENT AND ENTREPRENEURSHIP

Socioeconomic contribution in other regions

AQUACULTURE LICENSES (Million of Chilean pesos)



SUPPLIERS

	2021
Number of SMEs suppliers	964
Amount invoiced to SMEs suppliers (million pesos)	26,593
Number of non-SMEs suppliers	715
Amount invoiced to non-SMEs suppliers (million pesos)	39,132
Number of contracts with suppliers in other regions	3,426

LOCAL EMPLOYMENT



OUTSOURCING

	2021
Number of employees of service companies in the region	1,343



FIRST-PERSON IMPACT | LOCAL DEVELOPMENT AND ENTREPRENEURSHIP CITY OF CASTRO RECONSTRUCTION SUPPORT

The Salmon Council joined the public-private partnership formed at the end of 2021 for the reconstruction of houses for 49 families who had lost their homes in an accident in the Camilo Henríquez neighborhood.

On December 9, 2021, a fire tore through the Camilo Henríquez neighborhood in the city of Castro on Chiloé. Covered extensively by the media, the tragic and unexpected event hit the local and national community hard. The salmon farming companies—coordinating with the Municipality, the presidential delegation, and the Regional Government—immediately offered their support to the affected families through a variety of initiatives. Water tanker trucks were provided to supply residents and hundreds of boxes of food, blankets, and toiletries were donated. With a view to speeding the reconstruction, rubble was also quickly removed.

One week on from the fire, having assessed the consequences of the event and the needs of the families affected, the industry—represented by the Salmon Council and SalmonChile—committed to the formation of a public-private partnership. The initiative materialized in mid-January 2022 with the signing of an agreement to begin the reconstruction of 49 high-quality homes. The design included a living room and kitchen, and each house was fully furnished. Of the 49 homes, 38 were financed by the salmon farming sector, and 11 by the Los Lagos presidential delegation.

On August 30, 2022, the first 12 homes were completed and handed over to their new owners at an event marked by messages of hope and held in the area where the tragedy had occurred. Speakers highlighted the joint work of the organizations involved and the efficiency of the work, which by that point was 90% complete. The presentation ceremony was attended by the beneficiary families; representatives of local residents; the mayor of Castro, Juan Eduardo Vera; the regional governor, Patricio Vallespín; members of Desafío Levantemos Chile; and the salmon farming associations, represented by the Salmon Council and SalmonChile.



“We hope that these partnerships and the social commitment of the salmon farming industry will continue over time so that we can tackle new challenges together”

“Thanks to the contribution of salmon farming and the public sector, we have been able to move forward with this reconstruction project, which has been a dream for those families who lost everything in the mega-fire of December 2021. Today, these families have a quality house and a friendly environment.

The process has been very efficient throughout 2022 and on August 30 we began to deliver a housing solution for the families of the Camilo Henríquez and Yungay neighborhoods, witnessing the joy of those families who benefited from it.

I have no doubt that by the end of 2022 we will see 100% of the reconstruction complete. This achievement is unprecedented and the result of the public-private work that we have carried out with the fundamental support of salmon farmers, represented by the Salmon Council and SalmonChile.

We hope that these partnerships and the social commitment of the salmon farming industry will continue over time so that we can tackle new challenges together. On Chiloé we have a number of needs to address. If we are able to work as a team and apply a sustainable approach, we can promote the development of a place that is truly different—an example for Chile and the world.”

Juan Eduardo Vera
Mayor of Castro

49

Beneficiary families



RENEWABLE TRANSITION

RENEWABLE TRANSITION

As Salmon Council member companies, we have committed to nurture and protect our local environment, providing technology to mitigate the impacts associated with the environmental crisis. Through innovative projects we have managed to reduce our footprint, bringing our energy matrix up to date and making conscious use of resources as part of a clear commitment to a sustainable future.



Decrease in scope 1 emissions, compared to the previous year



Salmon Council companies that incorporated electricity from renewable sources into their matrix



Percentage of renewable sources in the energy matrix

Scope of emissions measured in the report

- **Scope 1:** Includes all direct emissions, that is, those that come from sources owned or controlled by the company.
- **Scope 2:** Includes indirect emissions associated with the energy consumed by the company.

