



LANDES®

SUSTAINABILITY
REPORT

2021

EXECUTIVE SUMMARY



We present to our stakeholders and the community the 3rd Sustainability Report of Landes, for 2021. Here, we summarize our economic, social, and environmental performance following the Standards of the Global Reporting Initiative, GRI, in a year marked by the consolidation into new businesses and the growth of the management structure.

ABOUT US



"On this path to a better company, we have modernized our plants in the different operations, investing in process automation and digital transformation. We have completed the expansion of our frozen jack mackerel plant in Talcahuano, which has allowed us to process 600 tons per day, in line with our strategic objective of producing high-quality food for human consumption. In Chiloé, we processed almost 40,000 tons of mussels in 2021, consolidating our leadership on the island in terms of purchasing raw materials from small local producers, which exceeds 80% of what was processed.

We want to be a paragon in environmental management, prioritizing circular economy in all our operations, and committed to actions to face climate change. We have consolidated the production of proteins destined for animal consumption, successfully managing the mass-scale mortalities of the salmon industry and its by-products sustainably, and we continue to move forward in new projects that allow us to grow in this line of business".

Andrés Fosk
CEO



ABOUT US

Landes is a company with a tradition of more than 60 years in the industrial fishing sector, that operates in central-southern Chile. In the Isla Rocuant sector, in Talcahuano, Biobío region, it has 4 production plants, intended for the manufacture of frozen jack mackerel, giant squid, and other fish, the production of fish meal, fish oil, and peptones (hydrolysates for animal feed) from salmon by-products and silage.

Since 2018, Landes has been growing and processing mussels at its plant in Dalcahue, Chiloé. Landes Mussels has become a leader on the island and the main buyer of raw materials: more than 80% of what it processes is purchased from small local producers, contributing to the regional economy.

The company has been recognized throughout its history for its environmental practices, its closeness to workers, its community

involvement, and its social responsibility. It currently generates more than 500 direct and permanent jobs and exports its products to markets such as China, Korea, Taiwan, Peru, Thailand, Spain, France, Ukraine, Japan, Canada, and African countries.

Landes has an industrial fleet of 3 ships that meet all the requirements imposed by the maritime authority. The vessels have high-tech equipment for navigation, monitoring, communication, and fishing systems managed by highly trained crews.

In 2021, Landes opened its commercial office in Puerto Varas, to serve the salmon sector in the central-southern area. It also has an unloading yard in Puerto Montt for salmon silage and by-products.



MILESTONES 2021



January

New Palletizing Robot at Landes Mussels

This modern acquisition arrived from the United States and palletizes 10 boxes per minute. The robot enabled the automation of the production of Landes Mussels, which has experienced great growth: from 24,240 tons processed in 2020 to 32,197 in 2021. This increase has been possible thanks to the joint work with small local producers, from whom more than 80% of the raw material processed in the plant is purchased.



February

Let's Navigate Gender Equality Together

Following the signing of the UN Women's Empowerment Principles (WEPs), Landes embarked on handling a cultural change to promote gender equality and diversity within the company. With the advice of the Decentralizadas corporation, a program was prepared that includes an Awareness Cycle about the benefits of promoting gender equality, workshops for workers on unconscious bias, and the generation of KPIs associated with the benefits of promoting equality. This goes together with management systems to implement the Chilean Standard 3262-2012, in the future.



March

Landes Receives an Award from the Biobío Companies Association

In its constant support to SMEs, the company was recognized for its outstanding participation in the Redes 2021 program, a virtual business roundtable held to promote the development of small and medium-sized companies in the VIII Region, along with regional economic reactivation. At the meeting, services in several areas were put on display, such as Engineering, Design, Industrial Maintenance, Industrial Cleaning, Waste Removal, Civil Works, Equipment and Material Suppliers, and Gastronomy, among others.



April

Landes Makes the Largest Shipment of Frozen Jack Mackerel in its History

For the first time in its history, among the shipments that Landes makes to its customers in Africa, the company managed to load a full bulk ship with 8,000 tons of frozen jack mackerel for human consumption. The Frio Galicia vessel was loaded in a week, with 369 trucks and 270 workers participating in this tremendous operation.



May

Inauguration of the Puerto Varas Office

After two successful seasons, Landes consolidated its Trident operation, an innovative initiative aimed at sustainably managing the mass mortalities of the salmon industry. To reinforce the growth of its services between the Los Lagos and Magallanes regions - and to be closer to its customers -, the company opened a commercial office in Puerto Varas and added a fishing discharge hose in Puerto Montt.



June

Strengthening the Businesses of our Neighbors

The Business Bureau of the Libertad-Gaete neighborhoods - which Landes is part of - launched the "Development of Entrepreneurial Capacities" program to support our neighbors in their informal ventures. The plan, developed by IRADE (Regional Business Administration Institute) included training, consulting, and a competitive fund to boost local businesses.



July

Covid-19 Vaccination Operations

The workers' health and safety are Landes' priority. Alongside the Biobío region's Health Authority, the company carried out three Covid-19 vaccination operations for Talcahuano staff at the Isla Rocuant facilities, supplying 383 doses. Meanwhile, in Chiloé, the transportation of the staff to health centers was coordinated to facilitate the vaccination scheme.



August

Expansion of the Talcahuano Freezing Plant

The Biobío Regional Council approved the expansion of the Isla Rocuant freezing plant, which allowed increasing production capacity from 400 to 600 tons of products for human consumption, without environmental externalities to neighboring communities. Landes invested US\$6 million in state-of-the-art technology, which has allowed improving the efficiency in the use of fresh jack mackerel, a resource that has seen a recovery after its sustainable management. This growth in the plant's operational capacity meant the creation of 50 new jobs.



September

Supporting the Alonkura Center

For over 5 years now, Landes has been working with the Alonkura center, which attends children and young people with special needs. In addition to offering professional internships and jobs to its students, the company has a volunteer program to support the center's development. This year, a team of Landes workers went to paint the facilities to make them ready for the start of classes.



