

Sustainability Report 2024

Towards sustainable fruit production



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Industry Sustainability Indicators

I. Introduction



I. Introduction

Our industry has always faced important local and international challenges, yet has continually adapted to compete in the most far off and demanding markets.

This adaptability has been the result of support industry development policies and, most importantly, our people: agricultural workers who learned farming techniques and transformed them into traditional knowledge, and several generations of professionals who have played a decisive role in the prosperity of our fruits.

In recent decades, we have seen major changes in fruit production conditions and the markets where it is sold, including our own local market. Our industry has witnessed the emergence and intensification of several trends, including concern for the environment, preferences for "natural" (with minimal transformation and intervention) or locally grown foods, reduction of food loss and waste, food safety as a minimum to compete, and renewed ethical standards, with worker and community well-being at the heart of the debate.

Our fruits competes globally in these conditions. What is produced is no longer the only relevant factor; today, how it is produced is even more valuable.

In this context, Frutas de Chile took on the challenge of leading the industry's sustainability efforts. It has done this by defining the key issues, gathering evidence and developing a powerful, coherent narrative regarding the fruit export sector's relevance to the development of the country and its communities, and its medium and long-term commitments to environmental protection, preservation and regeneration.

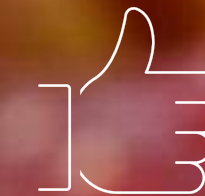
The outcome of these efforts are proudly presented in this document: The Chilean Fruit Export Industry's First Sustainability Report, which was designed and prepared based on four principles.

PRINCIPLES



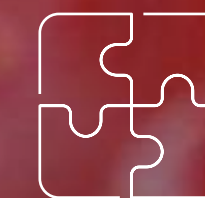
Gradualness

Starting with the basic elements included in the first industry report and moving towards more complex reports.



Simplicity

Creating no new standards to avoid adding to companies' administrative and management load.



Harmonization

Using methodologies and metrics from other local and international standards.



Comparability

Responding to companies' concerns and need for metrics to compare their performance in priority elements and to show to buyers.



Against this backdrop, the challenge for companies in preparing this report was administrative rather than managerial or operational in nature. It involved **organizing and systematizing** the data and information they already collect, at the farm and packing house level, for various certification programs or their main international customers' reporting requirements, which are not necessarily associated with specific certification or rating programs.

In light of the results disclosed in the Chilean Fruit Export Industry's First Sustainability Report, we still have a long way to go. This does not mean that our sector is in a bad place today but, rather, that we must redouble our efforts to increase the number of companies providing data and defining ambitious sector commitments. This will help us not only contribute to the country's environmental, social and governance (ESG) commitments but also to build a solid platform to support the industry's long-term

competitiveness and ensure that Chilean fruit is recognized globally as a sustainable product, grown and packaged with a minimal environmental footprint, maximum respect for worker safety and well-being, the greatest commitment to local development and the highest corporate transparency standard. Thus, our fruit will not only contribute to global food security, but also to the health of the planet.

We hope that this report will inspire our industry and other sectors that are pondering how to address the challenge of sustainability.

"Thus, our fruit will not only contribute to global food security, but also to the health of the planet."



Iván Marambio Castaño
Chairman, Frutas de Chile

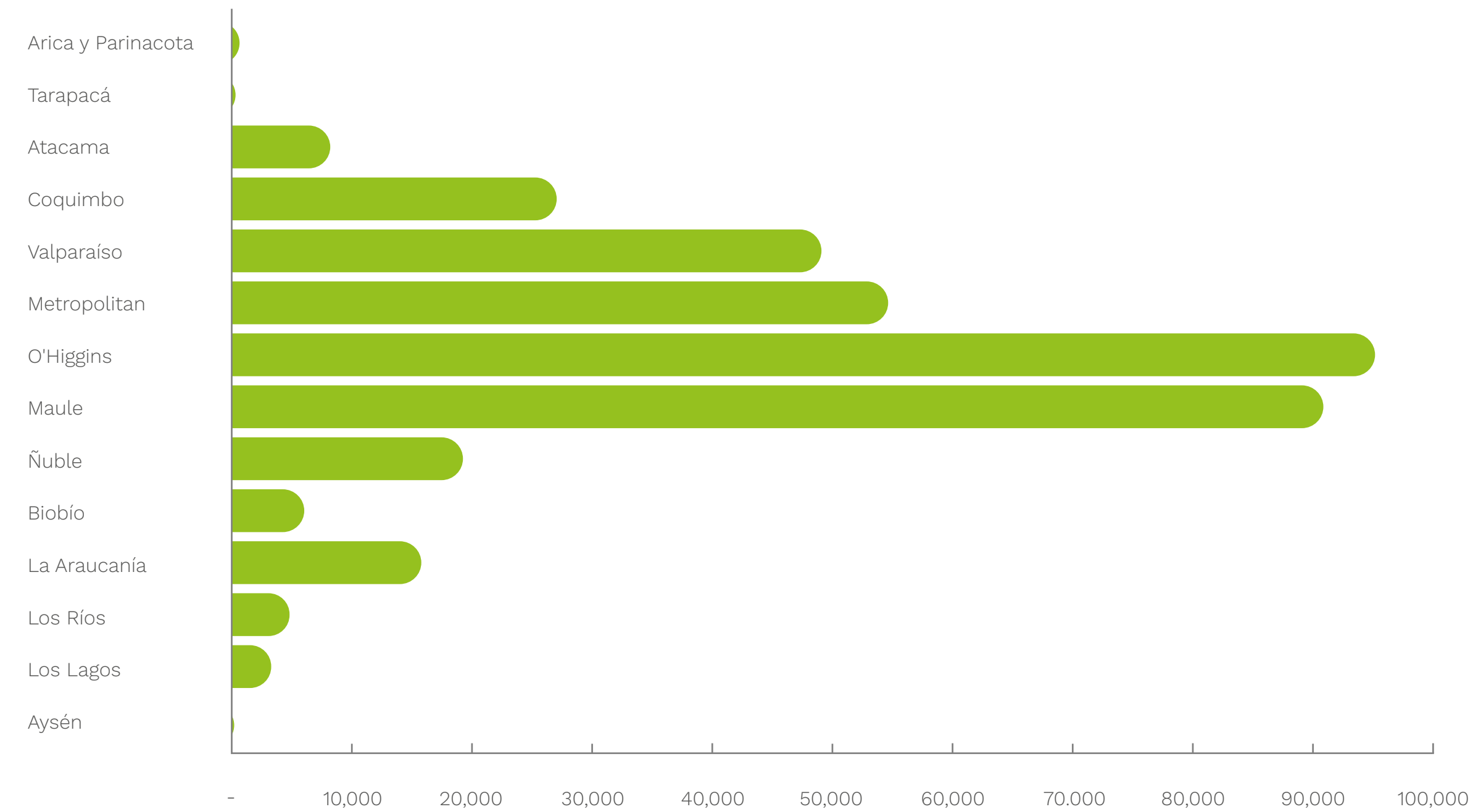


II. The Fruit Export Sector

II. The Fruit Export Sector

2.1 GEOGRAPHICALLY DIVERSIFIED, EXPANDING BUSINESS

Orchard Surface Area by Region, Year 2022



O'Higgins Region



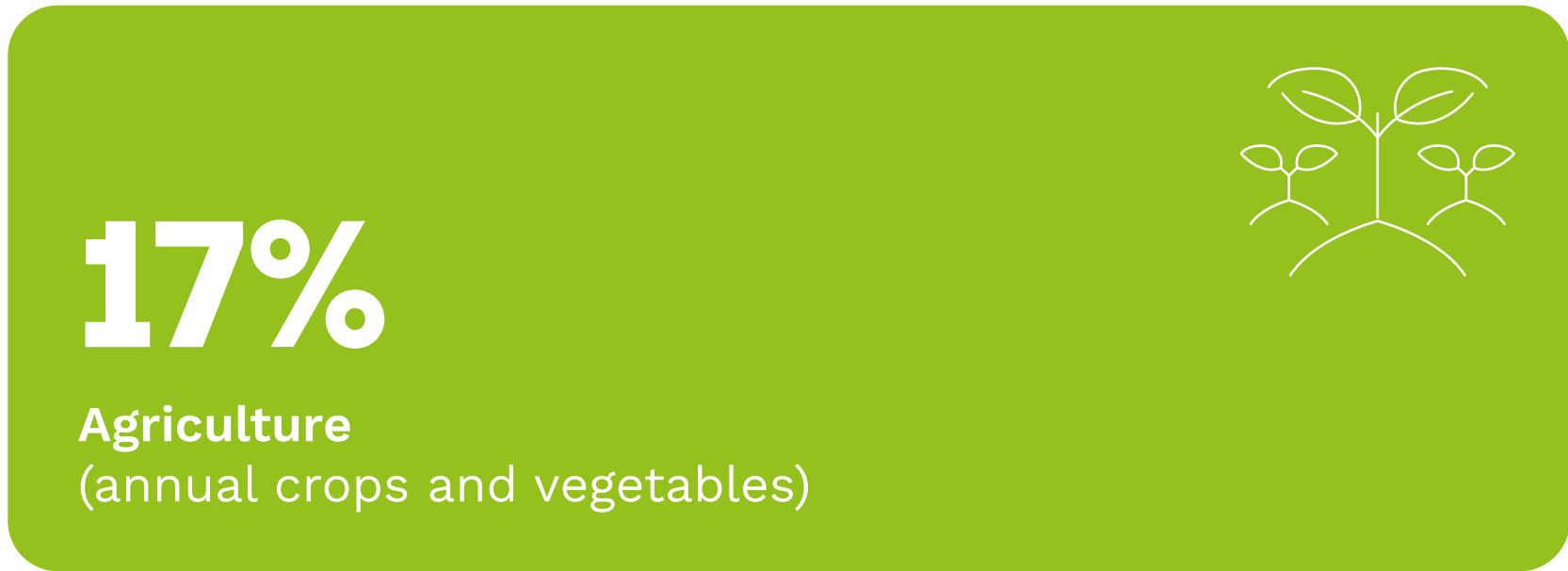
Evolution of Orchard Surface Area

	2012	2021	2022	Change 2022/2021
	Hectares (ha)			(%)
Cherries	13,642	48,961	61,559	25,7%
Walnuts	17,004	43,735	46,232	5,7%
Table grapes	53,850	43,104	43,025	-0,2%
Hazelnuts	5,722	24,456	36,393	48,8%
Avocados	36,386	32,364	32,387	0,1%
Red apples	28,230	25,743	23,992	-6,8%
Olives	15,110	21,364	21,141	-1,0%
American blueberries	12,450	18,216	17,822	-2,2%
European plums	12,511	12,451	12,530	0,6%
Mandarin oranges	3,629	11,194	11,184	-0,1%
Almonds	8,549	9,387	9,401	0,2%
Lemons	7,103	8,038	8,081	0,5%
Nectarines	5,348	6,479	6,624	2,2%
Oranges	7,837	6,371	5,362	-0,1%
Kiwifruit	11,198	6,973	5,315	-9,4%
Other	47,784	34,135	32,552	-4,5%
Total	286,308	352,970	375,598	6,4%

Source: ODEPA - CIREN.

2.2 ACTIVE CONTRIBUTION TO NATIONAL AND LOCAL DEVELOPMENT

Relative Contribution by Forestry, Farming and Livestock Industries to GDP



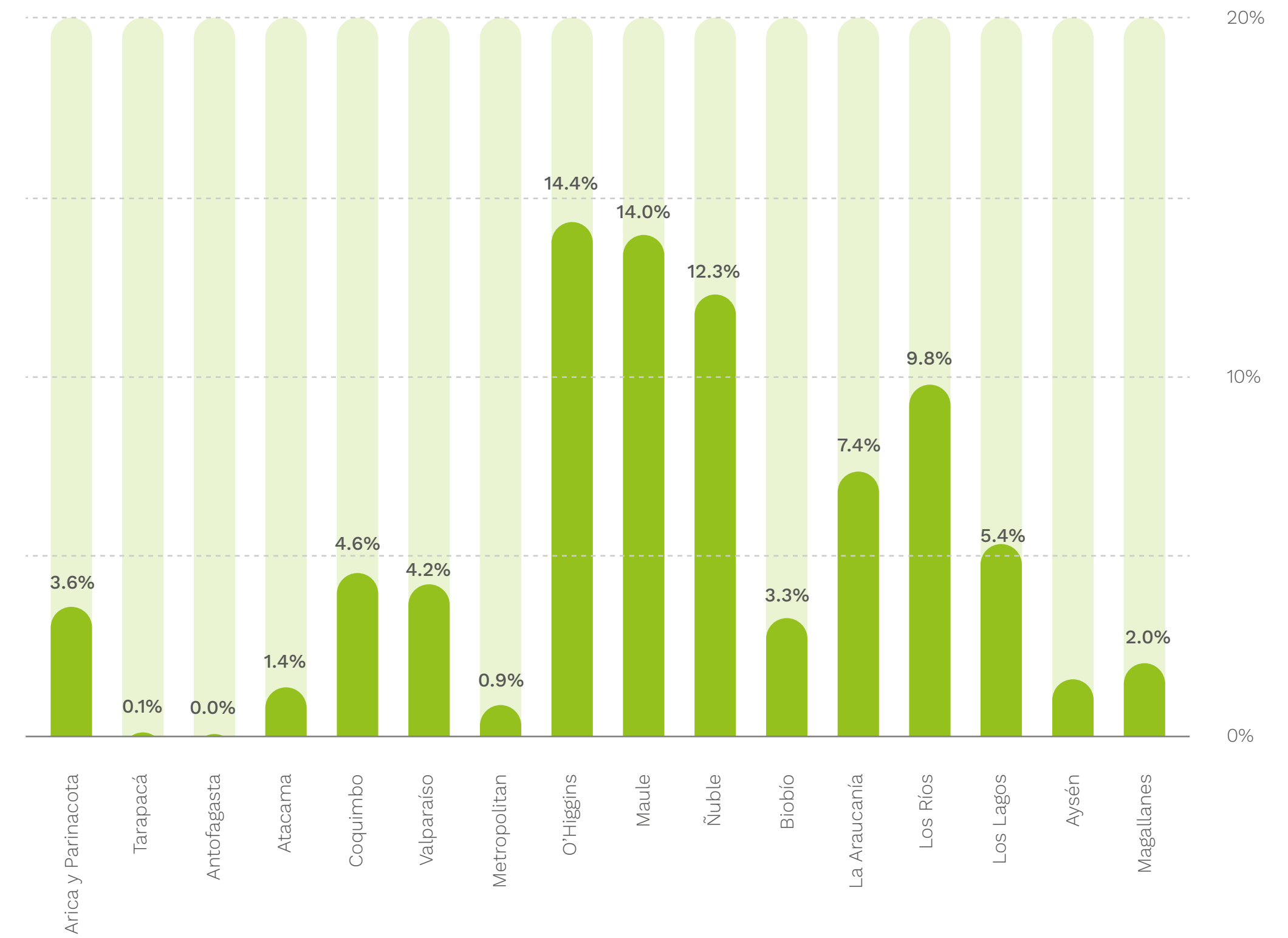
Note: manufacturing GDP (wines, processed fruits and meats) is not included.

Source: ODEPA with data from the Central Bank (May 2023).