CARBON FOOTPRINT

	2020	2021	VAR
Scope 1 emissions (tonnes CO2e)	195,917	171,364	-12.5%
Scope 2 emissions (tonnes CO2e)	65,252	73,576	12.7%

EMISSIONS INTENSITY

	2021
Intensity of scope 1 emissions (tonnes CO2e/tonnes biomass produced)	0.31 tonnes
Intensity of scope 2 emissions (tonnes CO2e/tonnes biomass produced)	0.13 tonnes

ENERGY EFFICIENCY AND RENEWABLE ENERGY

	2021
Energy efficiency (KW/tonnes biomass)	593.3
% of the electric matrix renewable sources	57%



FIRST-PERSON IMPACT | RENEWABLE TRANSITION

DIESEL TO GAS CONVERSION

Conversion of electricity generation platforms from diesel to liquefied gas by Salmones Aysén is the objective of work begun in partnership with Gasco.

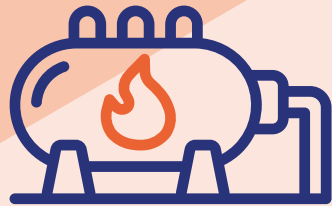
The initiative was launched in 2019 with the installation by Gasco of the first marine generation platform at the Salmones Aysén Huito farm in Los Lagos.

The program has allowed Salmones Aysén to make significant progress in more sustainable energy solutions and today platforms of this type are present at 7 seawater fish farms and 1 freshwater fish farm.

Generators driven by liquefied gas are cleaner than those that run on diesel, generating lower local pollutant emissions (e.g., particulate matter, sulfur oxides) and lower global environmental emissions, especially carbon dioxide (20%). In addition, it is a highly flexible and transportable fuel, enabling its use in very remote places and long-term storage without deterioration in quality. Importantly, due to its composition and state, there is a reduced risk of fuel spills into the sea, thus helping to avoiding long hydrocarbon residence in the water and the toxicological effects on existing biomass that diesel presents. Additionally, liquefied gas offers savings over diesel.”.



Thousand liters of diesel eliminated



SALMONES AYSÉN



“Through innovation, Chilean salmon farming is adopting more sustainable processes”

Salmones Aysén has developed a highly innovative vision to transform its processes in a sustainable, safe, and value-generating manner. In 2019 we launched the first pilot program at the Huito center in Calbuco in the Los Lagos region.

The objectives were, first, to create an energy solution to connect the farm’s central power pontoon to a platform housing 3 liquefied gas generators with a run time of 10 days, and second to replace all of the diesel with liquefied gas. Thus, we have eliminated some 15 to 18 thousand liters of diesel per month in favor of liquefied gas, which is less carbon intensive. As such, we have achieved a 20% reduction in carbon dioxide emissions compared to diesel. Furthermore, we can keep the center operating more safely and avoid the risk of diesel spills.

Huito has been operating in this way for 3 years, and we have made additional changes such as the installation of a floating solar platform.

These developments reaffirm that, through innovation, Chilean salmon farming is adopting more sustainable processes. We are very proud and eager to continue advancing. We already have 11 farms running this system, six of which are owned by Salmones Aysén, and one more is under construction.

Energy is a strategic resource and it is difficult to store it at sea, which is why we are—and want to continue to be—strategic partners with Chilean salmon farming in order to advance in the decarbonization of the salmon production process and achieve carbon emission-free operations, reducing energy consumption and maintaining stable salmon production.

Marco Wiederhold
Marine Commercial Manager
Gasco GLP S.A.

HEALTH AND ENVIRONMENTAL MANAGEMENT

HEALTH AND ENVIRONMENTAL MANAGEMENT

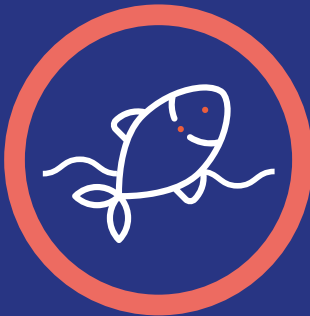
Salmon farming has a great responsibility to care for and protect the environment. The Salmon Council's member companies go beyond the requirements of the law, always striving to deliver the highest environmental standards and implementing cutting-edge technology that guarantees a healthier ecosystem.



The recycled tonnes of organic waste quintupled their value compared to the previous period



95% of the total organic waste is recycled



No fish escape events occurred

WASTE MITIGATION IMPACT

	2020	2021	VAR
Total recycled tonnes of organic waste	33,765	184,577	378%
Total recycled tonnes of non-organic waste	N/A*	96,735	

*Non-organic waste was not measured in 2020.