October

Hydrolyzates Plant Approved in Punta Arenas

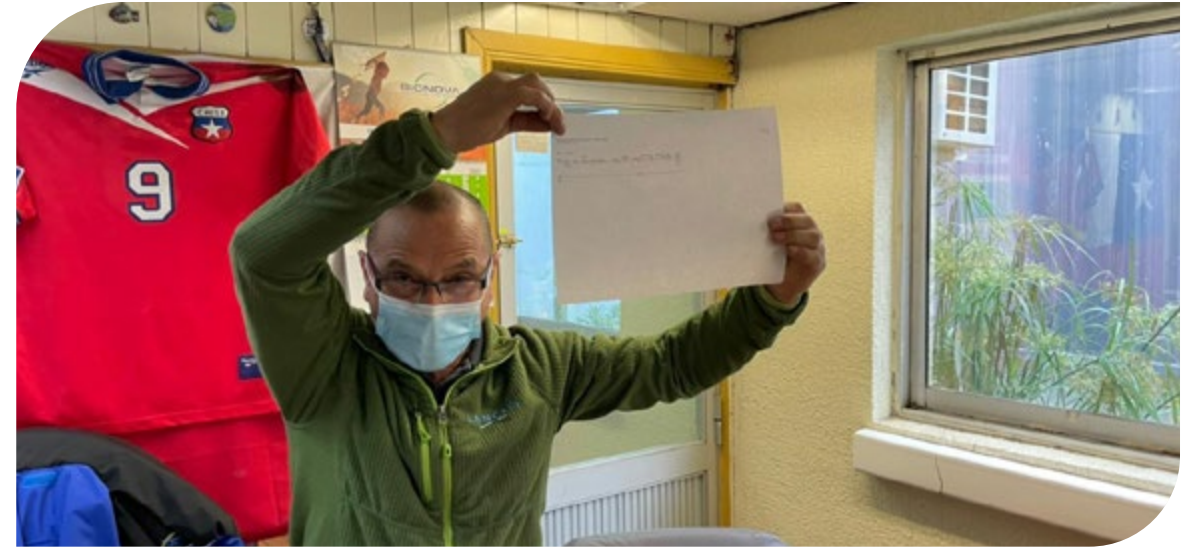
The Regional Environmental Commission of Magallanes approved the Circular Protein project, which contemplates the construction of two plants to process by-products and silage from the salmon industry, in the Cabo Negro sector, in Punta Arenas. Under the concept of circular economy, Landes is leading this project, which seeks to take advantage of 100% of the salmon by-products to develop proteins destined for animal consumption, the pet food industry, and organic soil improvers. Circular Protein was born as a sanitary solution for the salmon farming industry, where the XII Region does not have the capacity to re-value all the by-products generated. The plant will start construction in 2022.



November

Landes Workers Finish High School

A group of 12 Landes workers fulfilled a dream they had had for years: finishing High School. With a graduation ceremony, they graduated High School, after completing an intense studying process. They took part in the Chile Presente program, promoted by Santander Bank together with different companies, where company volunteers accompanied the preparation of home school-type exams, supported by content available on a learning platform.



December

Moving Forward in Digital Transformation

With the implementation of Microsoft Dynamics, an ERP system, Landes continues to move forward in its digital transformation process in the Accounting, Finance, Logistics, and Procurement areas. This process meant long days of training that will allow us to have a more agile organization, with more timely and efficient information.



SUSTAINABLE STRATEGY

Value Creation

Landes has defined, as its objective, to produce high-quality seafood for human consumption and the production of proteins for animal nutrition. For this, it has worked on its continuous improvement backed by the certifications obtained, that today allow it to have a broad international market.

In 2021, the actions of this strategy were focused on the investment in assets such as equipment, infrastructure, digitization, and investment in R&D.

Adaptation to the Environment

The company understood that, in the face of adversity, business flexibility is key and has transformed it without losing its essence. After the closure of the cuttlefish operation as a result of the law coming into force that handed over its catch to the artisanal fishing sector, Landes was able to generate new business lines and diversify its products, adding the production of fish meal, fish oil, and salmon hydrolysates.

Alongside the consolidation of new businesses, organizational restructuring was necessary for 2021, hiring people in several key positions, to sustain the growth and management of its different operations with excellence.

People Management

Although Landes has a team of more than 500 people today, it is still considered by its workers as a family business. To maintain this close relationship, the company has generated internal and external programs with a permanent team dedicated to strengthening that relationship, both with its staff and with neighboring communities.

In 2021, the People Management Team grew, and among its main challenges were worker care given the pandemic conditions, the development of the inclusion and diversity program, and maintaining communication and closeness with the community despite the face-to-face limitations.

Environment

Landes decided to become a paragon in environmental management. For this, it has mainly followed the guidelines of circular economy and the practices of B Companies. The circular economy is an environmentally friendly production and consumption model that involves reducing, reusing, and recycling existing materials and products as many times as possible to create added value. In addition, since 2018, the company has voluntarily carried out its Sustainability Report where it yearly registers its baselines and progress in economic, social, and environmental management and performance.

In 2021, Landes consolidated its Environmental Management System by working on the management and measurement of the impacts of its operation, standing out through continuity in the measurement of its environmental indicators, particularly the measurement of its carbon footprint.

COMPLIANCE WITH SDGs



SDG TARGET	ACTIONS 2021
<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.</p> <p>2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.</p>	<ul style="list-style-type: none">• Participation in the Seafood Bank Program promoted by Asipes, together with other companies in the industry.• Permanent donations to neighborhood councils and local communities.
<p>3.c Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in the least developed countries and small island developing States.</p> <p>3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction, and management of national and global health risks</p>	<ul style="list-style-type: none">• Participation in preventive health programs for plant workers, such as vaccination operations, opticians, and health and safety talks.





SDG GOALS

ACTIONS 2021

4.1 By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes.

- Participation in the “*Un Niño Nuestro compromiso*” Sponsorship Program. Different local councils have adhered to this initiative, promoted by the National Children’s Plan, which seeks that different companies sponsor children and young people from vulnerable sectors so that those who have academic merits are supported with a monthly payment that allows them to pay for clothing, school supplies, and supplies until they finish their studies.
- *Landes Presente* Program to support workers to complete their High School Education.
- School supplies scholarships.

5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.

5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

- Constitution of the Internal Diversity and Inclusion Committee.
- Application of Diversity survey to the company’s workers.
- Hiring external consultants to move towards the certification of the 3262 standard.
- Gender identity non-discrimination policy.





SDG GOALS

ACTIONS 2021

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading, and innovation, including through a focus on high-value added and labor-intensive sectors.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.6 Substantially reduce the proportion of youth not in employment, education, or training.

- Maintaining quality and stable employment with 65% of permanent contracts, and a 15% year-on-year increase of workers.
- Compliance with the Manual on Best Practices for Contractor Companies and active participation in its preparation through the Asipes People Committee.
- Participation in the training program for Talcahuano entrepreneurs.

11.a Support positive economic, social, and environmental links between urban, peri-urban, and rural areas by strengthening national and regional development planning.

11.b Substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

The Sendai Framework was the first major agreement of the post-2015 Development Agenda and offers the Member States a series of concrete actions that can be taken to protect the benefits of development against disaster risk.

- Participation in the Libertad-Gaete Tripartite Round-Table made up of the Municipality of Talcahuano, the Neighborhood Councils of the Libertad and Gaete sectors of this commune, and companies around these areas, to generate actions that favor the most sensitive environmental issues for the inhabitants.