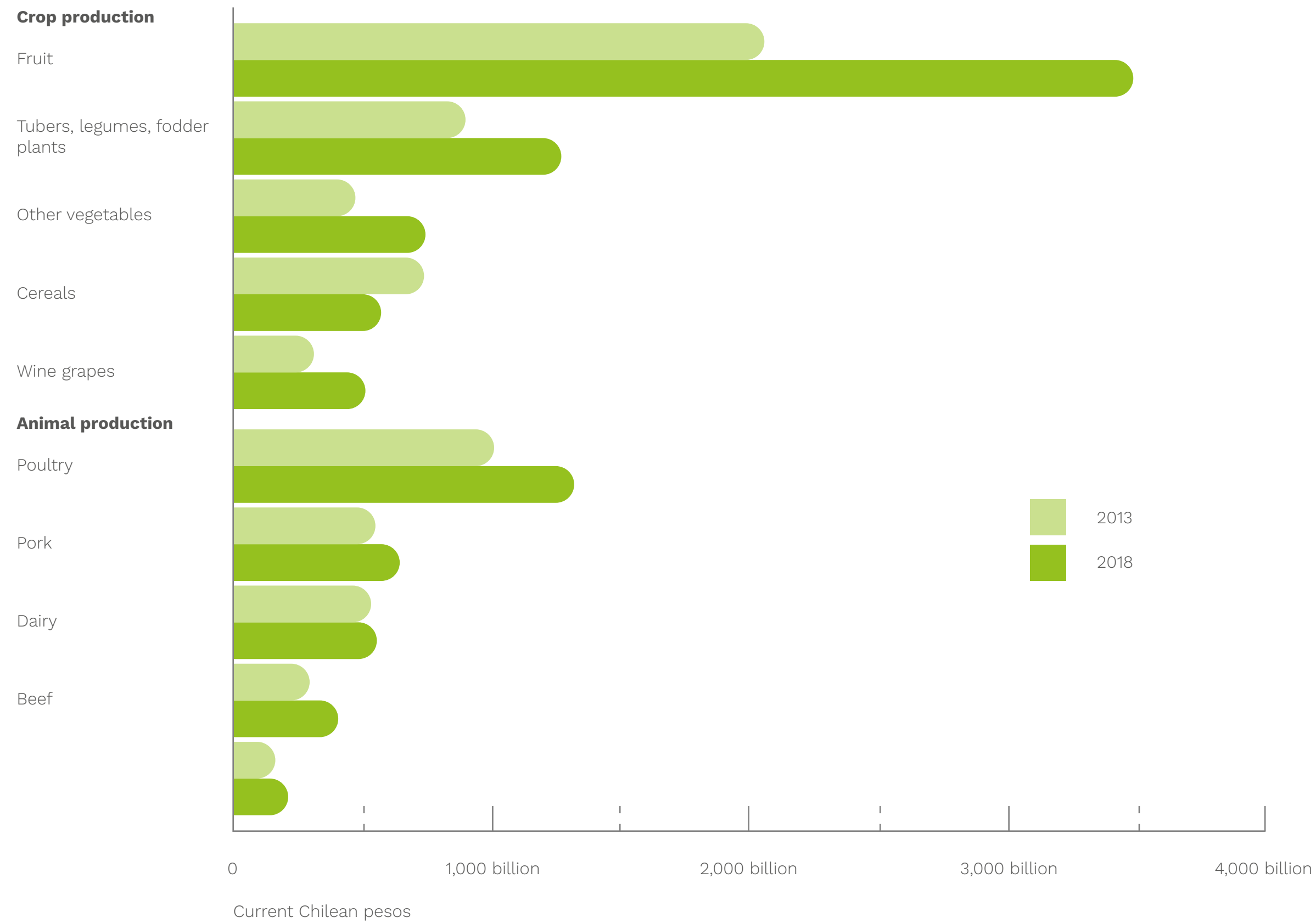


GDP Share of Forestry, Farming and Livestock Industries by Activity
at current prices, year 2022



Source: ODEPA with data from the Central Bank (May 2023).

Gross Value of Production

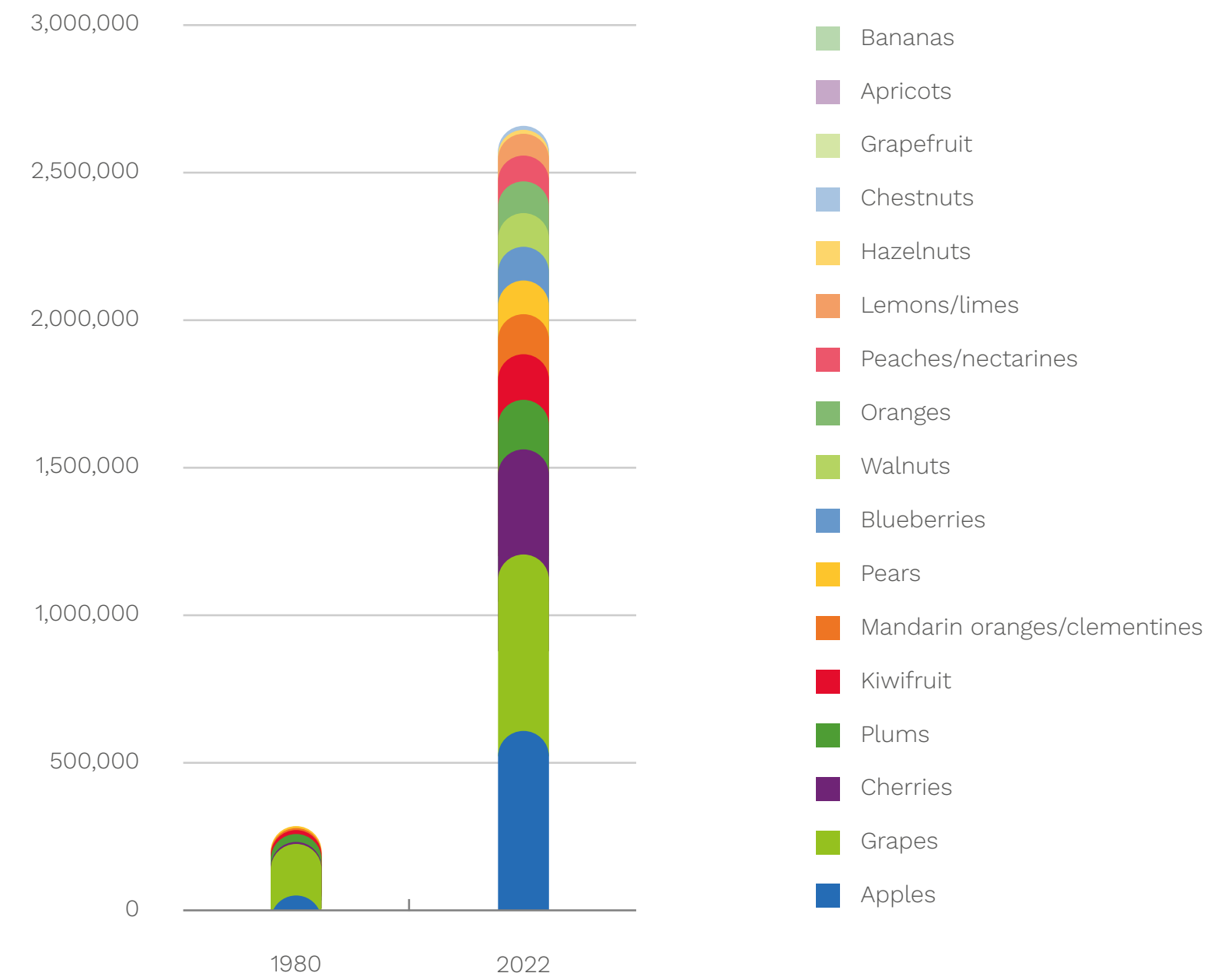


Source: ODEPA with data from the Central Bank (May 2023).

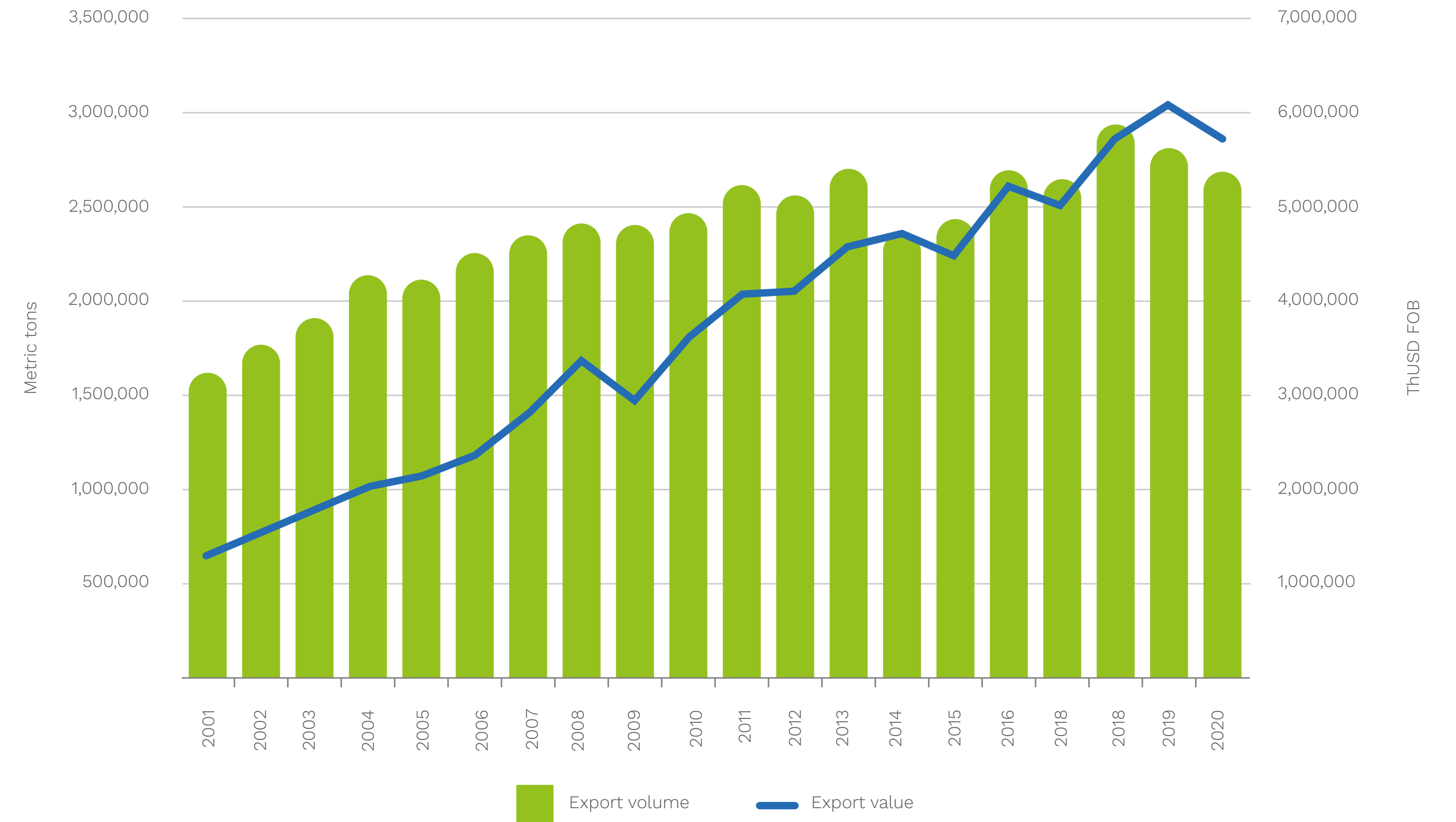
	2013	2018
In billions of current Chilean pesos		
Crop Production		
Cereals	737	565
Tubers, legumes, fodder plants	897	1,268
Other vegetables	476	746
Wine grapes	312	513
Fruit	2,053	3,478
Animal Production		
Beef	297	404
Pork	548	640
Poultry	1,005	1,321
Dairy	536	552
Other	161	214
Total (crops + animal)	7,061	9,702



Evolution of Fresh Fruit Export Matrix (metric tons exported of selected products)



Evolution of Fresh Fruit Export Volume and Value



Source: Prepared internally using data from FAOSTAT and Frutas de Chile.

Source: Prepared internally with ODEPA data

III. Sustainability for Frutas de Chile



III.

Sustainability for Frutas de Chile

The pressure on the agri-food sector in general, and export fruit production in particular, to be more sustainable comes from a powerful combination of changing social demands, consumer behavior, policy decisions and the requirements of major export fruit customers. In addition, there is greater concern for the fruit industry's legal and social responsibilities to care for and preserve the environment for future generations, and a better understanding of the importance of the environment to produce healthy, nutritious fruit. Thus, moving towards **sustainable fruit production** should meet the current needs and priorities of Chilean society and benefit the country's international positioning.

The fruit export sector will derive a long-term competitive advantage from demonstrating that it complies with the highest sustainability standards, making it a benchmark in this area. To achieve this ambitious objective, the Chilean fruit export sector will have to make important changes. This will require a coherent policy framework and a culture of innovation and continuous improvement throughout the fruit value chain.

The strategy for the fruit export sector identifies actions to make the industry more diversified, resilient and sustainable. Since more than 60% of the country's fruit production is exported, we must continue to push a policy of further diversifying export markets and developing new high-value markets. The next objective will be to boost the value of as much Chilean fruit as possible and guarantee that this higher value is shared throughout the value chain.

"It will require a coherent policy framework and a culture of innovation and continuous improvement throughout the fruit value chain."

The sector's strategy has been developed in a broad, complex and rapidly evolving context. Key issues that will shape the next decade include people and their social context; water and natural resource use; health and nutrition; and innovation, competitiveness and human capital. The shifting political environment and the international social and political agenda will shape the sector's opportunities and challenges over the next decade.

In this framework, **sustainable fruit production** must be profitable at all times (economic sustainability), have broad benefits for society (social sustainability) and have a positive or neutral impact on the natural environment (environmental sustainability). The sector's strategy establishes **three priorities** that must be met to develop such a system in our country.

PRIORITIES



Ecosystem Challenges

A fruit sector that understands and acts to meet the challenges posed by the ecosystem (social, political and environmental).



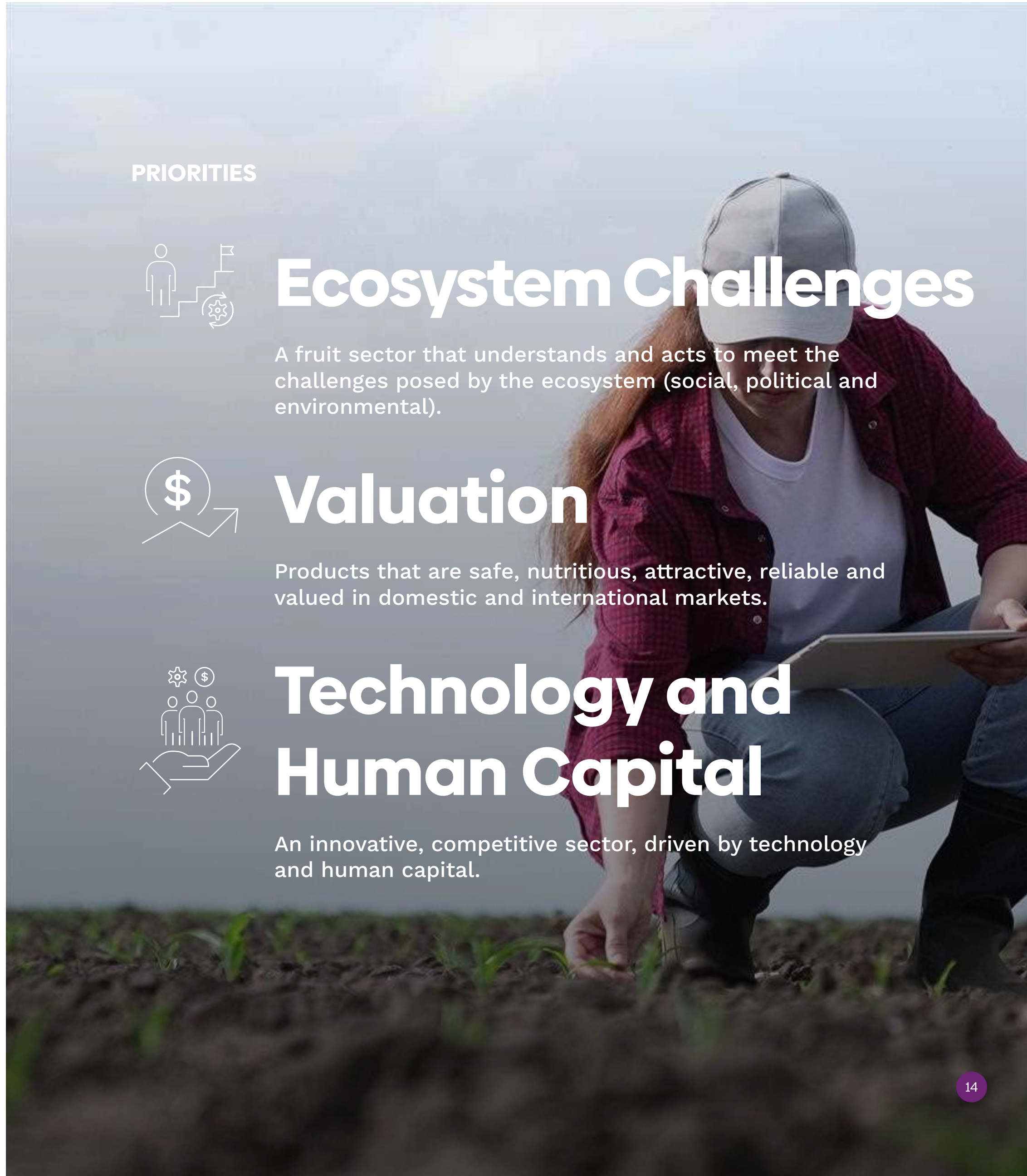
Valuation

Products that are safe, nutritious, attractive, reliable and valued in domestic and international markets.