	2021
% of non-organic waste recycled, revalued or reused	80%
% of organic waste recycled, revalued or reused	95%

BIODIVERSITY IMPACT MITIGATION

	2020	2021	VAR
Number of annual fish escape events, indicating the main cause of the escape	1	0	-100%
Total of escaped fish	50,638	0	-100%
% of raw material of marine origin	14.65%	13.4%	-8.5%

	2021
No. of lethal accidental interactions with marine fauna	0

	2021
% of fish oil included in the fish diet	5.7%
% of fishmeal included in the fish diet	7.7%

HEALTHY SALMON AND THE ENVIRONMENT

Taking care of salmon health and protecting the environment are major priorities in aquaculture and a central pillar of industry efforts.

Farmed salmon are vulnerable to a variety of diseases, and Chile's specific oceanographic and biological conditions present a risk of high-impact bacterial pathologies such as SRS (*Septicemia Rickettsial Salmonidea*). These are addressed through preventive measures such as functional nutrition, vaccinations, constant veterinary control in the field, and the use, ultimately, of antibiotics. In other aquaculture areas of the world, such as the northern hemisphere, afflictions are mainly viral, and these are not treated with antibiotics.

The use of antibiotics is regulated by strict national and international standards. They are administered only in the presence of diseases and with a veterinary prescription indicating appropriate dosage, which is always reported to Sernapesca. Before being harvested, the salmon go through an antibiotic-free period to eliminate the latter from their tissues and are examined in the laboratory in order to guarantee this.

Salmon Council member companies are currently working on strategies to reduce the use of antimicrobials, prioritizing the abovementioned preventive measures and investment in scientific research.

ANTIBIOTICS*

	2021
Antibiotics in Atlantic salmon g API/Tonne	520
Antibiotics in coho salmon g API/Tonne	94
Antibiotics in rainbow trout g API/Tonne	37

*The SERNAPESCA calculation methodology is used.

ANTIPARASITICS

	2021
Antiparasitics in Atlantic salmon g API/Tonne	9.26
Antiparasitics in coho salmon g API/Tonne	0.0006
Antiparasitics in rainbow trout g API/Tonne	0.31

HYDROGENE PEROXIDE

	2021
Hydrogene peroxide in Atlantic salmon g API/Tonne	7
Hydrogene peroxide in coho salmon g API/Tonne	0
Hydrogene peroxide in rainbow trout g API/Tonne	0

These figures for 2021 indicate the quantity of hydrogen peroxide in Atlantic salmon in grams API per tonne. This treatment was not used in coho or rainbow salmon during the period.

NON-PHARMACOLOGICAL TREATMENTS

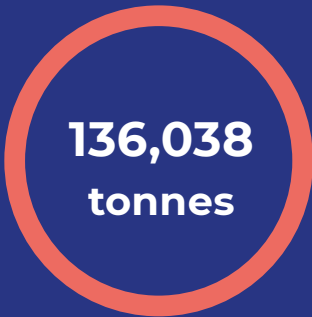
Salmon farming companies often use non-pharmacological treatments to deal with parasites in fish. One option is to bathe them with hydrogen peroxide.

This is done to protect the salmon from parasites such as *Caligus*, which primarily affects Atlantic salmon and trout. Treatments are given in accordance with guidelines from Sernapesca, which encourages the use of friendlier and non-pharmacological alternatives.

NON-MEDICINAL TREATMENTS



of Salmon Council member companies used non-medicinal treatments in salmon



from biomass treated with non-medicinal treatments

Types of non-medicinal treatment
Skirt
SFI
Lyptus Plus
Fresh water





FIRST-PERSON IMPACT | HEALTH AND ENVIRONMENTAL MANAGEMENT
ATANDO CABOS

AquaChile and *Atando Cabos* have created a circular economy designed to develop technology-based and collaborative solutions. Its objective is to convert large-scale plastic waste generated by the salmon industry into new raw materials and products to support the resolution of environmental problems and, in turn, to contribute to the company's internal goals and regulatory and sustainability challenges.

This initiative was launched in Aysén in 2021 with a pilot test in June and was extended for two months at three farming centers. Following positive results, it was expanded to the 17 AquaChile operating centers in the region, located in Puerto Aysén, Puerto Chacabuco, and Puerto Aguirre. In Puerto Aysén alone, 17,890 kilos have already been recycled.