SDG GOALS	ACTIONS 2021
<p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.</p>	<ul style="list-style-type: none">• Participation in the Irade Sustainability Circle.• Participation in the celebration of Social Leader Day through the Company Round-Table.
<p>12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.</p>	<ul style="list-style-type: none">• Maintaining product quality and safety certifications.• Continuity of the Trident Plan.• Renovation of laboratories for research and development (R&D).• Active action in recycling own waste from the operation and networks.• Maintaining Ecosite for the recycling actions of neighbors of the plant in Talcahuano.





SDG GOALS

ACTIONS 2021

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

14.2 Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.

- Regarding the company's policies on the environment and life underwater these include Quality, Safety and Environmental Policy, Environmental Policy, and the Environment Chapter, contained in the Code of Conduct and Business Ethics.
- Fleet maintenance with state-of-the-art technology, so as not to affect marine flora and fauna.
- Compliance with the Birdlife Convention, which consists of promoting best practices in fishing activities to reduce incidental catching of birds and marine fauna.
- Compliance with the Fishing Law, regarding quotas.

17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

17.17 Encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships.

- Active participation in industry organizations in general, and the fishing industry in particular, that promote sustainable exchanges and practices, such as Irade and Asipes.

LANDES IN FIGURES

ECONOMIC PERFORMANCE



JACK MACKEREL

Since the entry into force of the giant squid law at the end of 2018 - which handed over capture to the traditional fishing sector, Landes has been busy giving greater added value to jack mackerel, the company's main product today. In 2021, the largest jack mackerel shipment in the history of Landes was made by loading a full bulk ship with 8,000 tons of frozen jack mackerel for human consumption, bound for Africa.



CIRCULAR ECONOMY IN SALMON

In the production of proteins for animal nutrition, the salmon meal and oil production business area was consolidated in 2021. The company, through the development of technologies and process innovation, has converted the by-products and mortalities of the salmon industry into ingredients for pet food and products for the animal industry in general. In this way, Landes revalues these raw materials to turn them into quality proteins through a hydrolyzing process.

Main Activities of the Company, in Tons

(102-2)

Activity	2019	2020	2021
Total raw material processed (ton) Landes + Landes Mussels	104,607	132,240	184,095
Production of proteins for animal consumption (ton)	12,136	4,314	24,500
Production of frozen food for human consumption (ton)	40,995	35,557	56,015

Source: Administration and Finance Area.



Main Products and Volumes Traded, in Tons
(102-6)

Activity	2019	2020	2021
Frozen products	31,782	30,567	47.733
Proteins for animal nutrition	16,719	8,951	8,044
Mussels	2,706	6,606	8,087
Fresh fish	14,938	62,787	48,324

Revenues in MM USD (Landes + Landes Mussels)
(201-1)

2017	2019	2020	2021
50.33	81.21	79.49	112.69

Source: Administration and Finance Area.

CIRCULAR ECONOMY

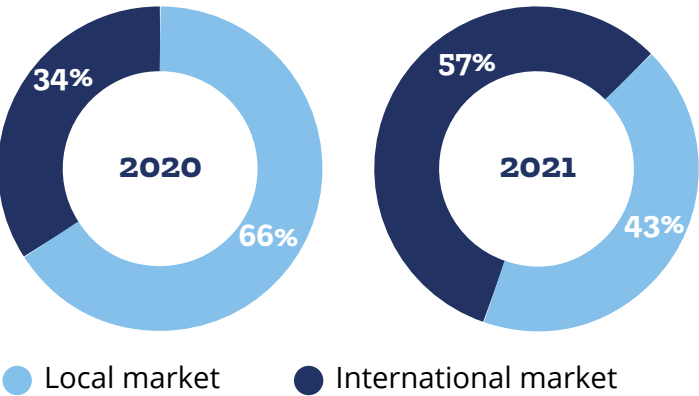
In the search for new businesses, work began on a circular economy project that originated as an environmental solution for the salmon industry. This is Circular Protein, which plans to build two plants to turn salmon by-products and silage into proteins for animal consumption in the Magallanes region.

Circular Protein, which already has its Environmental Impact Statement approved, involves an investment of US\$38 million that is in its tender process.



Market Performance, in Tons

	2020	2021
Local Market	71,799	53,101
Europe	7,601	9,368
Africa	25,925	46,019
Asia	1,696	6,533
USA	85	6,061
LATAM	1,720	2,322
TOTAL	108,825	123,404



Source: Administration and Finance Area.

Supply, in Tons, Landes

	2019	2020	2021
OWN	45,994	53,798	55,812
THIRD-PARTIES	43,849	54,201	96,086
Total	89,843	108,000	151,898

Supply, in Tons, Landes Mussels

	2019	2020	2021
OWN	2,680	2,387	5,180
THIRD-PARTIES	12,073	21,852	27,016
Total	14,753	24,239	32,197

Source: Administration and Finance Area.



Distributed Economic Value USD MM

(201-1) (203-1)

	2018	2019	2020	2021
Payments in goods and services	51.2	57.3	62.8	78.4
Payments in remunerations	13.9	13.2	14.1	14.7
Payments to shareholders	0.6	1.4	2.0	1.6
Payment of taxes to the State	5.7	4.9	5.8	2.9
Investments in infrastructure and equipment	7.9	3.5	8.2	8.6

EBITDA Landes + Landes Mussels

Millions of Dollars (USD MM)

2018	2019	2020	2021
9.71	7.08	7.43	13.43

Source: Administration and Finance Area.

INVESTMENT IN R&D

The company invested around US\$5 million in 2021 to reconvert its processes, innovating every day with new products and businesses.

Innovation is included in the company's policy as a strategic and motivational issue, as it allows giving added value to the raw materials it fishes and processes. The company understands that new uses and innovative quality products contribute to the country's development. During this period, the renovation of its laboratory in Talcahuano was completed, for which \$248 million was invested.



Investments Landes + Landes Mussels

Millions of Dollars (MM USD)

(203-1)	2018	2019	2020	2021
Infrastructure	2.6	1.9	2.5	6.7
Equipment	5.4	1.6	5.7	1.4
Others	0	0	0	0.5
TOTAL	7.9	3.5	8.2	8.6

Main Economic Performance Indicators

Millions of Dollars (MM USD)

Indicator	2018	2019	2020	2021
Operating Income	71,151	75,543	79,494	112,686
Total Capitalization	64,363	64,363	64,363	64,363
Total Assets	84,925	81,341	106,110	100,095
Total Liabilities	32,944	34,061	51,979	43,825
Total Equity	54,850	53,009	54,130	56,270
EBITDA Margin	9,630	6,307	7,430	13,438
Operating Margin	7,069	4,120	4,571	9,305
Profit Margin	4,073	-138	2,881	4,517

Source: Administration and Finance Area.