Technology and Human Capital

An innovative, competitive sector, driven by technology and human capital.





IV. About This Report



"Moving in this direction requires a fruit sector that understands and acts to meet the challenges posed by the social, political and environmental ecosystems."

IV.

About This First Industry Sustainability Report

As part of an ongoing industry effort, the industry worked for six months in 2020 to develop its "2030 strategy." This is the fifth fruit sector strategy implemented since 2006, and was developed by a wide range of interested exporters and growers from across the sector, as well as various industry suppliers. While 2030 strategy is directly based on prior strategies, it represents a major shift in the industry's course towards sustainability, reflecting the expected context for the next decade.

The 2030 Strategy considers sustainability a concrete challenge: we must move quickly toward productive activity that has a positive or neutral impact on the

environment, produces broad benefits for people and, simultaneously, is economically viable at all times.

To move in this direction, the fruit sector must understand and act to meet the challenges posed by the social, political and environmental ecosystems, committed to offering safe, nutritious, attractive, reliable and valued products in domestic and international markets, and that is innovative and competitive, driven by technology and human capital.

Based on this analysis and reflection, Frutas de Chile joined forces with Fundación para el Desarrollo Frutícola (Fruit Development Foundation or FDF) to

create a Sustainability Working Group and a Social Sustainability Working Group, made up of industry professionals working directly in sustainability.

These groups of professionals worked throughout 2021 and 2022 to define the priorities that Frutas de Chile should promote industry-wide and highlight different proposals for action.

Objective	Proposals for Action
Prepare an industry sustainability report	<ul style="list-style-type: none"> • Develop a farm and packing house sustainability report for internal use that provides an industry benchmark of the main components of sustainability and information for sustainable management. • Develop a sustainability report for external distribution that outlines the sector's position on sustainability vis-a-vis public or private requirements and its yearly progress, and link it to the UN Sustainable Development Goals (SDGs). • Organize activities for sector companies to exchange experiences and share good sustainability practices among Fruta de Chile member companies. • Design and implement a plan to distribute the industry's sustainability report and contribute to the communications plan for industry positioning.
Reduce water consumption and GHG emissions by farms and packing plants.	<ul style="list-style-type: none"> • Develop and implement a management plan to reduce water consumption and GHG emissions by farms and packing plants. • Measure water consumption and GHG emissions. • Establish industry-wide targets and propose technological and management mechanisms to achieve them. • Estimate Water Footprint and Carbon Footprint at industry level.
Optimize the use of plastics on farms and in packaging materials	<ul style="list-style-type: none"> • Perform industry-level diagnostics and identify gaps with market requirements. • Design and implement circular economy plans (sustainability enabler). • Encourage and support the development and use of new containers and packaging that contribute to industry sustainability.
Promote links between exporting companies and their social ecosystem.	<ul style="list-style-type: none"> • Raise awareness of actions that companies carry out in their communities. • Systematize information and organize industry-wide dissemination activities (exchanging experiences) and external communication channels with a local focus, in coordination with the strategic pillar of Image and Communication.
Take action on water efficiency and rural drinking water solutions	<ul style="list-style-type: none"> • Intervene in the diagnosis, set up and maintenance of rural drinking water systems (law 20.998). • Conduct courses and dissemination and training activities (OTIC and OTEC). • Define and implement a model for financing and operating through the Food Export Council and FDF. • Conduct a series of seminars and lectures on water efficiency (focusing on international customers' sustainability requirements).
Support community development	<ul style="list-style-type: none"> • Develop and strengthen ties with local stakeholders (companies, suppliers, associations, etc.) and local authorities (municipality, GORE, CORE). • Design and implement relevant proposals for action (legal authorizations, support for local small business, horticultural specialization courses, etc.).

52
Fruit packing plants

145
Orchards

Following this effort to prioritize issues, the Sustainability Working Group developed a self-assessment instrument, which was applied between October 2023 and March 2024.

This instrument was based on data from the 2022-2023 growing season, collected from 52 fruit packing plants, representing 45% of the fruit processed during the season, and 145 orchards, representing 15.5 thousand ha of orchards nationwide.

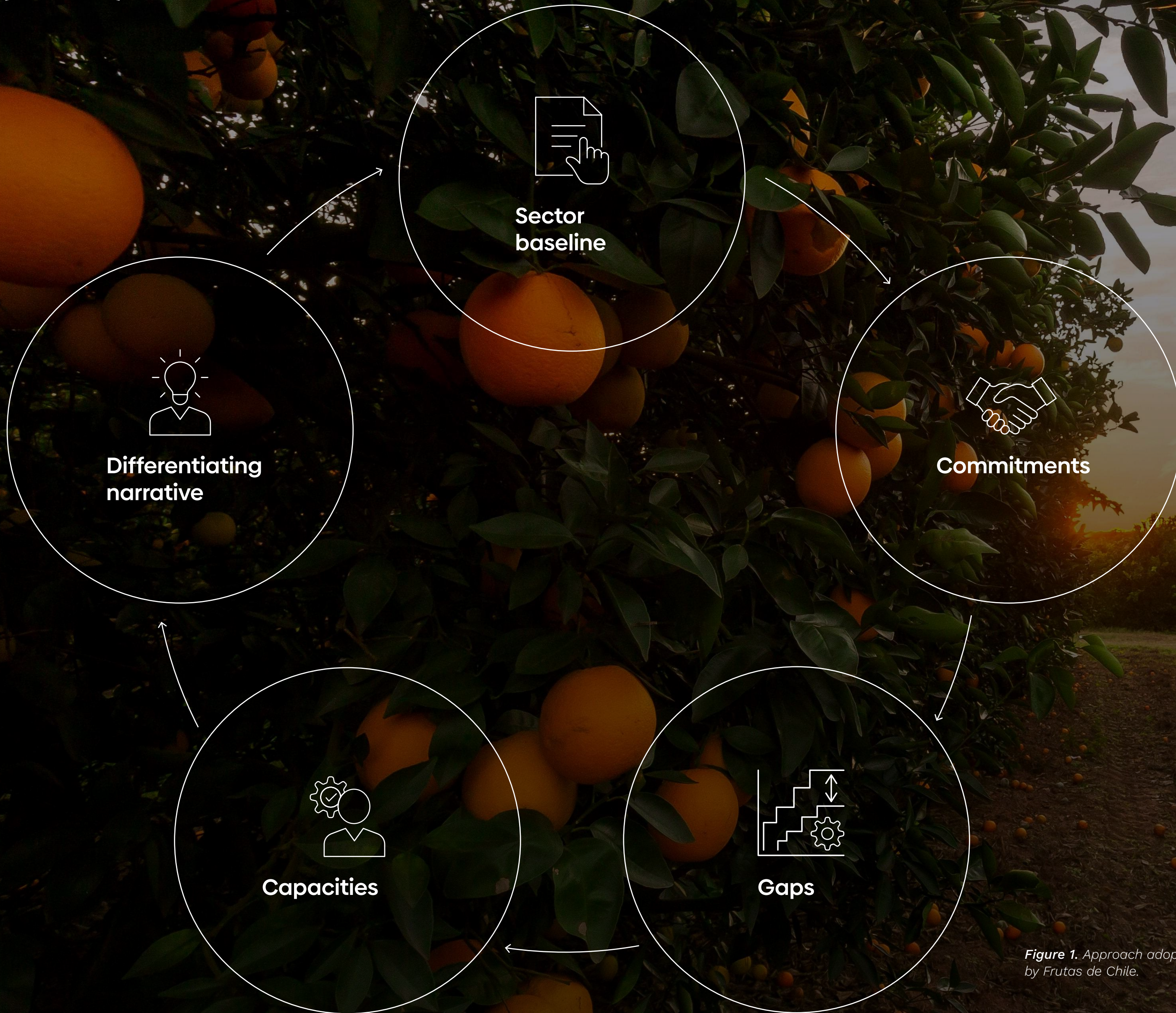
45%
of fruit processed during the season

15.5 thousand
hectares of orchards nationwide

The instrument is now the basis for the industry's first Sustainability Report. Although it will need to be continuously reviewed, updated and enhanced, it was designed to be flexible enough to not burden companies in the sector with additional demands for information beyond standards or certifications. Instead, it seeks to gather information that companies are already reporting in one of the various certification programs in which they participate.

V. Our Approach





VI. Our Approach

To address the challenge of moving the fruit export sector towards sustainability, Frutas de Chile has adopted an approach based on identifying the sector's baseline (environmental, social and transparency), establishing sector commitments and detecting and closing gaps. All this work is closely monitored and relies on the right technology to ensure the progress of the industry, as a whole, towards sustainability, which will be reflected in **periodic industry sustainability reports**.

Figure 1. Approach adopted by Frutas de Chile.

VI. Our Current Situation

VI. Our Current Situation

To establish a starting point and the industry's current situation, Frutas de Chile conducted a baseline study using primary and secondary information to estimate the sector's environmental and social footprint. This study is an integral part of this First Industry Sustainability Report.

It revealed, for example, that the industry's national average water footprint is 368 liters per kg of fruit processed (considering water consumption in orchards and fruit packing plants). Similarly, the industry's carbon footprint was estimated at 0.82 kg of CO₂ equivalent per kg of fruit exported, with variations among the different species, potentially explained by the means of transport used, as air transport contributes a higher carbon footprint than maritime shipping.

As for the industry's economic and social footprint, the study concluded that fruit production contributes significantly to GDP and employment in a large number of regions in the country (unlike other natural resource-based industries). Likewise, it identified that rural communities with greater fruit production have a lower multidimensional poverty rate than areas with less intense fruit production, which is a reflection not only of its contribution to employment, but also to production chains and the need for support services.

[Check out our baseline study here](#)



In addition, Frutas de Chile joined forces with Fundación para el Desarrollo Frutícola (FDF) and several member companies on the Sustainability Committee to develop a diagnostic tool to build indicators for the First Industry Sustainability Report. Collectively, the responding companies have 115 orchards (total surface area of 15,574 hectares) and 52 fruit packing plants, which processed a volume of 1,071,780 metric tons of fruit last year, representing 44.5% of fruit exported by volume. Some of the highlights identified by this tool include:

WATER

More than **90%**

of the water used by the fruit packing plants comes from deep wells, and their water intensity is **2.8m³ per metric ton** of fruit processed, with a significant monthly variation (greatest intensity in October, November and January).

At orchard level

52%

of water comes from surface sources

46%

from deep wells

77%

use technified irrigation

CIRCULAR ECONOMY

The intensity of containers and packaging materials is

117 kg per metric ton of fruit

Of these,

42% **30%**

is recycled plastics

is recycled cardboard and paper

In the fruit packing plants, the solid waste footprint is

35 kg **59%**

of organic and inorganic waste per metric ton of fruit processed

are components of a circular model

At the orchard level, the solid waste footprint is

9.5 **metric tons per hectare**

of which

88% is organic waste

ENERGY

Energy intensity in fruit packing plants is

193 Kwh
per metric ton of fruit processed

with

48%

of this energy from **non-conventional renewable sources.**

At the orchard level, it uses

25,345 Kwh
per hectare

of which

78%

comes from electricity.

WORKFORCE

88%

of the people employed in the fruit packing plants are **seasonal workers.**

11%

are permanent employees

53%

are women

47%

are men

During the year, the intensity of labor demand varies strongly, reflecting the seasonal nature of the activity, reaching

0.29 a 0.35

people per metric ton of fruit processed at the peak of the season.

The **occupational accident rate** in the fruit packing plants is

3.8%

and at orchard level is

2.7%

GOVERNANCE

100% of the fruit packing plants

have implemented **ethical-social policies** and **occupational health and safety management systems.**

94%

have enacted **environmental policies**

80%

have formally designated a **sustainability officer** and have prepared a sustainability report.

VII. Our Commitments

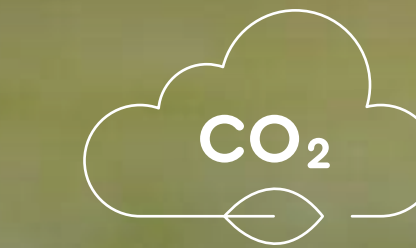


VII. Our Commitments

The change in production systems required by the current environmental and social context will not occur, either in scale or in speed without mechanisms to transform the desirable attributes of **sustainable export fruit production** into economic value.

Therefore, our strategy is based on making these desirable attributes part of the fruit export sector's value proposition.

In the short term, the differentiating attributes of Chilean fruit are:



Minimal carbon and water footprint



Minimal territorial impact



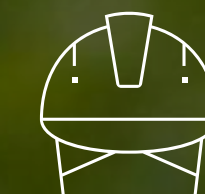
Equal opportunities (gender, ethnicity, etc.) in contracting or subcontracting



Respect for neighboring communities



Financial, fiscal and tax transparency



Respect for worker safety



VIII. The Path Forward

VIII. The Path Forward

In the coming years, the sector's efforts will focus on designing and executing initiatives to close gaps and make progress on sector ESG targets¹. It will also need to review the diagnostic instrument and foster sector participation.

In the medium term, the measurement instrument will be applied specifically for each species, which will require a new review and adaptation effort by the Frutas de Chile product committees, namely the Blueberry, Cherry, Citrus Fruit, Kiwifruit and Table Grape committees and any other new committees formed at the industry's request.

A system for monitoring and controlling sector commitments will also be designed and implemented to provide aggregate, up-to-date information on the sustainability of the fruit export sector.

Today, the fruit industry has vast experience and capacity and greater clarity regarding the challenges and opportunities in its ecosystem (local and international); it is also a more competitive industry with better development prospects than in past decades. For these reasons, the vision of an industry that generates prosperity for growers and exporters, as well as for surrounding communities and ecosystems, is a vision worth sharing.

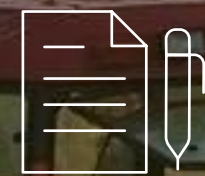
As we enter the next decade, this will help the industry boost the value its produce, that is, to produce more and better (from an environmental and economic point of view) and to help create jobs (direct and indirect), thereby contributing to poverty reduction and regional development.

This vision, however, requires work and collaboration from multiple agents, not only those directly linked to fruit production and exports, but also other public and private agents that act directly and indirectly in the value chain and in the national agri-food system at large. This coordinated effort must also be **a shared action, which will help mobilize resources and willpower to continue moving towards sustainability** and lay the foundations for the fruit industry's competitiveness in the future.