Recycling operating centers



Recycled material in kilos (2021)



“We want to continue promoting this circular economy model and for communities to continue to see its impact, both on the environment and on local recyclers’ economic development opportunities”

“When we first approached the salmon industry to offer them what we had developed for processing the plastic waste they generated, it was not easy. It took time for them to take the plunge. However, AquaChile was one of the first companies to believe in the Atando Cabos project and in the possibility of doing it on a large scale and achieving high impact.

Atando Cabos is currently recycling more than 100 tonnes of rope per week, in addition to buoys, nets, and piping. In broad terms, we aim to process 2,500 tonnes of marine plastic waste in 2022, that is, 30% more than last year.

We want to cross borders between industries. This is what allows us transform ropes into boxes and pallets for the logistics industry and agriculture. The pipes and buoys are transformed into flooring for maintenance areas in the mining industry and for music events. Fishing nets are recycled for the textile industry, reverting to filaments to make clothes.

Willingness on eexcellent and AquaChile has been key in this expansion. We want to continue promoting this circular economy model and for communities to continue to see its impact, both on the environment and on local recyclers’ economic development opportunities. We hope to reach other industries and not only clean up the ocean, but also the land, bridging industries and using plastic as a tool.”

Michel Compagnon
Business manager at Comberplast, and cofounder of *Atando Cabos*



FIRST-PERSON IMPACT | HEALTH AND ENVIRONMENTAL MANAGEMENT

JUNTOS LIMPIAMOS NUESTRAS COSTAS

Juntos Limpiamos Nuestras Costas is a sustainability program run by the Salmon Council. It was launched in January 2021 and Salmones Aysén has been involved from the start.

The initiative involves a greater frequency of cleanups conducted on beaches near the operations of Salmon Council member companies, mainly in the fish farming centers of Los Lagos, Aysén, and Magallanes. State regulations dictate that cleaning should occur but do not specify frequency; however, a schedule of at least two beach cleanups per month has been implemented. This commitment provides more complete control of beach cleanup and prevents waste from accumulating over long periods in the areas in question.

The program also includes a commitment to contribute to the systematic monthly cleanup of “sink” beaches. These are coastlines on which waste from a variety of sources—productive, commercial, domestic—are washed up by sea currents and winds.

During 2021, monthly cleaning was carried out on beaches across the Los Lagos and Aysén regions, with Salmones Aysén in charge of Puluqui Island, located in the Reloncaví basin, Calbuco district. In this area alone, 14 tonnes of waste were removed in 2021, and between January and August 2022, more than 8 tonnes of waste were collected and disposed of.

Also in 2021, 2,812 cleanup activities took place as part of the “*Juntos Limpiamos Nuestras Costas*” program, covering sectors in the vicinity of the farming centers and the sink areas included in the initiative.

2,812

Cleaning activities during 2021

14

Tonnes of waste collected in the district of Calbuco



“Greater awareness has been raised regarding the origin of the waste, which comes not only from the salmon industry, but also from households and other sectors, such as mussel farming”

“We work hard alongside Salmones Aysén in the Calbuco archipelago, specifically on Puluqui Island, a coastline of approximately 10 kilometers in length, where we conduct constant beach cleanups. Every year we collect between 80 and 120 cubic meters of waste, including black pipes or hoses used for feeding fish, balls of all sizes, floats, and a large amount of rope. Of this, we manage to reuse or recycle between 30 and 40%. This beach cleaning initiative affords us a very close link with the communities. We have involved local residents in waste collection; we have hired local women for the work and the response has been very positive. I know all the residents of the communities and they are very happy to see that Salmones Aysén is concerned with keeping the beaches clean. Greater awareness has been raised regarding the origin of the waste, which comes not only from the salmon industry, but also from households and other sectors, such as mussel farming. So, this has allowed us to raise greater awareness of reality, which is why our company strives to maintain the ecosystem balance of the coastline without interrupting the sustainability of production on the part of the aquaculture industry. We still have a long way to go, but we believe that with greater awareness and environmental education within communities and industries we will be able to increase waste reuse. We must improve the classification of waste and promote education about the circular economy.”

Rigoberto Hernández
General manager, Skyring Minerals



CONSEJO DEL SALMÓN
CHILE

CERTIFICATIONS

CERTIFICATIONS

Certification in the salmon farming industry has become a requirement in the eyes of consumers, who want to have full knowledge of the products they eat. Salmon Council member companies have made significant progress in this area.