SOCIAL PERFORMANCE

Product innovation and new businesses have allowed a large part of the jobs lost with the cuttlefish crisis to be recovered during 2021.

In 2018, Landes’ workforce was 628 workers, a figure that decreased over time, despite the company’s efforts to retain them. The worker payroll in the period reported 502 workers.



Distribution of Workers by Gender (Landes + Landes Mussels)

(102-7) (102-8) (405-1)

	2018	2019	2020	2021
Female	170	147	152	128
Male	458	395	338	374
TOTAL	628	542	509	502

Source: Administration and Finance Area.



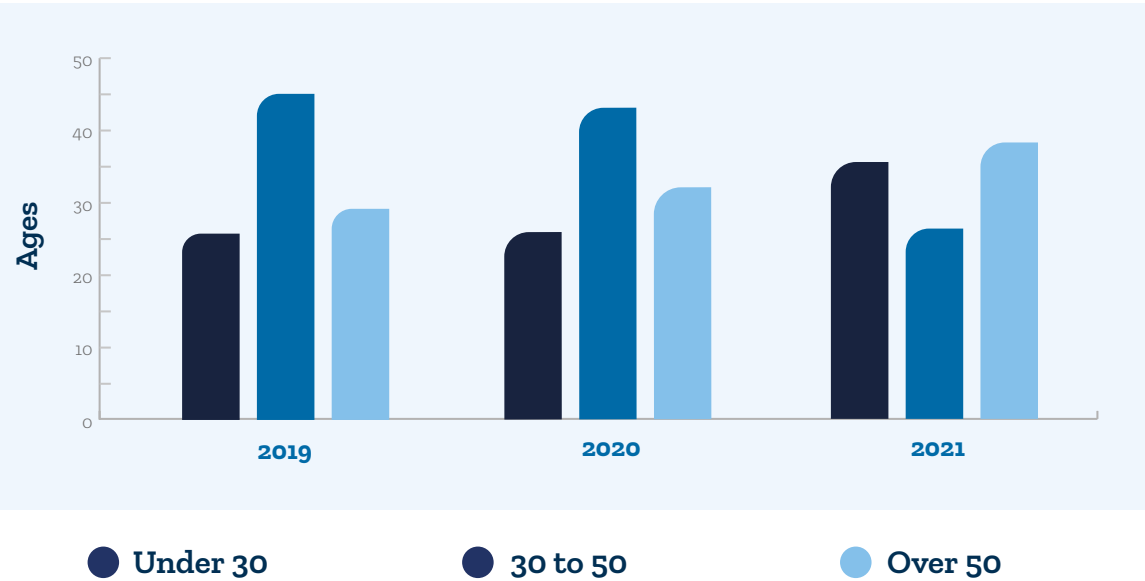
EQUALITY AND INCLUSION

After signing UN Women's Empowerment Principles (WEPs), Landes embarked on handling a cultural change to promote gender equality and diversity within the company. The company is currently implementing an internal awareness program regarding the benefits of promoting gender equality, workshops for workers on unconscious bias, and the generation of KPIs associated with the benefits of gender equality. These activities are part of the path that Landes has mapped out for the short-term implementation of the Chilean Standard 3262- 2012.



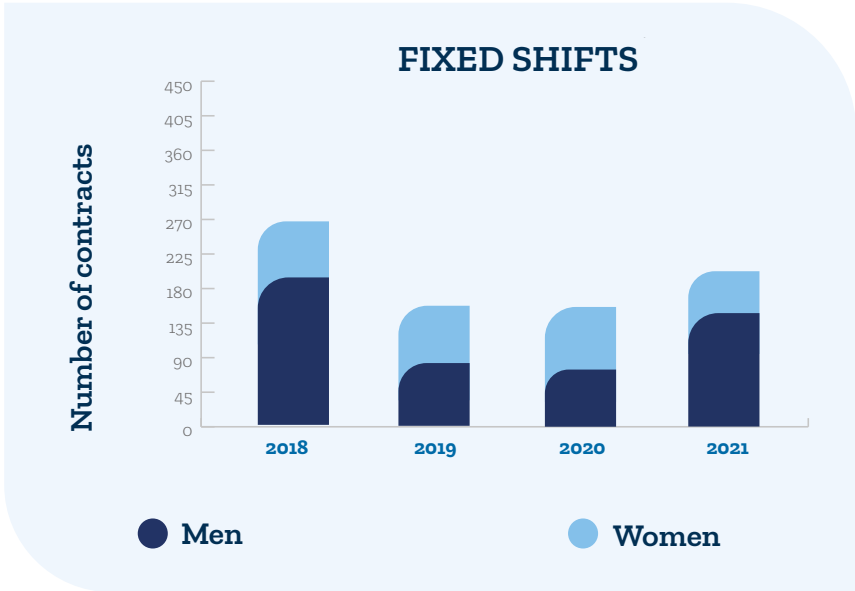
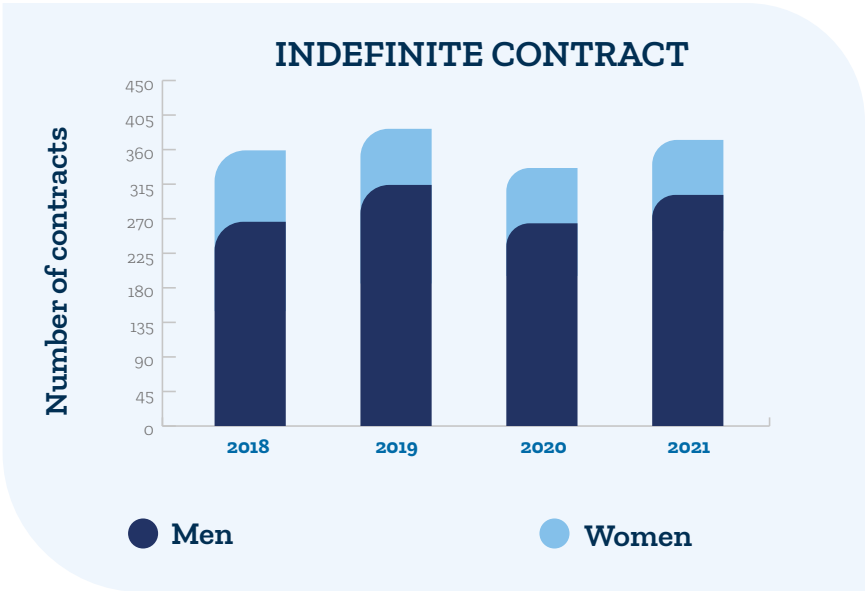
Age Range, in Percentage
(Landes + Landes Mussels)

