SUSTAINABILITY REPORT

TRENTINO SUSTAINABLE FRUIT-GROWING PROJECT



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SUSTAINABILITY REPORT 2023

PROJECT PROMOTED BY







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PRESENTATION

This is already the third edition of the "Sustainability Report"; six years have passed since the first edition was presented in 2016 and many things have changed.

We have been through the Covid-19 pandemic although the related economic and interpersonal implications can to some extent still be felt. We currently find ourselves in a political and economic crisis deriving from the unexpected and tragic Russian-Ukrainian conflict, with its impact on costs and economies around the world and which is fuelling uncertainty in the lives of citizens. This uncertainty is having an impact on purchasing behaviour, as the pressure from inflation and speculation surrounding energy prices feeds its way through to the microeconomic level and affects families and individuals, including farmers.

We all hope this situation comes to an end so we can get back to normality.

In the meantime, in our capacity as Directors, we are called upon to do everything that is within our power and over which we have some control.

We must firstly mention the significant step towards centralising within APOT the marketing of the Melinda and La Trentina consortia and, subsequently the Copag Cooperative for potatoes, with major benefits for the efficiency of the system and fruit growers themselves. This step required thorough analysis and some changes in governance, but has resulted in the system becoming one of the few European players to have achieved a genuine concentration of supply by taking advantage of the role of associations of recognised producer organisations, such as APOT.

This is a strong choice characterised by quality and which expresses the system's natural inclination to search for new forms of work and projects to support producer members, while encompassing within its vision the priorities of society as a whole.

This is achieved under the framework of an EU policy with a clear environmental focus. Indeed, following the achievement of food safety standards by Italian and European producers, a new qualitative push is required of territories, their products and their citizens. This policy framework - the Green Deal - must also quide fruit producers in Trentino, and despite some understandable apprehension, we must be conscious of our historic role as

pioneers and trailblazers and become successful adherents of this new standard.

The Trentino Sustainable Fruit-growing project is not at odds with these principles. Instead, it is precisely because of its role in promoting civil responsibility and responding to new social priorities that it can drive collaboration and tolerance. And, as we have stated many times, the path towards sustainability is essential for the competitive growth of our companies.

The process which was presented in 2016 was developed with the usual commitment and the results have been clearly outlined in the various editions of the report. Many objectives have already been achieved and others will be soon, but to make this tool even more effective

WE MUST FIRSTLY MENTION THE SIGNIFICANT STEP TOWARDS CENTRALISING WITHIN APOT THE MARKETING OF THE MELINDA AND LA TRENTINA CONSORTIA AND, SUBSEQUENTLY THE COPAG COOPERATIVE FOR POTATOES, WITH MAJOR BENEFITS FOR THE EFFICIENCY OF THE SYSTEM AND FRUIT GROWERS THEMSELVES. we decided to integrate the report on the APOT system with specific information from the Melinda Consortium, in order to highlight the projects which most accurately represent the latter's commitment. This is something that will soon also be done for the "La Trentina" Consortium.

In the meantime, the market has changed as the production potential of the apple sector continues to grow in Europe and the rest of the world and competition expands to new countries just outside the borders of the European Union. There are also changes afoot in the supply chain, with important signs of dialogue with producers. Discussions need to take place with the Retail sector to identify new means of working together in order to transfer the value generated in the orchards all the way through to the price of products in stores and develop a strategic vision for the future.

This can only be done with professionalism certified by facts and numbers, as has been done and continues to be done by the Trentino Fruit-growing Project with its ideas, projects and constructive search for relationships. The pressing issues we face today leave no room for trials of strength.

Fruit growers also play a central role in this process. APOT, Melinda and La Trentina can stimulate, provide guidelines, control and where necessary sanction, but they cannot completely replace the diligence of individual producers. The cooperative connecting fabric in Trentino is certainly a precious ally. It is within this interconnected network that the day-to-day activities of farmers, public institutions and private representations take place. All this reinforces the ability of these Consortia to stand out in a rapidly growing competitive market, by offering a concrete and proven ability

to supply products that meet the increasingly sophisticated criteria demanded by customers, consumers and citizens as users of the territory and the goods connected with it.

It is our duty as farmers, Consortia and representatives, and perhaps even more so as citizens and responsible members of the social ecosystem, to help shape a future that is more stable and responsible towards food, the environment and the land, while maintaining

balanced income objectives.

APOT, MELINDA AND LA TRENTINA CAN STIMULATE, PROVIDE GUIDELINES, CONTROL AND WHERE NECESSARY SANCTION, BUT THEY CANNOT COMPLETELY REPLACE THE DILIGENCE OF INDIVIDUAL PRODUCERS.