		FACILITY		
		Fresh water fish center	Marine fish farming	Processing plant
TYPE OF CERTIFICATION	ASC		AquaChile Salmones Aysén Australis Seafood Mowi Cermaq	AquaChile Salmones Aysén Australis Seafood Mowi Cermaq
	HACCP			AquaChile Salmones Aysén Australis Seafood Mowi Cermaq
	BAP	AquaChile Australis Seafood Mowi Cermaq	AquaChile Salmones Aysén Australis Seafood Mowi Cermaq	AquaChile Salmones Aysén Australis Seafood Mowi Cermaq
	GLOBAL G.A.P	AquaChile	AquaChile	AquaChile
	PROA SALMÓN		AquaChile Cermaq	
	HALAL			AquaChile Australis Seafood
	KOSHER			AquaChile Salmones Aysén Australis Seafood Cermaq
	ISO45001			Mowi
	IFS			AquaChile Cermaq

	2021
% of ASC certified biomass	48%
% of BAP certified biomass	94%



ABOUT THIS REPORT

ABOUT THIS REPORT AND METHODOLOGY

For the preparation of this report, the Salmon Council, with the support of Sustenta +, set up a 12-strong technical committee representing all of the member companies. The team met in March and May 2022 to define the work methodology and the indicators to report.

Within the fields of economic, social, and environmental sustainability, 10 areas of impact were identified. In order to progress towards achievement of the sustainability objectives, the number of RIS indicators reported was increased from 51 to 108 in 2021. The new indicators were incorporated with the 2021 data, thus creating a baseline against which to compare progress made during the next period.

Collection of data concerning the various areas of impact was carried out through in-depth interviews conducted with 12 key industry players. In parallel, a search was made for outstanding initiatives implemented by member companies during the period, and this yielded 13 programs that were incorporated and described.



CATEGORIES
OF IMPACT

SOCIAL

- Professional growth and employment
- Diversity and participation of women
- Scientific contribution and innovation
- Territorial boost
- Local identity

ECONOMIC

- Local development and entrepreneurship

ENVIRONMENTAL

- Renewable transition
- Health and environmental management
- Certifications

INDICATORS

40

38

30

GLOSSARY

ASC Certification (Aquaculture Stewardship Council): International standard that establishes the requirements for sustainable aquaculture production, with a focus on environmental aspects, safety, animal welfare, and social responsibility.

BAP Certification: Allows fish farms, processing plants, food factories, and aquaculture operations to guarantee to all those involved in the sector—including consumers—that their fishery products are obtained and processed in accordance with industry best practices.

Scope 1 emissions: Greenhouse gas emissions from sources owned or controlled by the company.

Scope 2 emissions: Indirect emissions associated with the electricity consumed and purchased by the company.

Fish escapes: Events where caged fish escape from fish farms and disperse into the natural environment.

Salmon access initiatives: Action taken by companies to facilitate and promote the consumption of salmon.

Scope 1 emissions intensity: Direct greenhouse gas emissions, that is, from sources owned or controlled by the company, in relation to the total tonnage produced.

Scope 2 emissions intensity: Indirect greenhouse gas emissions associated with the electricity consumed and purchased by the company, in relation to the total tonnage produced.

Sustainable Development Goals SDG (2015-2030): United Nations initiative implemented as a development agenda follow-on from the Millennium Development Goals (MDG). There are 17 goals and 169 milestones, including in new areas such as climate change, economic inequality, innovation, sustainable consumption, peace, and justice.

Hydrogen peroxide: Powerful and effective oxidizer with the advantage of being environmentally friendly, breaking down into oxygen and water. In aquaculture it is used as a dip treatment to neutralize many disease-causing organisms.

Organic waste: Naturally composed biodegradable waste that rapidly disintegrates or degrades, transforming into other organic matter.

Non-organic waste: All waste that is not of biological origin.

Severity rate: Number of injury-free days per thousand hours worked by all personnel over the period.