(102-8)



Workers by Type of Contract (Landes + Landes Mussels)

(102-8)

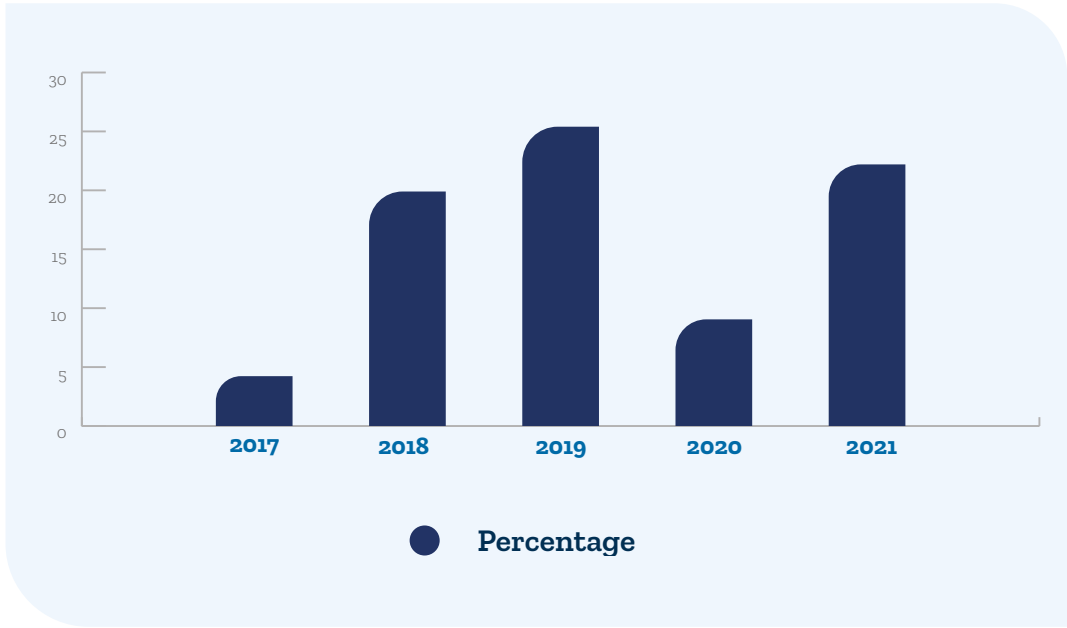


Staff turnover with an indefinite contract, in percentages

(401-1)

2016	2017	2018	2019	2020	2021
6.46	4.23	19.90	25.4	9.05	22.2

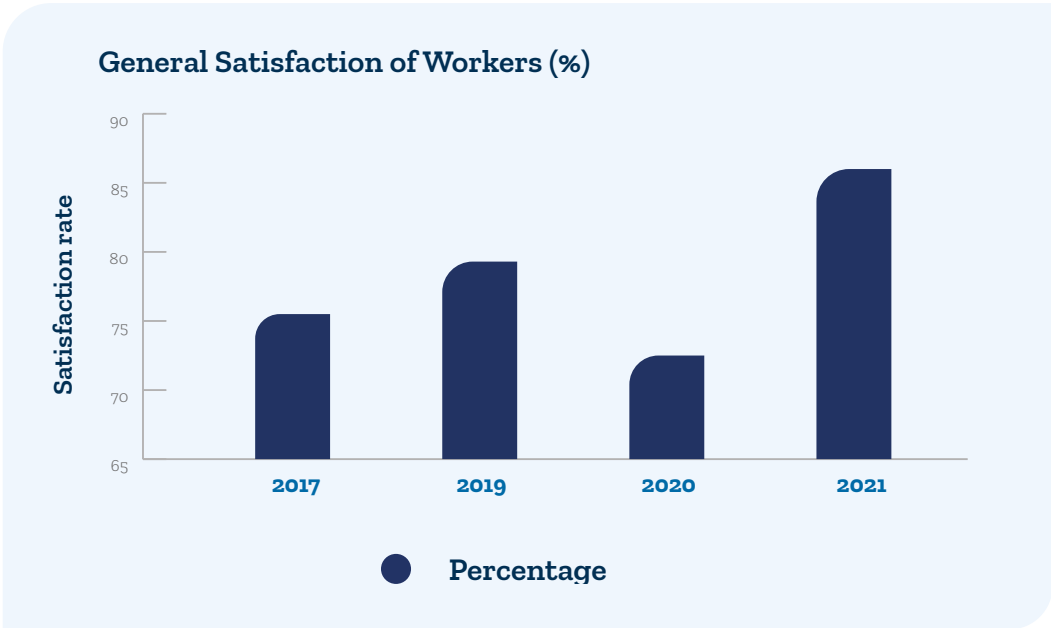
Source: Administration and Finance Area.



WORKING CLIMATE

To maintain and optimize the well-being of its workers, Landes periodically applies an organizational climate survey. In December 2021, the latest online survey was applied, where more than 63% of the associates took part. The main objective was to know the perception of the people who work in Landes about the work climate and their environment.

Of the fourteen dimensions consulted, nine are located at the level of “clear strength” of the organization, distinguishing **Job Stability** as the best evaluated one, followed very closely by **Workload** and **Identity**. These valued attributes are especially relevant for Landes, given the complex context where it has been operating: workforce reduction, economic difficulties, and instability of the period. Regarding the actions promoted by the company in protecting Safety and Commitment to its workers, these dimensions reached more than 85% of satisfaction.