ENNIO MAGNANI APOT CHAIRMAN



LETTER TO STAKEHOLDERS

(GRI 2-22)

In the process of building sustainability, APOT and PO Melinda and La Trentina seek the best possible balance between its three axes: economy, environment and society, with a focus on both the internal effects of the system and the direct or induced external effects. In the short term, there is a focus on performance in terms of food safety and certain environmental aspects, like biodiversity, which has important implications for relations with local communities. In the medium and long term, the impact of choices made on other aspects relating to the environment, local areas and company margins will also have to be carefully assessed in order to ensure an appropriate level of profitability.

The parameters considered range from the carbon impact of the production guidelines, to the supply of energy from renewable sources, to trends in the use of simple fertility inputs, mainly agrochemicals and fertilisers. Particular attention is paid to measuring, preserving and where necessary improving the biodiversity of the system in its main plant and animal components, through the preservation and enhancement of biocenosis of particular value. A strategic emphasis is placed on knowledge and monitoring of soil biodiversity, which is the subject of a specific certification process. In this context, the choice of bio-indicators of particular and recognised effectiveness is significant, such as pollinating insects or bats, to which specific preservation activities should be devoted, and which have already been partially researched, or will be investigated in the future.

For the third edition of the sustainability report, a decision was made to highlight the insurance system

against adverse weather or market fluctuations, organised around the Co.Di. Pr.A production defence consortium, which, in its role as an instrument of economic support, becomes a guarantee for company operations and for employment, thus contributing to the economic and social sustainability of the system.

The fruit-growing system belonging to APOT closely observes and follows the

social implications of the fruit-growing sector, which are reflected in three directions: the vitality of the associated farms, the long-term employment that derives mainly from the work requirements in the factories and seasonal employment for field work, which implies quality in company accommodation for workers and is

monitored with the specific GRASP form from GlobalG.A.P.. Safety at work is an integral part of APOT's policies and is addressed in annual professional training courses.

In agreement with the associated POs and direct territorial interlocutors, APOT expresses its strong and creative commitment to the development of a network of relations between different local economic actors, with a broad vision and holistic approach that reflects agricultural and non-agricultural territorial values. Enhancing their respective potential is a modern and topical objective, especially for Trentino Fruit-Growing, which is located in different valleys that share economic,

IN THE MEDIUM AND LONG TERM, THE IMPACT OF THE CHOICES MADE ON OTHER ENVIRONMENTAL COMPONENTS, THE TERRITORY AND COMPANY MARGINS MUST BE CAREFULLY ASSESSED.



social and often historical and cultural roots.

The scope of activities driving APOT's growing commitment in the area of "sustainability" stems mainly from the lifestyles changes of citizens and consumers, on the one hand, and, on the other, by the European political framework and the strong focus on sustainability and the environment. The United Nation's 17 strategic objectives for the protection of the planet, as well as the EU strategies encompassed in the Green Deal, have therefore become essential guidelines towards which the attention and resources of APOT, its associated consortia and each individual fruit grower can be channelled.

In this context, the APOT production system can only accelerate its evolution towards sustainability objectives, by responsibly focusing on the economics of businesses, with the awareness that only healthy companies rooted in the territory can provide direct and indirect economic, environmental and social benefits to the local system.

Since its foundation in 1993, APOT has played a pivotal role in directing the production system towards plant protection techniques which are increasingly concerned with food safety and the environment, thus moving from the "self-governance" protocols of "integrated" defence, to voluntary and certified "integrated production". Today working methods include social and environmental components, which are essential for demonstrating professional maturity and one's vision for the future. There has been a progressive growth in investment in research and innovation, which have become a qualifying part of the Operational Programmes of OPs, which were merged into the 2023-2029 project and will be fully governed by the APOT AOP.

Significant efforts have been made in communication, both internally towards members and externally towards the broad and complex category of citizens. There have never been any setbacks in this process ; if anything, there have been strategic adjustments and a fine-tuning of methods which have accompanied APOT towards a greater openness to "environmental" challenges as well as dialogue and discussion as tools for growth and innovation. The Trentino Sustainable Fruit-Growing Project, which started in 2016, and which brings together operational and communication activities, is a crucial step in the process and represents the linchpin for the variables of "future sustainability".

The first "Sustainability Report" of 2016 enabled APOT to get to know itself better, while measuring and building on its sustainable performance and setting short-term objectives. The second sustainability report in 2020 was valuable in assessing the progress that had been and the solidity of the system, as well as for repositioning the development of the project.

We are now at the third edition, which offers a broader perspective of certain trends, such as programmes for the control of plant protection residues or the biodiversity of soils, which are already at very high level and offer only slim margins of improvement, while in other cases even some of the most challenging objectives have been achieved or surpassed. These positive trends are there to be seen, for example, in the project of organic cultivation: after the timid increase in the 2016 - 2019 this now appears more stable, as we await the repositioning of the market



and a new equilibrium between supply and demand. It should be noted that the whole sector is assessing the economic equilibrium of the organic sector, in order to correctly remunerate the product and work of producers.