The calculation formula is as follows:

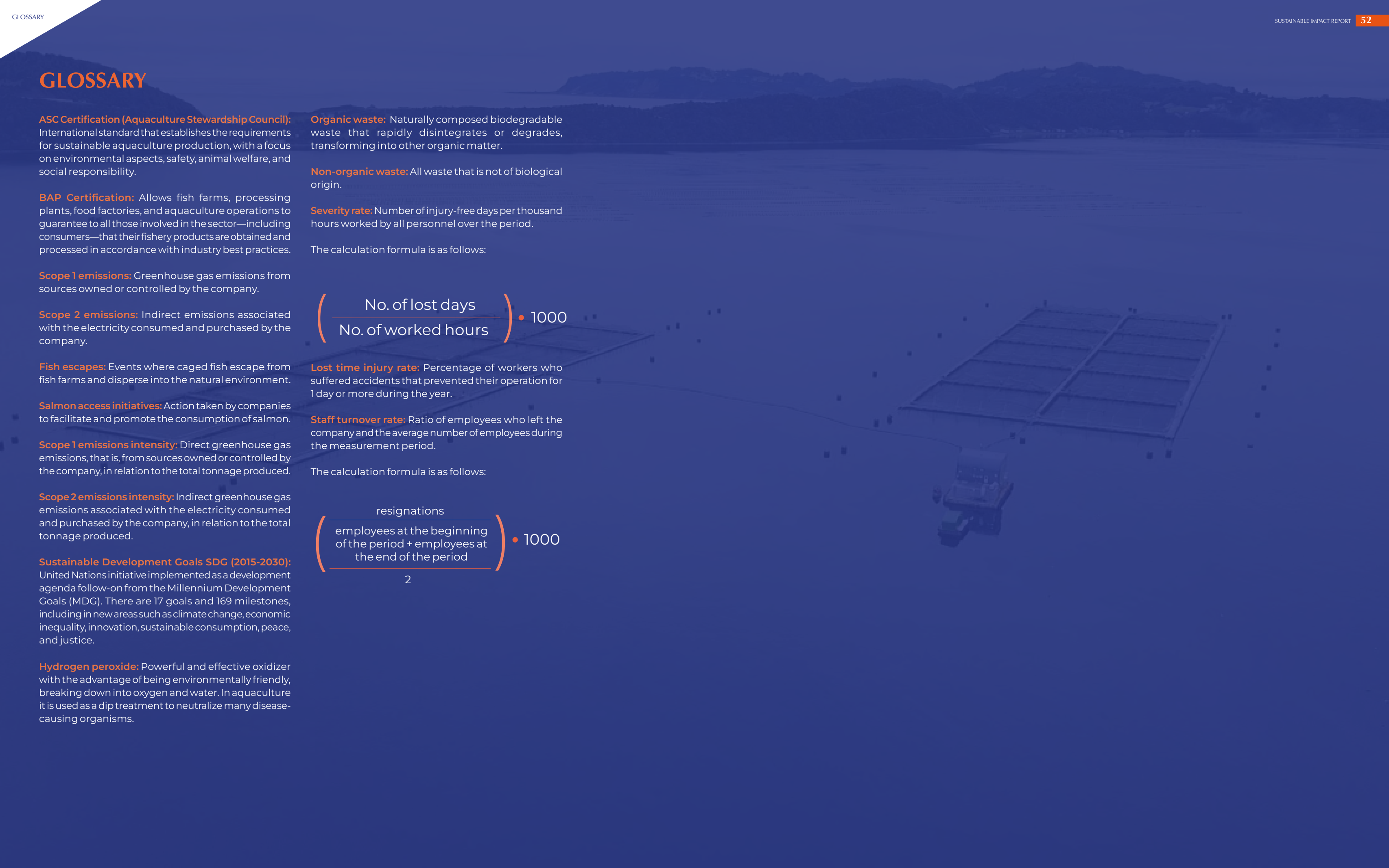
$$\left(\frac{\text{No. of lost days}}{\text{No. of worked hours}} \right) \bullet 1000$$

Lost time injury rate: Percentage of workers who suffered accidents that prevented their operation for 1 day or more during the year.

Staff turnover rate: Ratio of employees who left the company and the average number of employees during the measurement period.

The calculation formula is as follows:

$$\left(\frac{\text{resignations}}{\frac{\text{employees at the beginning of the period} + \text{employees at the end of the period}}{2}} \right) \bullet 1000$$



PREPARATION AND GENERAL DIRECTION:
The Salmon Council

CONTENT DEVELOPMENT:
Sustenta+

DESIGN:
Baobab

PHOTOGRAPHY:
Photo bank of the Salmon Council and its member companies

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CONSEJO DEL SALMÓN
CHILE