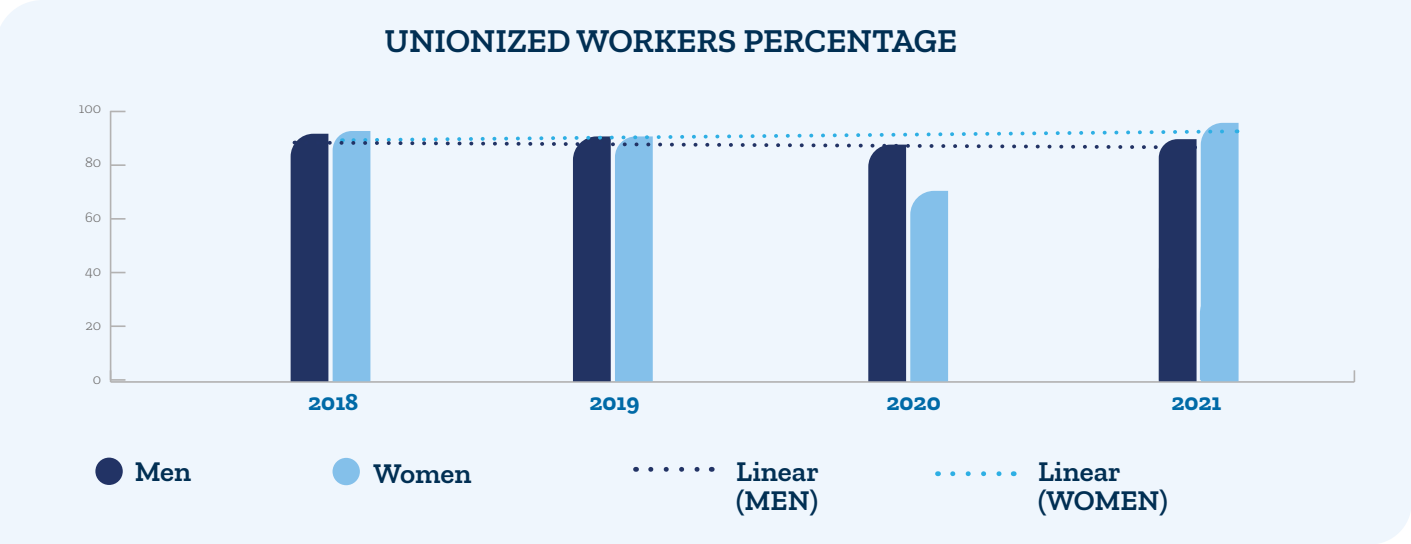


Source: Public Affairs and People Area.



Collective Agreements Landes + Landes Mussels

(102-41)



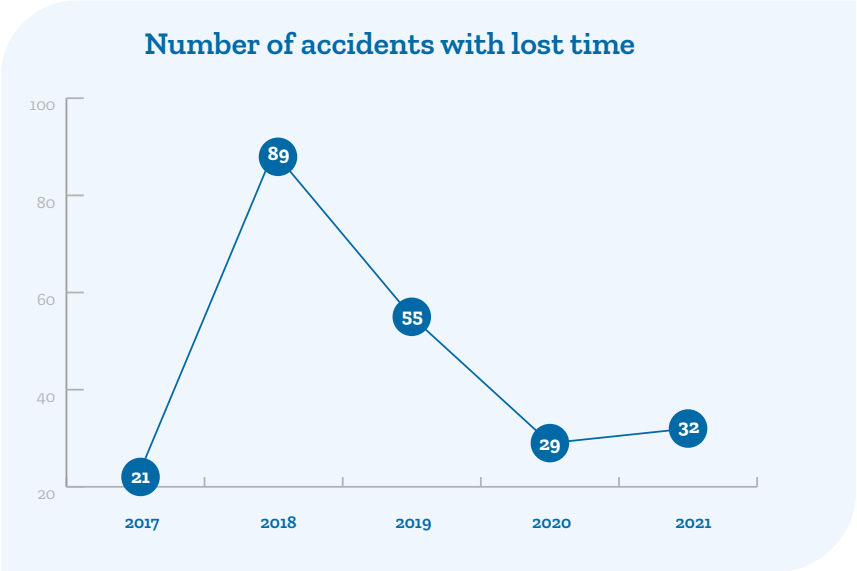
	2018	2018	2019	2019	2020	2020	2021	2021
% workers covered by collective agreement	92	91	90	90	70	87	95	89
% unionized workers	92	91	90	90	70	87	95	89



HEALTH AND SAFETY

Given the working conditions, the company takes care of providing strict health and safety measures and of complying with all the regulations laid out by the law on work-related accidents and occupational diseases. In addition, there is a culture of continuous improvement for both the company's staff and those of contractors, mainly reinforcing self and mutual care. Every year, activities are planned to keep in mind the value of prevention and avoiding risks that threaten the integrity of all those involved in the production process.



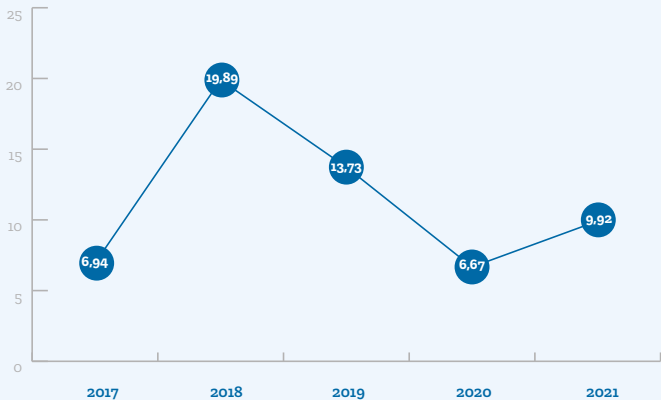


Source: Administration and Finance Area.

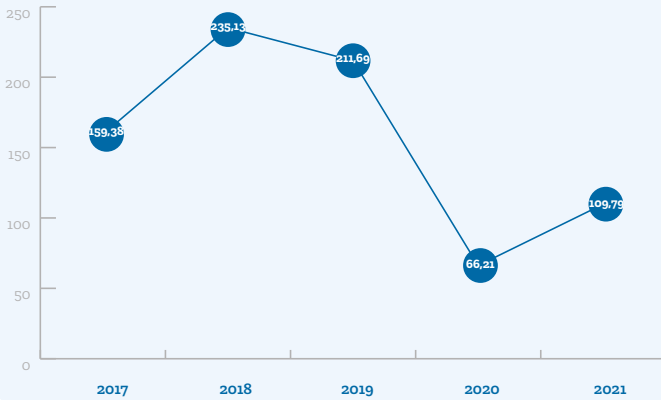




Accident Rate



Incident Rate



Source: Health and Safety and Environment Department.