¹ From the acronym for "Environment, Social and Governance"



Construct sector baseline for Environmental and Social Footprint



Develop a guide or protocol for measuring and recording ESG indicators in companies



Design strategy to communicate and publicize sector action and commitments to key audiences



Prepare Industry Sustainability Report and long-term ESG targets



Design and implement initiatives to achieve sector ESG targets



Establish a mechanism for monitoring sector ESG progress

SHORT-TERM (2022-2023)

MEDIUM-TERM (2024-2027)

LONG-TERM (2026-2030)

Roadmap



ENVIRONMENT



SOCIETY



GOVERNANCE

SHORT-TERM (2024-2026)

Enhance mechanism for measuring carbon footprint (scopes 1 and 2)

Increase recycled content of material used at fruit packing plants

Increase proportion of NCRE at fruit packing plants

Increase technified irrigation in orchards

Reduce CO² eq in fruit packing plants and orchards (scopes 1 and 2)

Decrease energy intensity in fruit packing plants and orchards

Decrease agrochemical use intensity in orchards

Survey companies' frameworks of action for certifications with an environmental focus

Promote inclusion and diversity in fruit packing plants and orchards

Promote regular and safe migration programs for the agricultural sector

Minimize occupational hazards and accidents in fruit packing plants and orchards

Survey companies' frameworks of action for certifications with a social focus

Establish industry-wide commitments to full implementation of human rights at work

Disseminate and encourage adherence to the "Contractor's Decalogue"

Promote the new framework of labor competencies for the agricultural sector

Promote the creation of corporate social-ethical policies

Encourage companies to designate a sustainability officer

Transparent public relations activities at trade unions

Survey companies' frameworks of action for certifications with a governance and transparency focus

Promote the creation of environmental policies at the company level

Assess industry suppliers and customers in ESG matters

Increase company participation in industry ESG reporting

MEDIUM-TERM (2027-2030)

Implement "zero waste" programs at fruit packing plants

Design and implement circular economy programs at fruit packing plants

Strengthen the use of integrated sector climate data platforms (RAN and Geomatika)

Include the supply chain in carbon footprint measurement programs

Promote water recycling and reuse at fruit packing plants

Promote the statute for seasonal agricultural workers

Establish monitoring and follow-up programs for inclusion initiatives in fruit packing plants and orchards

Encourage and formalize social engagement programs and initiatives carried out by companies

Ensure full implementation of human rights at work

Industry-level ESG reporting

Promote responsible business practices at the industry level

Create a platform for recording and monitoring ESG indicators at industry level

Company-level ESG reporting

Define and adopt ESG standard for industry reporting

Full company representation in industry ESG reporting

LONG-TERM (2030-2050)

Design industry strategy for protecting and conserving biodiversity

Carbon neutrality in fruit packing plants and orchards

Promote companies' full integration in local development

Promote transparency throughout the supply chain

Promote supplier selection based on ESG criteria at the industry level

External audit of industry-level ESG reporting

IN SHORT...

Although we are not yet where we want to be, our industry recognizes that positive, sustainable change takes time. As a trade association, Frutas de Chile, our members and our people take responsibility for continuously improving our indicators and making progress towards our goals in this area. We know that we will be evaluated by our actions and the results we achieve, not just by our words.

"Our industry recognizes that positive, sustainable change takes time."



IX. Acknowledgments





IX. Acknowledgments

We are especially grateful for the contributions of Fundación para el Desarrollo Frutícola and AGROCAP.

Fruit Packing Plants

- Hans Leibbrandt, Agrícola Monfrut Ltda.
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- Nicolás Damm, Comercial Río Blanco
- Robert Stuart, Comercial Río Blanco
- Johanna Espinoza, David Del Curto S.p.A.
- Tamara Salazar, David Del Curto S.p.A.
- Andrés Delgado, Dole Chile
- Javiera Maurens, Exportadora e Inversiones Agroberries SpA
- Gabriel Correa, Exportadora Agua Santa
- Marisol Valdivia, Exportadora Atlas S.A.
- Rita Rojas, Exportadora Unifrutti Traders S.p.A
- Alfredo Barriga, Exportadora Unifrutti Traders S.p.A
- Marcelo Bavestrello, Exser Ltda.
- Marjolaine Ducaud, Fresh Del Monte
- Gloria Vidal, Frutera San Fernando
- Rodrigo Pérez, Frutera Aguas Blancas Ltda.
- Pia Walker, Hortifrut

- Daniel Benavides, San José Farms
- Fabienne Laneri, Jorge Schmidt y Cía.
- María Eugenia García-Huidobro, Prize
- Italo Vega, Polar Fruit
- Marcela Iturrieta, Rio King
- Luis Maino, Santa Elena
- Andrea Araya, Subsole
- Karina Neira, Subsole
- Magali Adasme, Subsole
- Constanza Lyon, Verfrut
- Jaime Marin, Vitafoods
- Alison Rifo, Westfalia Fruit Chile
- Daniela Dall'Orso, Westfalia Fruit Chile

Frutas de Chile would like to thank everyone who helped prepare this report, dedicating time, knowledge and experience for the benefit of Chile's fruit export industry.

Orchards

- Carolina Briones, Soc. Agr. El Alamo
- Berner Riffo, Soc. Agr. El Alamo
- Valentina Peñaloza, Garcés Fruit
- Luis Delgado, Soc. Agr. La Primavera
- Constanza Lyon, Soc. Agr. El Porvenir
- Cupertino García, Frutícola Viconto
- Sociedad Agrícola Copequén Ltda.
- Andrés Delgado, Inversiones del Pacifico
- Claudio Campillay, Soc. Agr. Agroking
- María Teresa Pérez, Agrícola San Agustín
- Andrea Araya, Agrícola Los Terrones





X. Industry Sustainability Indicators

X.

Industry Sustainability Indicators

10.1 FRUIT PACKING PLANTS

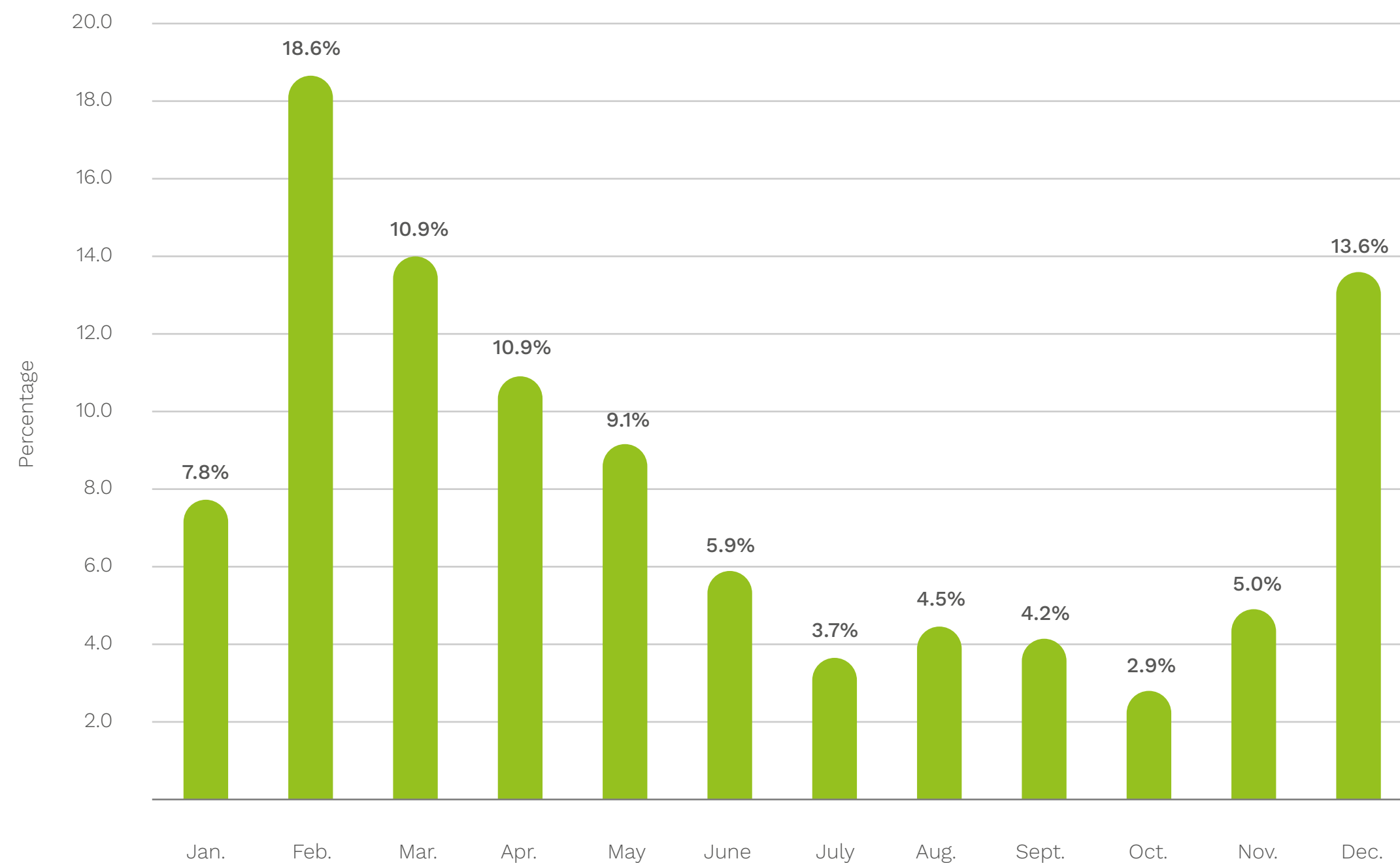
10.1.1 SUPPLY CHAIN

Of the reporting packing plants, 11% exclusively handle table grapes, 15% are mixed packing plants that process table grapes and other species, and 74% pack other species but not grapes.

The plants with the largest processing capacity generally pack up to five species, operating practically

the whole year. One particular plant packs up to seven species. Grape packing plants generally pack only table grapes.

Monthly distribution of the volume of fruit processed in fruit packing plants





Packing plants receive fruit from an average of 64 agricultural suppliers per facility. However, 48% of plants source from 100 or more suppliers.

Number of Agricultural Suppliers	Packing Plants (%)
More than 100 suppliers	48
50 to 100 suppliers	13
10 to 40 suppliers	25
Less than 10 suppliers	13

Packing Plants (%) by Number of Agricultural Suppliers



Regarding the size of fresh fruit suppliers delivering to packing plants,

27% are small growers (less than 12 ha) **63%** are growers with up to 50 ha of land

In other words, they are small and mid-sized growers.

Annually, packing plants consume

267,562 metric tons of containers and packaging materials.

In this case, intensity is defined as the amount of materials per metric ton of fruit. For this industry, the figure is

117 kilos of packaging materials per metric ton of fruit.

Type of Supplier Agricultural	Percentage Distribution (%)
Small agricultural suppliers (less than 12 ha)	27
Mid-sized agricultural suppliers (12.1 to 50 ha)	36
Large agricultural suppliers (more than 50 ha)	37

Criteria	(%)
Plastic packaging	50.2
Cardboard packaging	49.8

Percentage Distribution of Agricultural Suppliers by Size



These materials have the following average percentage of recycled content:

42% for plastics **30%** for paper and cardboard





On average, a packing plant has

4

certifications focused mainly on food safety

2,5

certifications per facility

1,1

social certifications per facility



Food Safety

These include preventive measures to maintain product safety, ensure demonstrable traceability and train people to work in a safe environment and apply the necessary preventive measures. The

international standards. Failure to comply will result in non-certification. The three most common types of certifications are summarized below:

most common certification for farms is Global G.A.P., which goes beyond food safety aspects. Its most recent versions feature about 40% environmental content.



Social

These require full compliance with domestic legislation, plus all necessary measures to provide people with decent work and no discrimination of any kind.



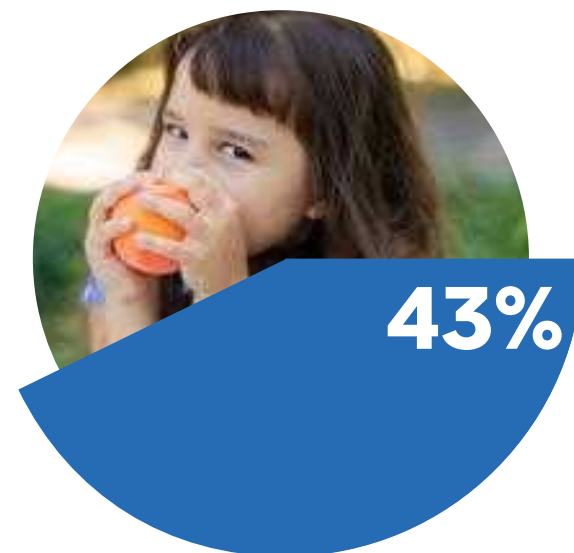
Management

These refer to measures to maintain product traceability from the acquisition of raw materials through all processes until delivery to the customer.

Area of Certification	Percentage (%)	Average Certifications per Facility	Range of Certifications per Facility
Food Safety	43	2.5	1 to 4
Social Aspects	19	1.1	0 to 3
Environmental Aspects	5	0.3	0 to 2
Management Systems	19	1.1	0 to 3
Organic	14	0.7	0 to 5



Percentage (%) of Certifications by Area



Food Safety



Social Aspects



Environmental Aspects



Management Systems



Organic

10.1.2 ENVIRONMENT

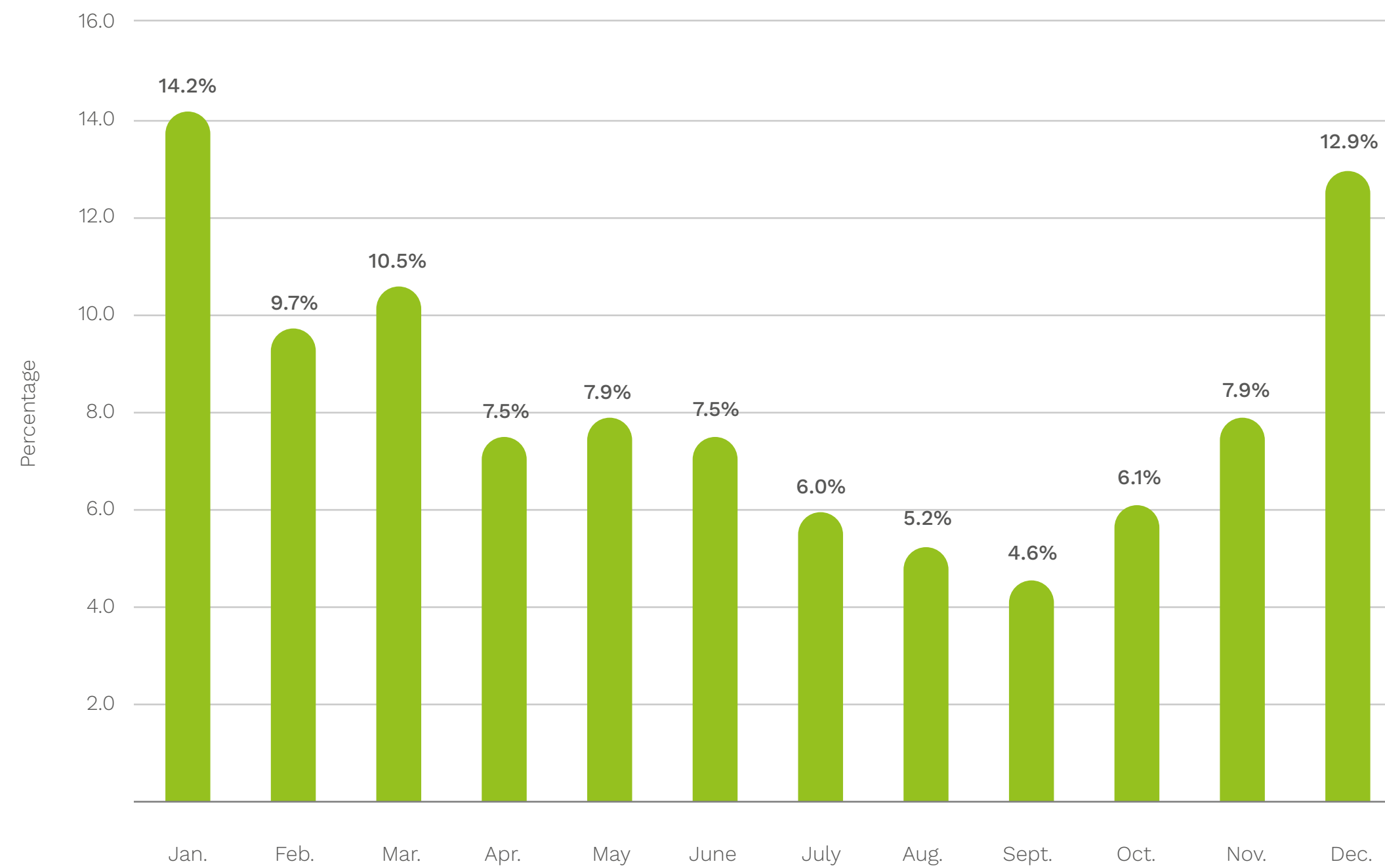
WATER

Total annual water consumption by fruit packing plants is

6,749,316 m³

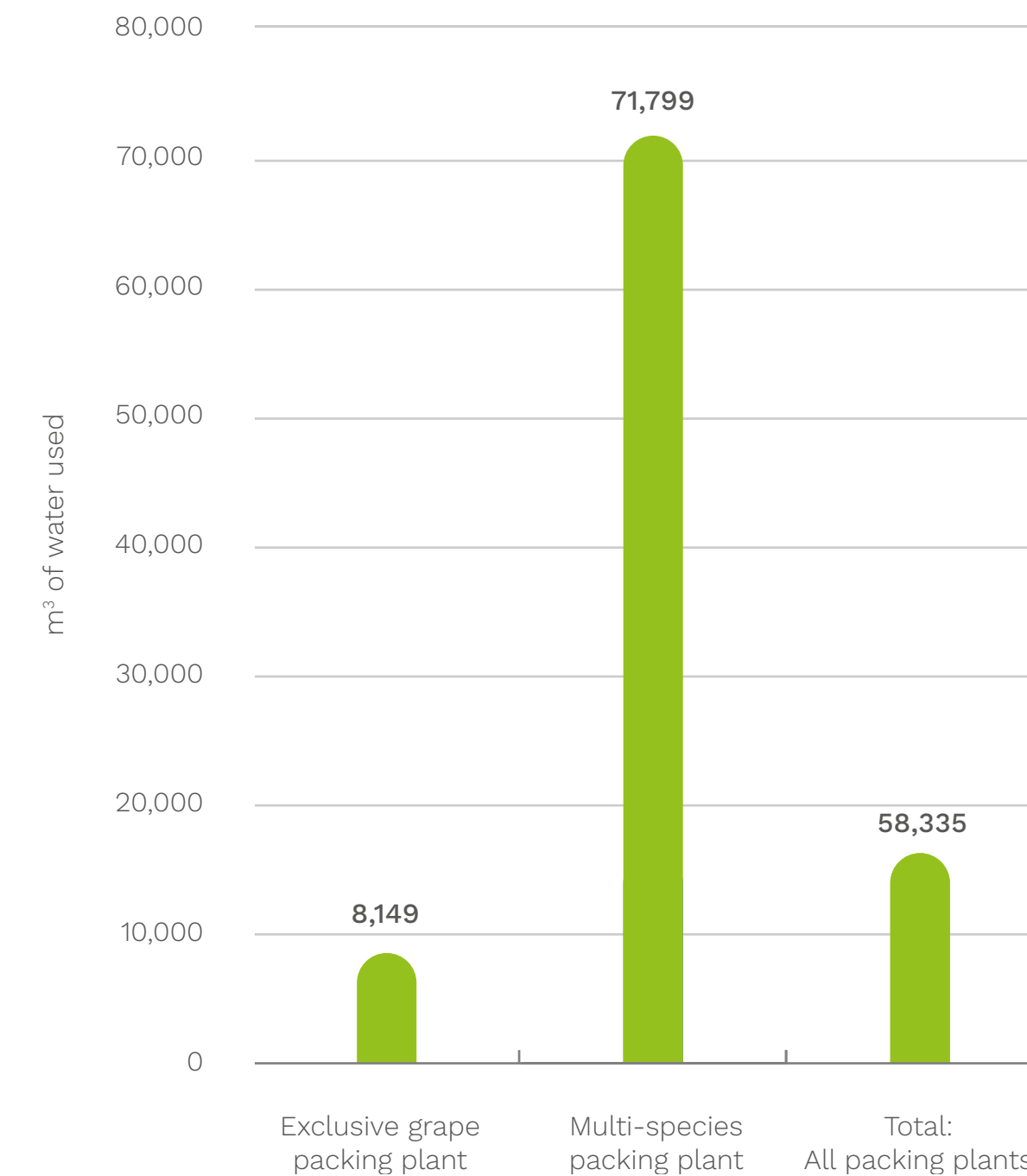
Packing plants that exclusively handle table grapes process them in dry conditions, so their water consumption profile is different from packing plants for other species.

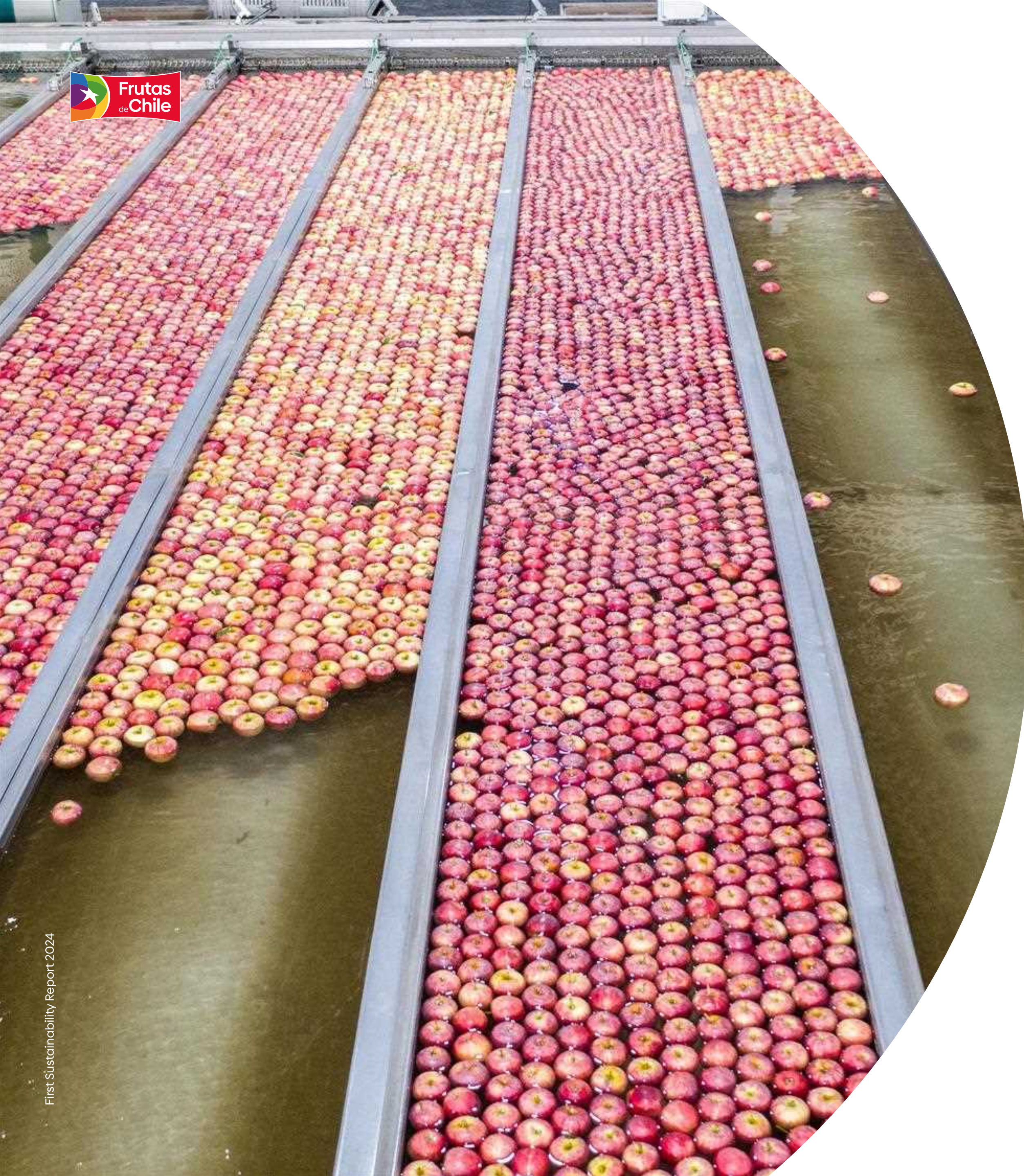
Monthly Distribution of Water Consumption (%)



Criteria	Average Consumption per Facility (m ³)	Distribution (%) per Facility
Exclusive grape packing plant	8,149	3.0
Multi-species packing plant	71,799	97.0
Total: All packing plants	58,335	100.0

Average Annual Consumption by Facility Type (m³)

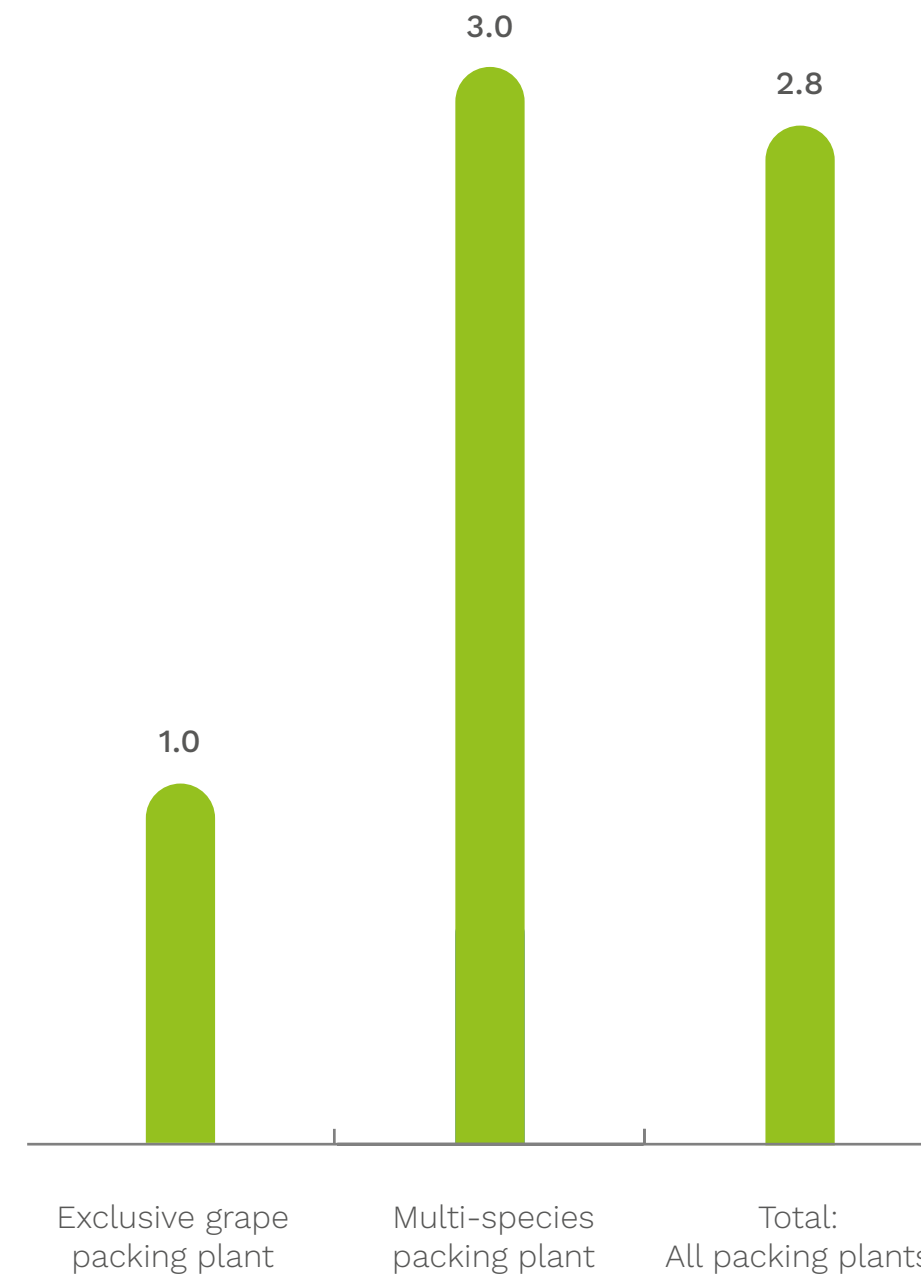




The previous figures give one an idea of the total volume of water consumed. However, the information is standardized using the concept of water intensity, or the volume of water per metric ton of fruit. This figure is

2.8 m³
of water per metric ton of fruit

Water intensity (m³ per metric ton of fruit)



ENERGY

The total energy used annually at the packing plants is

814.7 million kWh.

Total energy consumed

814.7
millions of kWh

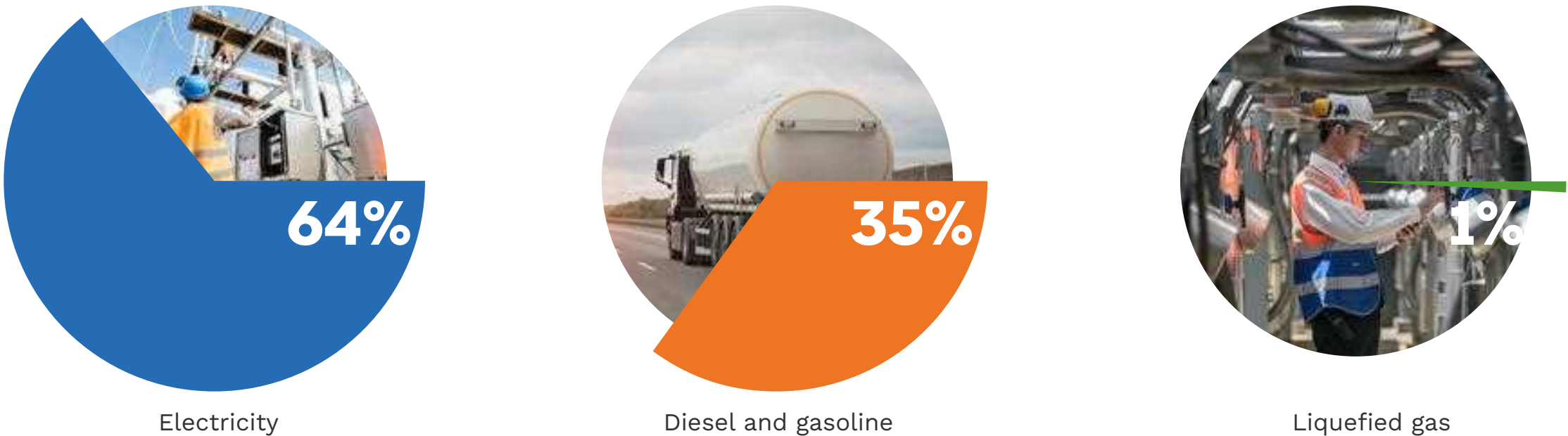
Energy sources

Electricity:
465.2
millions of kWh

Other energy sources
(oil, gasoline, gas):