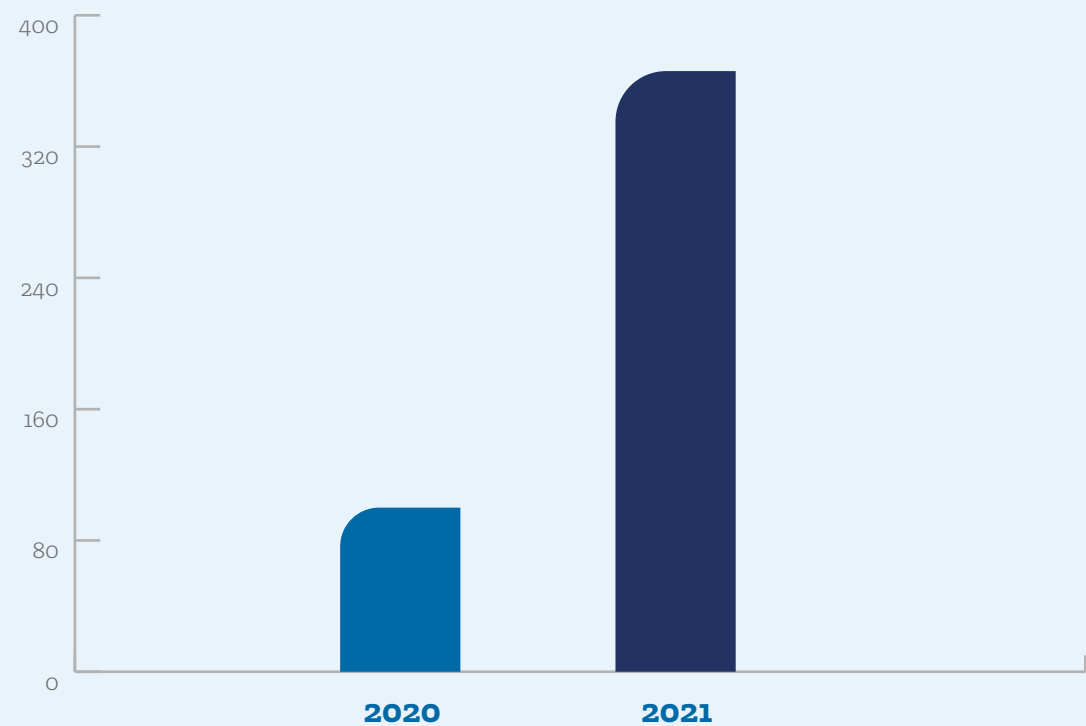
TRAINING

Learning is part of the Landes culture, which is why it encourages all those who work in the company to expand their knowledge and skills according to the needs of the area, and also their professional development.

For the proper management of training, Landes seeks to identify specific competencies, which correspond to desired behaviors in the organization, to then select the people who have the required competencies and make available to them the necessary means to improve performance. The objectives of the company's training strategy are the development of technical knowledge, management, and leadership skills.



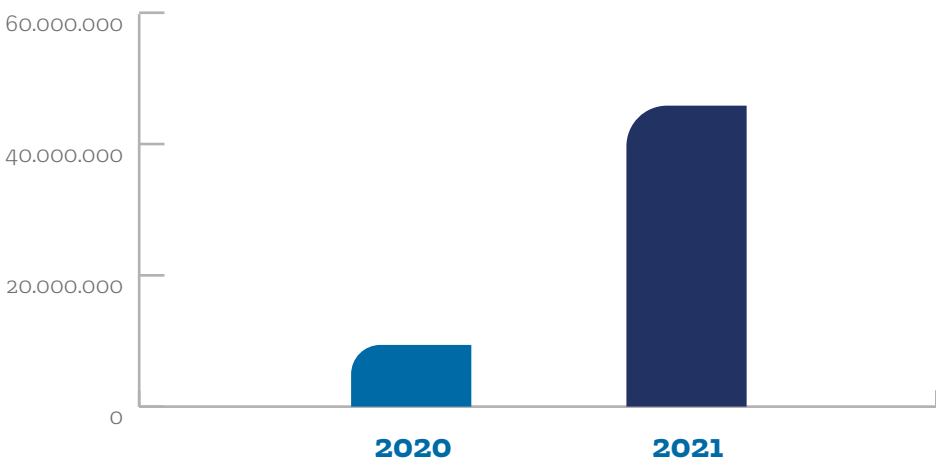
PARTICIPATION IN TRAINING



Participants in training activities during 2021 increased by **266%** compared to the previous period.

Source: Corporate Affairs and People Area.

INVESTMENT IN TRAINING



Investment	2020	2021
Sence	\$ 2.614.000	\$ 29.911.000
Landes	\$ 2.754.000	\$ 13.195.352
Total	\$ 5.368.000	\$ 43.106.352

Sence investment in 2021 increased by **1,044%** compared to 2020.

Company investment in 2021 increased by **379%** compared to 2020.

ENVIRONMENTAL PERFORMANCE



WATER CONSUMPTION

Landes Talcahuano water consumption, in m³
(303-5)

	2021
San Vicente	20.004
Isla Rocuant	130.434
Nets warehouses	1.168
TOTAL	151.606

Landes Talcahuano water consumption, in m³
(303-3)

Type of water	2019	2020	2021
Groundwater (well)	33,370	56,320	61,865
Sea water	76,297	112,556	122,557
RDW Water	148	191	167
Bottled water	46	52	63
TOTAL	109,861	169,119	184,652

Reused water from the discharge of raw material, in m³
(301-2)

	2019	2020	2021
San Vicente Discharge	4,100	4,700	7,100

Source: Health and Safety and Environment Department.



EMISSIONS

Carbon Footprint Challenges

Landes, in its goal of reducing the impact of climate change, as a first step began its carbon footprint quantification in 2018 under the *HuellaChile* Program. This initiative of the Ministry of the Environment promotes the management of the carbon footprint through seals that recognize the different stages each company is at.

Landes has received the *HuellaChile* Program certification for the quantification of 2018, 2019, and 2020. Regarding 2021, the carbon footprint was

measured by Landes. However, by the issuing of this report, it had not yet been certified.

HuellaChile's methodology considers an exhaustive measurement that covers direct emissions generated throughout the production chain (GHG 1); indirect emissions (GHG 2), associated with electricity supply; and other indirect emissions (GHG 3), such as the transportation of raw materials or waste generation, among others.



Direct and Indirect Greenhouse Gas (GHG) Emissions
(305-1, 305-2, 305-3)

Direct Emissions	Plant	2019	2020	2021
GHG 1	Landes Mussels	3,826	3,115	4,111
	Landes	12,851	7,716	12,815

Indirect Emissions	Planta	2019	2020	2021
GHG 3	Landes Mussels	1,329	1,687	3,406
	Landes	8,947	6,443	5,891

Indirect Emissions	Plant	2019	2020	2021
GHG 2	Landes Mussels	1,008	1,208	1,371
	Landes	5,550	4,218	7,376

Source: Health and Safety and Environment Department.



ENERGY CONSUMPTION

(302-1)

Energy Consumption

Fuel consumption of fixed sources, Landes Talcahuano, in tons

	2019	2020	2021
LPG	112.6	38.8	201.1
Diesel	128.9	33.0	219.4
Fuel Oil	1,965.1	565.9	2,296.2

Fuel consumption of mobile sources, Landes Talcahuano, in tons

	2019	2020	2021
LPG	6.1	6.1	31.1
Diesel	1,464.6	1,749.4	3,236.1



Energy Consumption, Landes Mussels
(Chiloé, Quetalco, and Lemuy)

Fuel consumption, in tons

	2019	2020	2021
LPG	331.3	417.2	566.5
Diesel	7.8	3.9	22.3
Gasoline	0.4	1.0	1.0





ELECTRICITY CONSUMPTION, IN KWH

INVESTMENT IN CLEAN ENERGY TO MITIGATE EMISSIONS

In the second half of 2021, work began at the Isla Rocuant plant, Talcahuano, for the conversion of oil boilers to liquefied gas. This investment, which will make it possible to reduce oil consumption to a minimum, is another example of the company's firm intention to make progress in reducing its impact due to emissions. In the same period, a contract was signed with Enel so that all the electricity supplied to the Talcahuano facilities comes from renewable energy sources.

Electricity consumption, Landes Talcahuano, in kWh

	2020	2021
San Vicente Bay	142,758	174,000
Nets warehouses	36,543	34,203
TOTAL	179,302	208,203

Electricity consumption, Landes Mussels, in kWh

	2019	2020	2021
Chiloe	2,412,888.8	3,149,312	3,576,083
Queltauco	344	283	348
Lemuy	127	121	141
TOTAL	2,413,359.8	3,149,716	3,576,572

Source: Health and Safety and Environment Department.



RECYCLING

Recycling of Landes Plant, in tons
(301-2)

Material	2018	2019	2020	2021
Metal	102	33.58	79.92	121.996
Cardboard	45.54	41.64	21.8	24.040
Stretch Film and Other Plastics	20.47	11.91	8,55	16.540
Sacks	2.31	-	-	1,01
Nets	8.86	24.17	-	37.35

RECYCLING OF NETS

The fishing nets are recycled internally by the company, using them to manufacture hangings for the company’s mussel farms. However, the remaining nets are delivered to the company Bureo, which turns them into sports items such as skateboards, sunglasses, and baseball caps.

The recycling process begins with the collection of these disused nets, which are cleaned and classified by the type of plastic, subsequently crushed to become pellets that the products are manufactured from.

Source: Health and Safety and Environment Department.



Bureo



Recycling of nets, in Kilograms

Nets	2019	2021
Delivered by Landes to Landes Mussels for reuse	32,320	24,950
Delivered to Bureo	-	37,350
TOTAL		62,300

Recycling Eco Site, in Kilograms

Material	2018	2019	2020	2021
CANS	66	36	24	15
BOTTLES	160	43.4	18.6	15.2
TETRA PACK	34	12.6	12.6	8.5
TOTAL	260	92	55.2	38.7

Source: Health and Safety and Environment Department.



RECYCLING OF MASKS

The idea of collecting the masks arose at the beginning of the pandemic, to give a sustainable use to the more than 20,000 surgical masks used every week in the Biobío fishing plants.

In 2021, Asipes managed to collect more than 600,000 masks which were transformed into sets of coasters, planters, pencil holders and trays for cafeterias made entirely from recycled masks.

This promising circular economy project included the Ministries of the Environment, of Science, the University of Concepción, and Industrial Fisheries of the Biobío Region. Landes is an active part of this project, and in 2021 it delivered more than 160 kilos of masks, which it collects in garbage cans specially set up for this in all its facilities in Talcahuano.

Thanks to the success of this project, the company agreed on an alliance with the Liceo Industrial de Concepción to sponsor the collection and treatment of masks.

Recycling of Landes masks, in Kilograms

	2020	2021
Masks	17.6	160.5



WASTE

Summary of LIW volume discharged by Landes Talcahuano, in m³
(306-2)

	2019	2020	2021
Isla Rocuant	48,021	30,512	49,930
San Vicente	57,156	51,447	83,816

Liquid industrial waste (LIW), in m³
(306-1)

	2019	2020	2021
Landes	105,177	81,959	133,746
Landes Mussels	117,431.50	168,876	163,733.24
TOTAL	222,608.50	250,835	297,479.24

Landes hazardous waste, in tons
(306-2)

2019	2020	2021
21,89	26,04	27,52

Landes Mussels hazardous waste, in kilograms
(306-2)

	2019	2020	2021	Disposición
Used oil	1,450	1,120	1,200	Recycling
Others (Batteries, chemicals, filters, etc.)	250	138	0	Industrial landfill

Source: Health and Safety and Environment Department.



Landes Mussels non-hazardous waste, in tons

(306-2)

MATERIAL	2019	2020	2021	Disposal
SIL*	2,878.2	2,255.4	10,250	Industrial landfill
Shells	8,869	13,449	15,354	Recycling
Cardboard	12.59	24,900	35,987	Recycling
Plastic	7.50	6,139	5,171	Recycling
TOTAL	11,767.3	15,735.5	25,645.8	

(*) SIL: Industrial waste not specified in any category. As of July 2021, the entire shell was sent to an industrial landfill as SIL.

Source: Health and Safety and Environment Department.

Landes Mussels non-renewable materials used, in tons

(301-1)

INPUT	2019	2020	2021
Raw Material	16,441.40	27,930,48	39.415,17
Maxi sack	4.59	7.4	11,575
Cases	6.15	67.4	14.77
Cardboard boxes	23,962.2	40	40.71
Plastic film	0.18	4.1	33.13

Recycling of Landes Mussels, in tons

(301-2)

MATERIAL	2019	2020	2021
PLASTICS	7	6	5.17
CARDBOARD	13	25	35.99

100% CPA COMPLIANCE

After 24 months of implementation, Landes Mussels and the Landes Dalcahue Fishing Society managed to meet 100% of the goals of the CPA (Clean Production Agreement) for the sustainability of companies in the mytiliculture sector of the Los Lagos Region, promoted by AMICHILE (Association of Mytiliculturists of Chile).

Compliance with the Clean Production Agreement, CPA Landes Mussels (IP)

	2020	2021
Centers	88%	100%
Plant	70%	100%

Source: Health and Safety and Environment Department.



ODOR MANAGEMENT

PREVENTION AND 24-HOUR CARE

At the Isla Rocuant plants, Landes has a UV-Ozone system for the abatement of odors from the fishmeal and oil plants' chillers. This system allows addressing all the critical points to ensure health. In addition, the company manages a preventative protocol of questions and complaints, to face questions and possible contingencies that could occur in the operation or transit of trucks with raw material. There is also a 24-hour hotline (+56942299921) to report an incident, after which a protocol is activated.

Evaluation of odor removal efficiency, in percentage NCH3190:2010

	2018	2019	2020	2021
Fish meal plant scrubber	93.3	90.2	92.5	92.5
Hot air gas washing	89.7	89.7	76.8	76.8
Hydrolyzed plant scrubber	95	97.6	97.5	97.5
UV equipment - LIW plant	80	81.9	67.4	67.4
UV Equipment - chillers	-	92.9	82	82

Source: Health and Safety and Environment Department.





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