349.5
millions of kWh

Distribution (%) by Energy Source, in kWh



Distribution (%) by Monthly Electricity Consumption

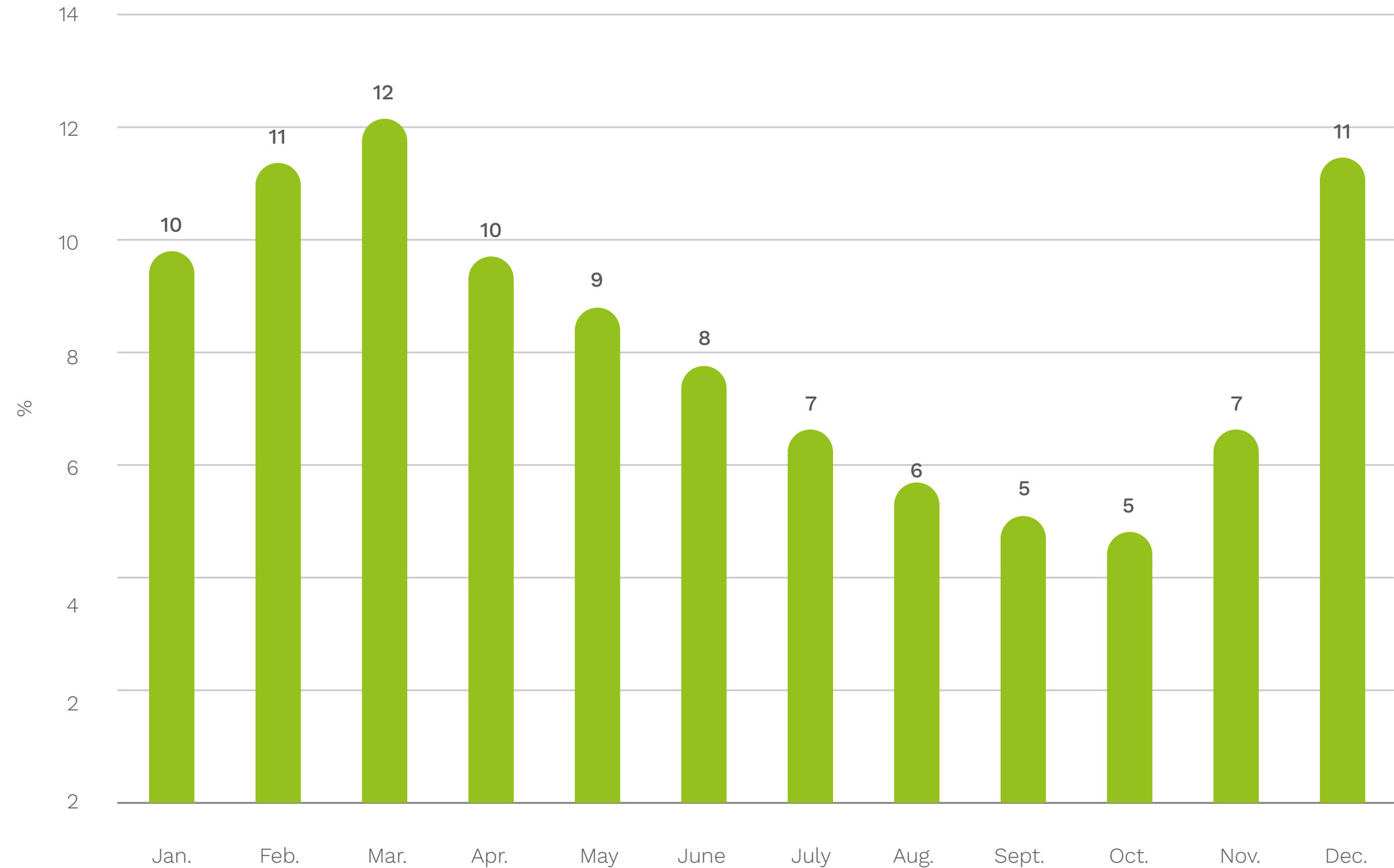
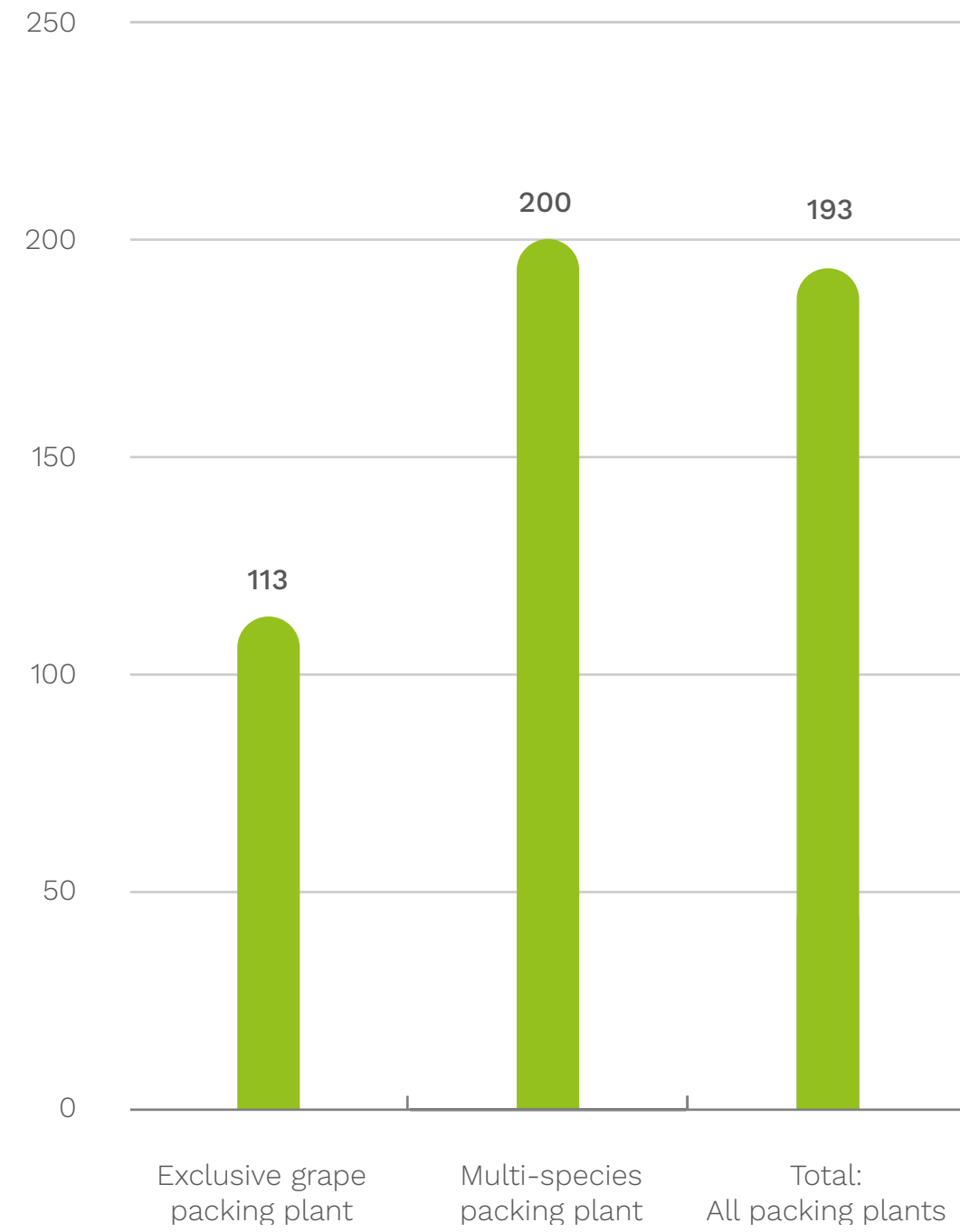
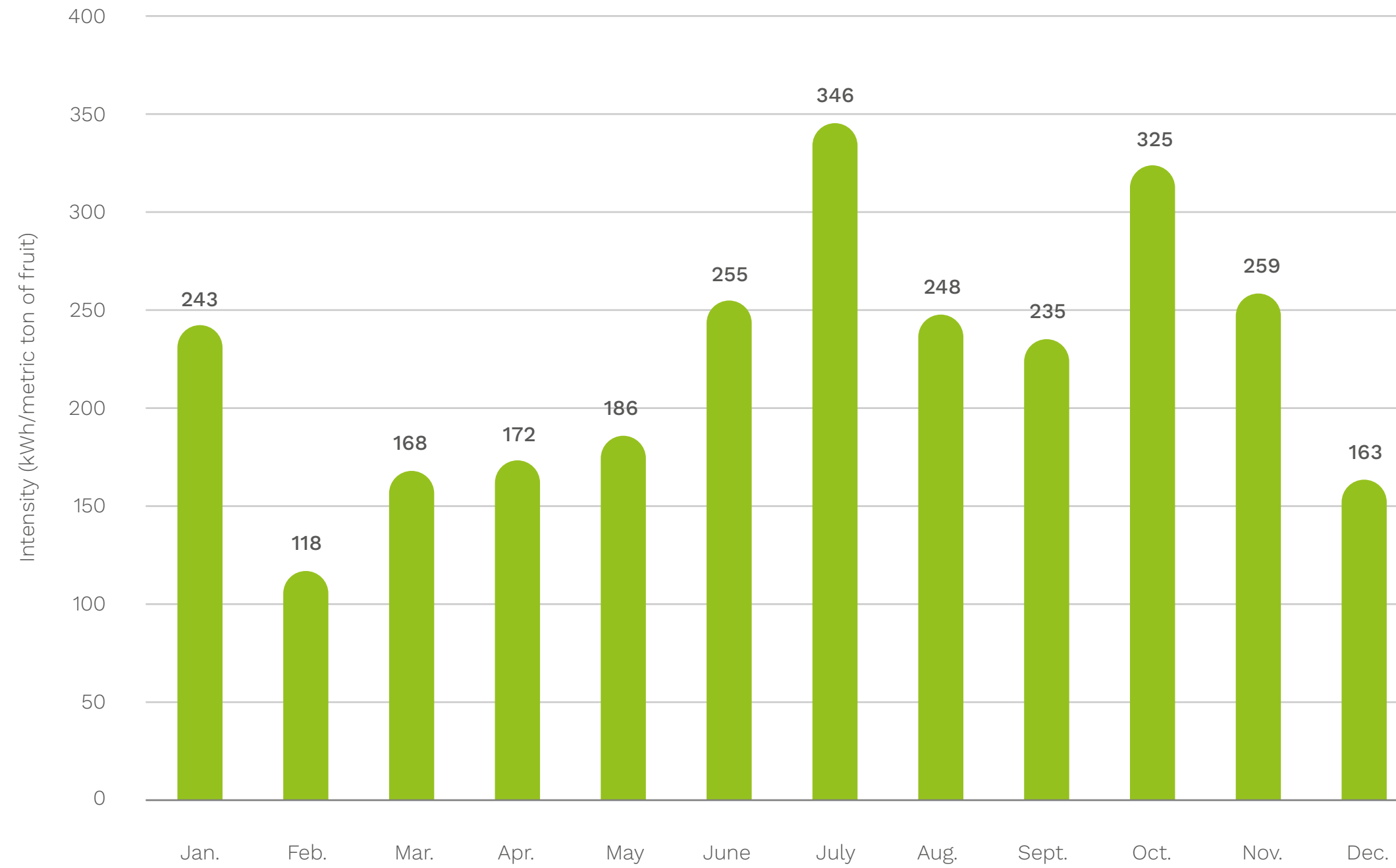


Table grape packing plants, which are seasonal in nature, have a different profile for energy intensity.

Energy Intensity (kWh/metric ton of fruit)



Monthly Energy Intensity per Packing Plant (kWh/metric ton fruit)



51%

of the electricity used in packing plants is from non-conventional renewable sources.

	Electricity from Non-conventional Renewable Sources (%)
Grape packing plants	13.0
Multi-species packing plants	50.0
All packing plants	48.2

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Inicio | ¿Quiénes somos? | Regiones | Servicios especiales | Enlaces de interés

Seleccione una región | Seleccione estación | Ver Datos

Lo Herrera	Hoy	Sabado	Domingo	Lunes	Martes	Miercoles	Jueves
19.5°C	26.3°C / 9.2°C	28.3°C / 7.3°C	20.9°C / 13.5°C	17.8°C / 11.2°C	15.8°C / 11°C	24.1°C / 10.3°C	21.4°C / 12.2°C

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Sistema de Información Geográfica de la fruticultura chilena

Proyecto impulsado por **CORFO** y **Frutas de Chile**

Fundación para el Desarrollo Frutícola | Portal Geomatika | Portal Agromet | Datos Agroclimáticos | Portal de Mantención

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CLIMATE ADAPTATION

Through Fundación para el Desarrollo Frutícola (FDF), Frutas de Chile helps maintain the Agroclimatic Network (Red Agroclima), which has over 200 automatic agroclimatic stations located on farms throughout Chile that provide information every 15 minutes.

Using specialized software, this information is processed and daily reports are issued, allowing growers to take preventive measures and better cope with climate change. The information is also provided on the Geomatika platform, which shows the scope and coverage of weather variables of interest in each area.

The Agroclimatic Network is part of the Agricultural Ministry's National Agroclimatic Network.

CIRCULARITY

59%

of solid waste disposal is circular, which is described in three ways in this report:



Destination of solid waste.



Percentage of packing plants that send plastic, paper and cardboard materials for recycling.



Percentage of recycled content of plastic and cardboard containers.



Waste Destination	(%)
Landfill	28
Recycling	20
Compost	15
Plastics and cardboard for recycling	15
Other miscellaneous uses	13
Animal feed	9

Type of Waste Recycled	% of Plants Recycling Waste
Plastic	45.1
Paper and cardboard	72.5

The packing plants use plastic containers with an average recycled content of 42% and the range shown below:

Average Percentage of Recycled Content in Plastic Containers/Packaging	Range of Percentage of Recycled Content in Plastic Containers/Packaging
42.2	0 to 85

Percentage Distribution of Waste Destination



The packing plants use cardboard containers with an average recycled content of 29.6% and the range shown below:

Average Percentage of Recycled Content in Cardboard Containers/Packaging	Range of Percentage of Recycled Content in Plastic Containers/Packaging
29.6	0 to 55%



AGROCHEMICALS

Of the reporting facilities,

21%

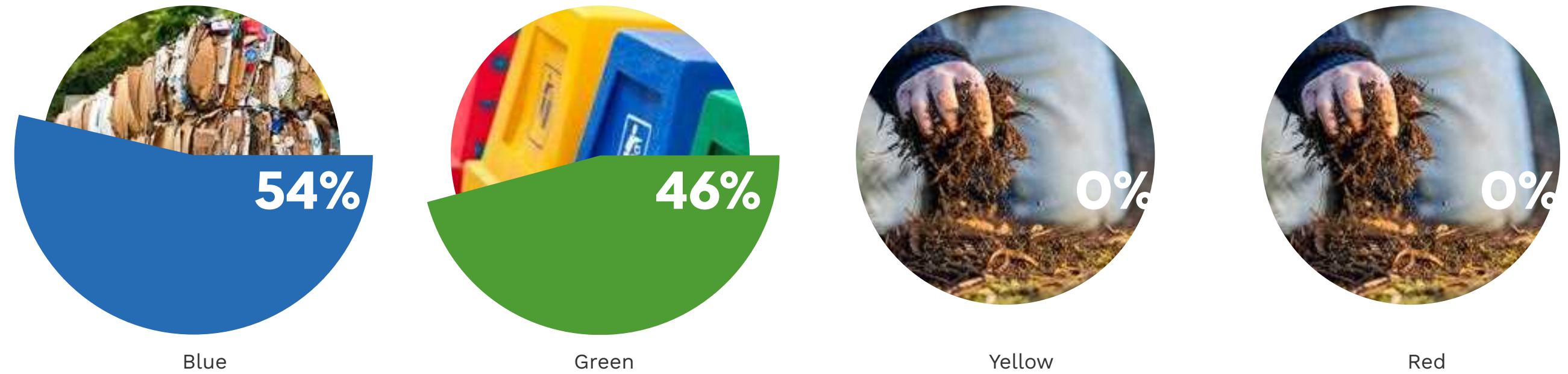
claims not to use post-harvest agrochemicals and in packing plants that do use them

99.5

of the products are low-hazard or no-hazard, according to the SAG toxicological classification, as shown on the product label.

Agrochemical Classification	% of Product Used
Blue	53.7
Green	45.8
Yellow	0.5
Red	0.0

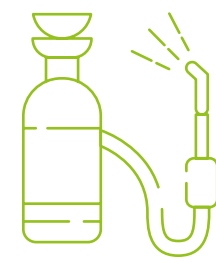
Distribution of Agrochemicals by SAG Classification



Therefore:



No less than **21%** of packing plants use no agrochemicals



Some packing plants process species that require agrochemical use. None of these plants use products with a hazardous SAG toxicological classification and **99.9%** of the reported products are classified as "not normally hazardous" (green label) or "low-hazard" (blue label).

100%

of packing plants take samples for multi-residue analysis of each grower's fruit, either at farm- or finished-product level, to ensure that the fruit does not exceed the residue limits set by different markets.

These analyses are performed by independent accredited laboratories.



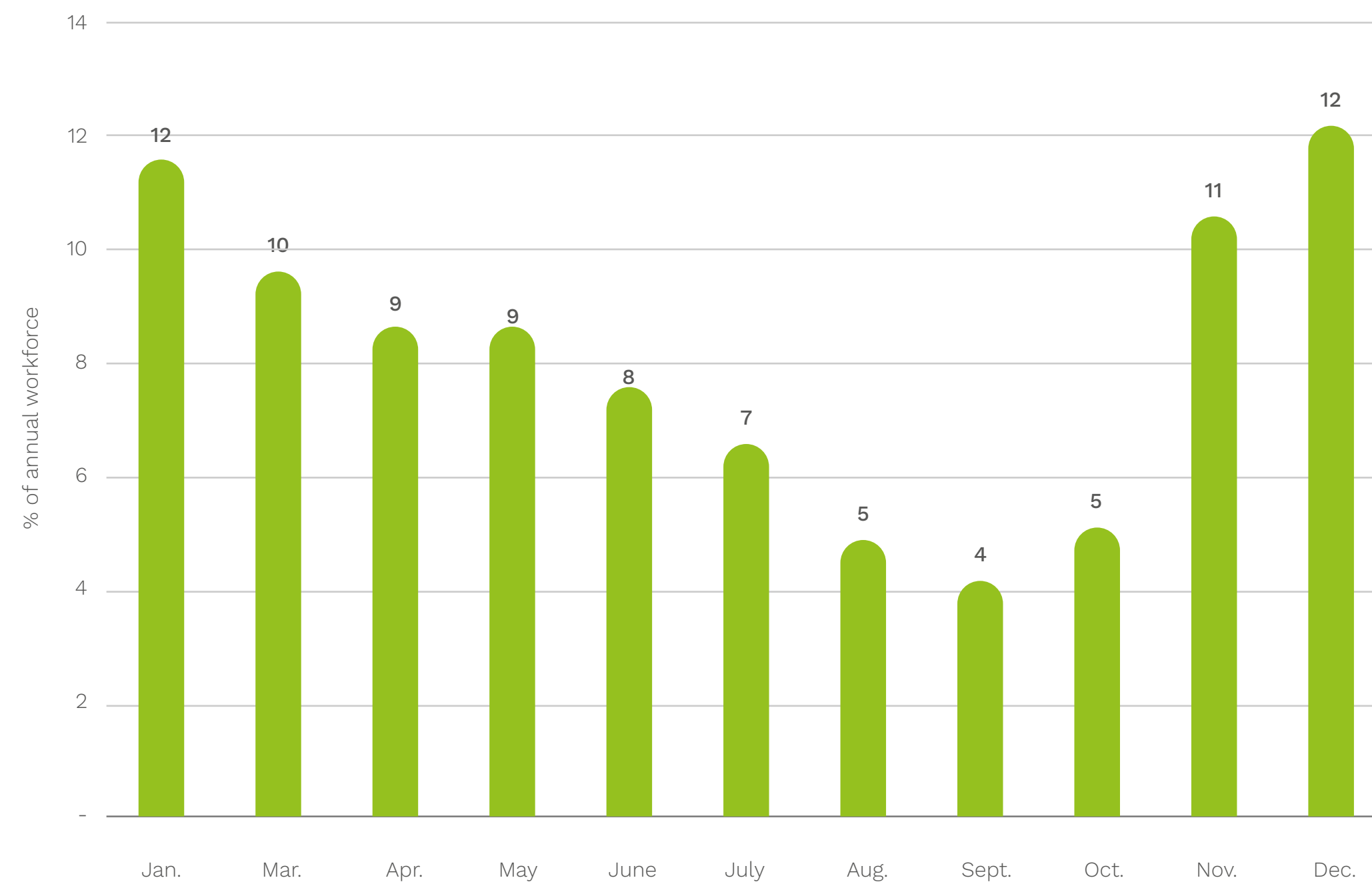
10.1.3 SOCIETY

The total annual direct labor force employed by the fruit packing plants numbers 385,675 people. Given its variable nature, the fresh fruit packing industry is characterized by two aspects:

- a. High seasonality in terms of the number of personnel required, so there is a significant difference in the annual number of permanent and temporary personnel.
- b. Variability within its seasonality, based on each species' volumes and harvest dates, which mark the beginning of operations for each variety. This is reflected in the monthly change in the number of people working in the packing plants.

	(%)
Total people employed	100.0
Temporary employees	88.5
Permanent employees	11.5

Monthly Distribution (%) of Workforce by Active Payroll



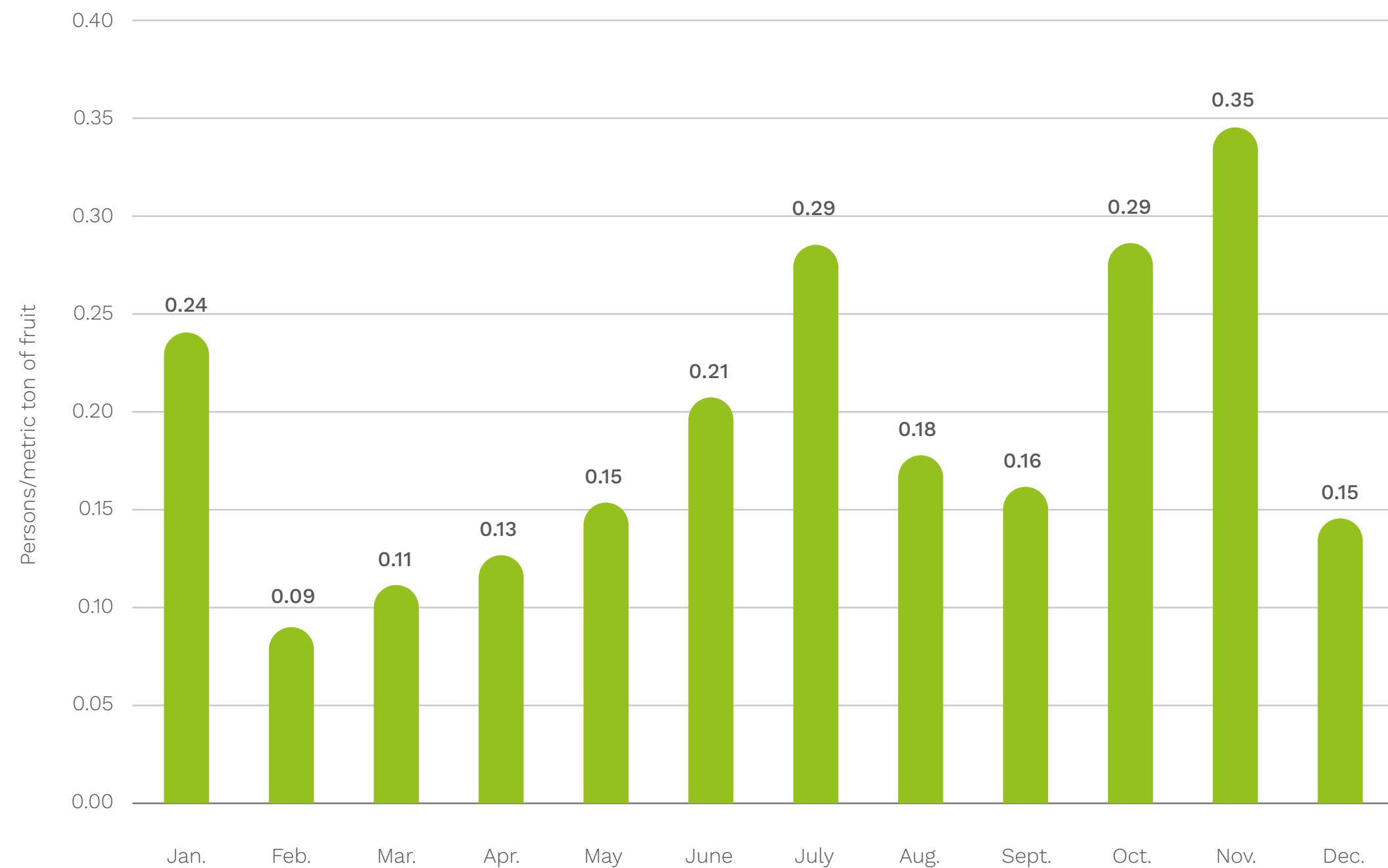
Labor intensity is defined as the number of people per metric ton of fruit. The average annual labor force intensity is

0.16

people per metric ton of fruit, but this figure is also affected by the sector's seasonality.

Gender	(%)
Female	52.9
Male	47.1

Monthly Change in Labor Force Intensity (persons/metric ton of fruit)



HEALTH AND WELL-BEING

The average annual accident rate per plant is 3.8%. The total number of training hours per year per packing plant is 6,534. On average, each year 684 people per packing plant were trained.

3.8%

average annual accident rate

6,534

total hours of training per year

684

individuals trained annually

10.1.4 GOVERNANCE FOR SUSTAINABILITY

Sustainability governance programs are prominent in the packing plants, demonstrating management's commitment to support necessary sustainability measures.

100%

of packing plants:

- Have enacted an ethical-social policy
- Have established an occupational health and safety management system

94%

of packing plants:

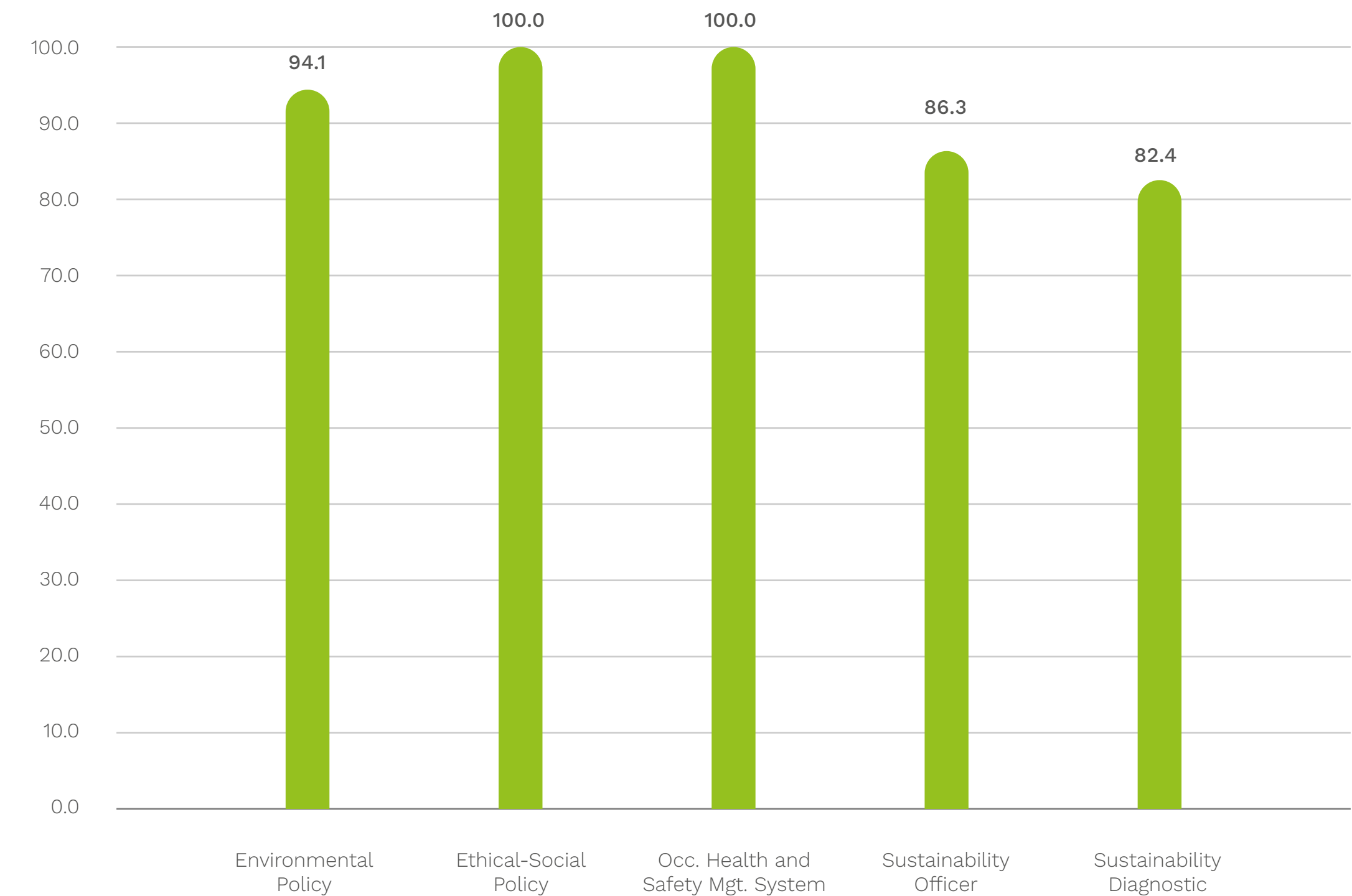
- Have enacted an environmental policy

Between

80% and 85%

- Have formally designated a sustainability officer and
- Have prepared a sustainability report

Packing Plants (%) with Sustainability Governance Actions



10.2 ORCHARDS

10.2.1 SUPPLY CHAIN

The following tables illustrate the most commonly grown species and the number of species per production unit:

Species	Percentage of Reported Fields with the Species
Cherries	57
Table grapes	23
Stone fruit	22
Blueberries	20
Apples	28
Citrus fruits	11
Kiwifruit	12
Avocados	7

Number of Species on the Farm	% of Farms
1	46
2	27
3	24
Over 3	2

The main certifications for orchards fall into the following categories:



Food Safety

In the case of farms, the most common certification is GLOBAL G.A.P., which goes beyond food safety aspects. Its most recent versions feature about 40% environmental content.



Social

These require full compliance with domestic legislation, plus all necessary measures to provide people with decent work and no discrimination of people. The most widely used certification is GRASP.



Environmental

This basically refers to all measures needed to maintain and/or enrich the production ecosystem and its surroundings. The most widely used is Spring, which focuses on water care.



10.2.2 ENVIRONMENT

WATER

Total annual water consumption by an average farm is

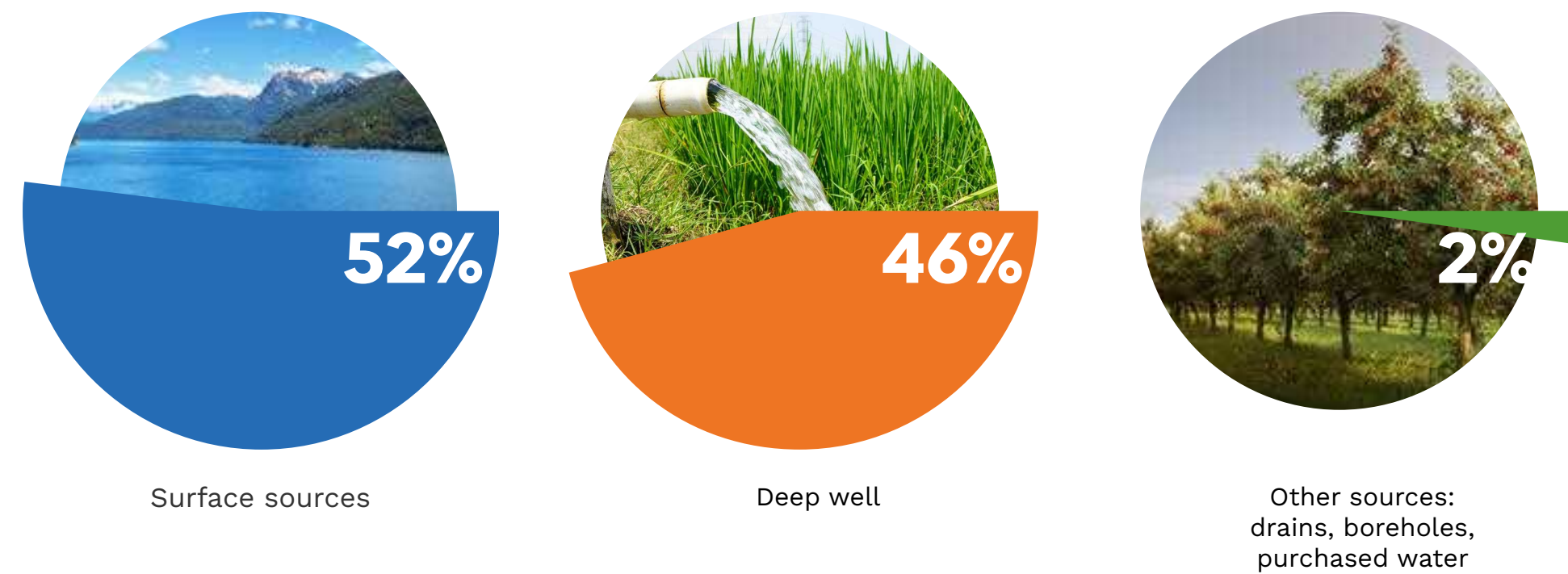
8,463 m³ per ha.

This water comes primarily from surface sources, accounting for

52%

of the volume used, while deep well water makes up the remaining 46%. In many cases both sources are used. Namely, surface water is used for irrigation and well water is used to apply agrochemicals for food safety reasons.

Water by Source (%)



77%

of orchards use technified irrigation, which reflects efficient water use.

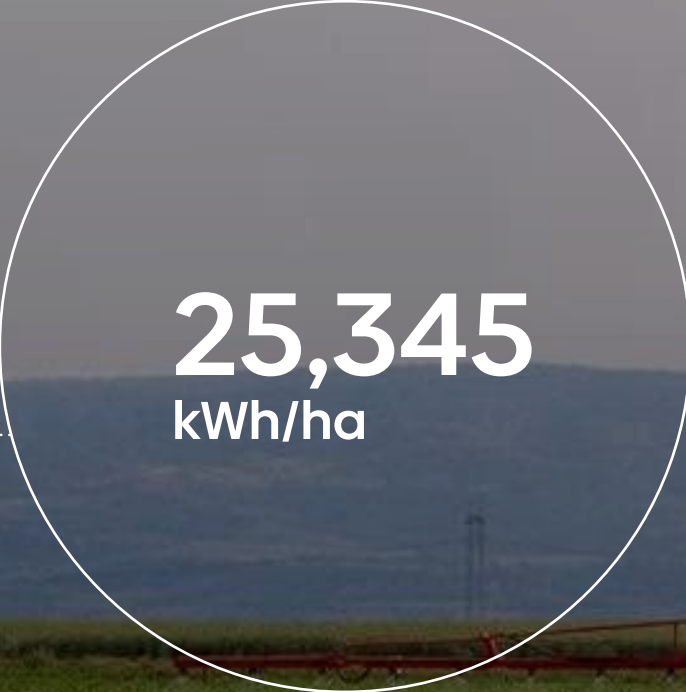
Type of irrigation used (%)



ENERGY

Total annual water consumption by an average farm is

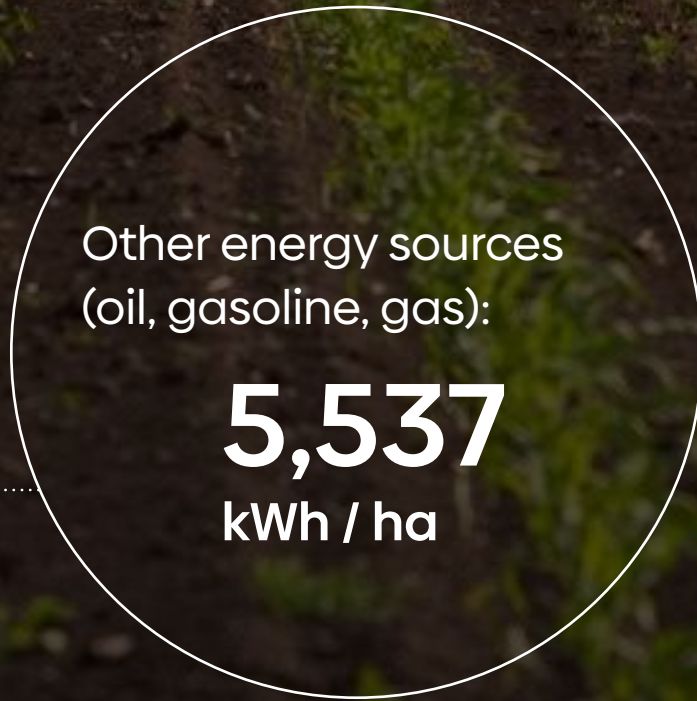
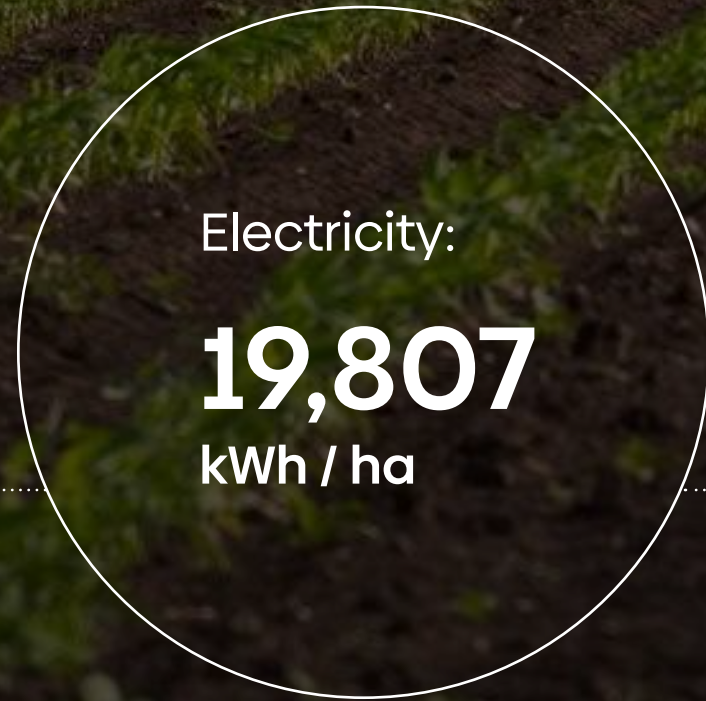
Total energy per ha



Distribution (%) of Energy Consumed on Farms by Source



Energy sources



12.2% **16%**

of the electricity used on farms is from non-conventional renewable sources per NCRE power supply agreements.

of farms have solar panels.

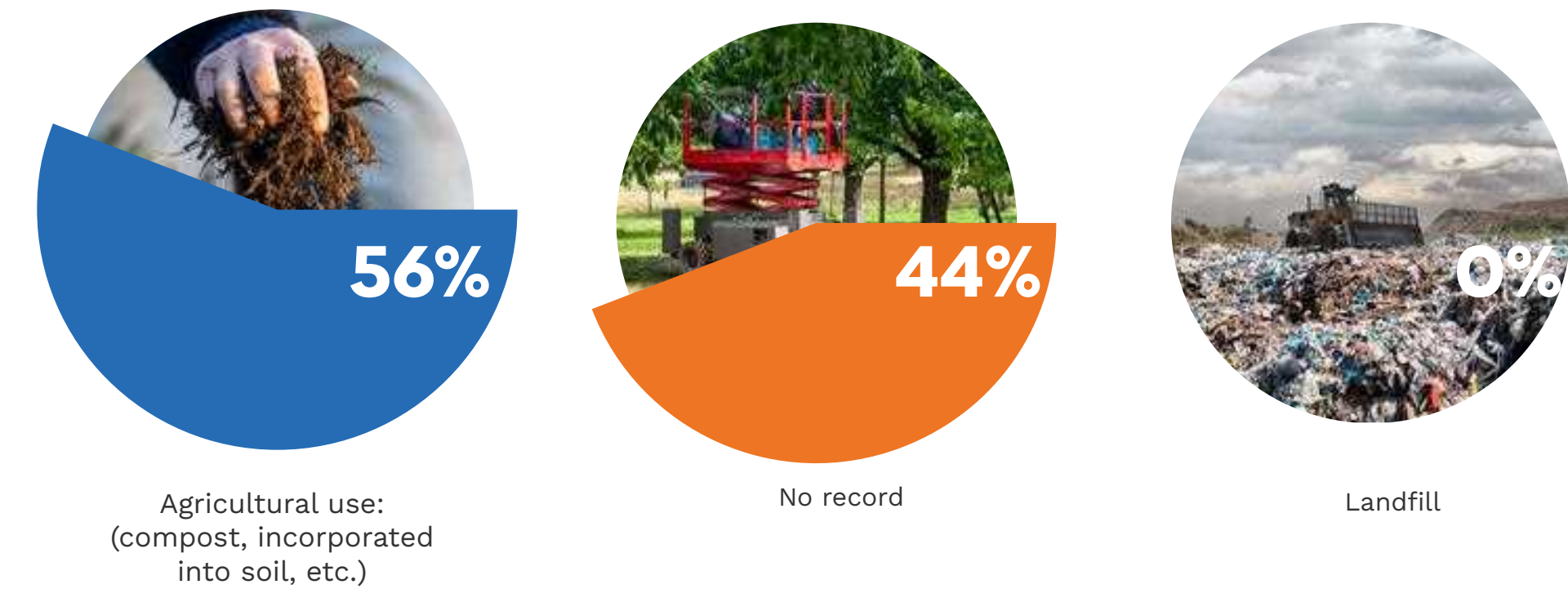
CIRCULARITY

The circularity of solid waste produced on farms will be reflected in two ways:

- Identifying the destination, by use, of waste.
- Participation in recycling programs for empty phytosanitary product containers.

Solid Organic Waste Disposal on Farms	(%)
Agricultural use (compost, incorporation into soil, etc.)	56.1
Landfill	0.4
Made into by-products	0.0
No record	43.5

Distribution (%) of Energy Consumed on Farms by Source



AGROCHEMICALS

84% of agrochemicals used at the farm level meet the SAG classification of "low-hazard" or "no-hazard."

Most agrochemicals used

79% have a green label (i.e. they are classified as "low-hazard" according to SAG regulations).

SAG Classification of Agrochemicals	(%)
Green label	79.1
Blue label	5.3
Yellow label	15.5
Red label	0.1

Distribution (%) of Agrochemicals at Farm Level, by SAG Classification





10.2.3 SOCIETY

Staffing needs vary based on the volumes and harvest dates of the different species. The harvest marks the start of operations and is the point of greatest staffing needs.

33% of the people working on the farms are women.

The average annual accident rate per farm is 2.7%. The total number of training hours per year per farm is 257. On average, each year 42 people per farm were trained.

Distribution (%) of Energy Consumed on Farms by Source

Area of Certification	Percentage %	Average Certifications per Facility
Food Safety	59	2.7
Social Aspects	32	1.4
Environmental Aspects	8	0.1
Organic	1	0.1

2.7%
average annual accident rate

257
total hours of training per year

42
individuals trained annually

10.2.4 GOVERNANCE

Sustainability governance programs on farms demonstrate management's commitment to support necessary sustainability measures.

More than

90%

of farms:

- Have an occupational health and safety management system.

85%

of farms:

- Have enacted an ethical-social policy.

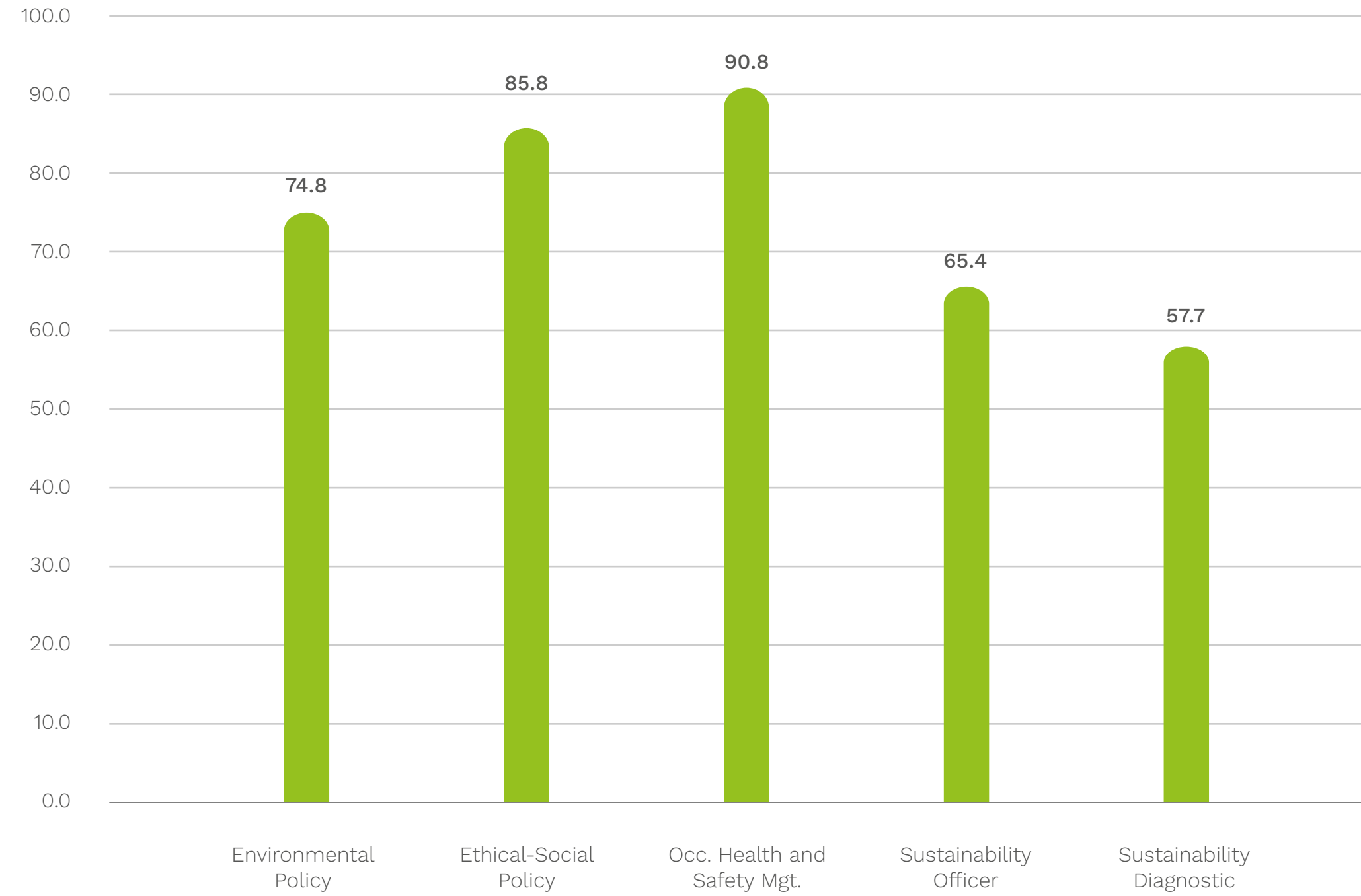
Between

77% and 65%

of farms:

- Have formally designated a sustainability officer.
- Have prepared a sustainability report.

Farms (%) with Sustainability Governance Actions



Towards sustainable fruit production

First Sustainability Report for the Fruit Export Industry

OCTOBER 2024

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