It is significant to observe the reduction in the use of pesticides, from 5.2 g/sqm in 2012, to 4.5 in 2016, and 3.6g/sqm in 2019 up to 3 g/sqm in 2021, which resulted in the elimination of certain insecticides, on the one hand, and - on the other - in a progressive increase in the use of more environmentally friendly techniques and technologies. With the 2023 edition, the report is complemented with the risk assessment method associated with the pesticides used at an EU level (HRI), which in this case saw a significant parallel drop between 2016 and 2022.

Finally, among the many aspects analysed, it is worth mentioning the certification of the biodiversity of Trentino fruit-growing soils, which on average is at a more than satisfactory level.

With the third edition of the sustainability report, we also provide the customary analysis of the socio-economic system, with a detailed look at direct employment implications and seasonal work. This highlights the quality of the social and corporate network, which is of growing importance for the national and international retail system.

The period 2023 - 2025 will see a continuity with the previous action, as well as an technical innovation aimed at improving or consolidating various environmental parameters. This includes phytosanitary aspects, energy, biodiversity and, as far as possible, the use of water resources, with the latter

also being the subject of additional focus. Positive partnerships with public sector actors and research institutions will continue with the common goal of creating sustainable innovation. This process will also include other themes, that are apparently less related to farming, but which are becoming increasingly significant in the perception of citizens / consumers, like the quality of a product connected to its place of cultivation. The decisive step to evolve from a "good fruit" to an "identity fruit", that is intimately connected with its origins, the richness and beauty of the landscape it comes from and thus the ability of producers to add the intangible values of the production setting to the fundamental pillars of taste, quality and food safety. We have a story to tell, one of positive levels of diversity compared to many other production locations which could help fruit-growing in Trentino and the province itself develop a virtuous relationship between farming and local communities.

Considering the complexity of the analysis of the multiple factors that contribute to shaping "sustainability", the steps we have made in the period 2016 - 2022 are very significant, and confirm the soundness of the insights underlying the Trentino Sustainable Fruit-Growing Project and lend themselves well to an relaunch for 2023 - 2025.

ALESSANDRO DALPIAZ APOT DIRECTOR



THE THIRD SUSTAINABILITY REPORT

(GRI 2-5)

With its third sustainability report, the "Trentino Sustainable Fruit-Growing" project continues the periodic reporting process of its goals and the results achieved by Trentino fruit growers in this context across economic, social and environmental variables. The document is therefore available to all interested parties, whether they are stakeholders within or which are external to the system.

The 2023 edition summarises the activities performed and results achieved during the course of the 2022 calendar year, and also charts - for most of the aspects that are examined - the development trends of the Trentino fruit-growing sector in the three year period 2020-2022. It therefore represents the completion of the second summary in 2020 on the sustainable approach taken by the production system. The elements analysed are water, soil and energy as far as the environmental aspects are concerned; production, employees, research direct and indirect economic activities for the district; and to the local area, integration, health and social initiatives as regards the social aspects, as well as an analysis on the positive externalities that the economic positioning of the fruit-growing sector contributes to generating. As regards the scope of the analysis this considers the production of fruit in all its facets, its subsequent refrigeration, processing and packaging, all the way to its final sale and related logistical and marketing activities.

The report was drawn up with the help of a group of professionals from outside APOT, specialised in sustainability issues applied to agri-food processes, who took care of the project's *assurance* by liaising with a specially structured working group within APOT and with two audits, one made up of stakeholders from within the fruit-growing system and one from outside it.

This third report is that was drafted according to the standards developed by the *Global* Reporting Initiative (GRI)¹, a non-profit organisation whose aim is to provide concrete support to any company or institution wishing to draw up a sustainability report to present their environmental, social and economic performance. To do this, GRI Standards are made available,

which are criteria by which organisations can measure their impact and disclose this in a format that is understandable to non-experts.

Today, more than 10,000 organisations in over 100 countries use the GRI Standards to prepare their sustainability reports.

GRI Standards are structured as an interrelated standard system that is organised in 3 series: GRI universal standards, GRI industry standards and GRI specific standards. GRI universal standards, updated to the 2021 version, are divided into 3 groups: GRI 1 Foundation 2021, GRI 2 general disclosure and GRI 3 material topics 2021.

APOT has decided to develop its sustainability report in accordance

THE ELEMENTS ANALYSED ARE AIR, WATER, SOIL AND ENERGY AS FAR AS THE ENVIRONMENTAL ASPECTS ARE CONCERNED; PRODUCTION, NUMBER OF PEOPLE EMPLOYED, RESEARCH AND DIRECT AND INDIRECT LOCAL SATELLITE INDUSTRIES FOR ECONOMIC ASPECTS; THE LOCAL AREA, INTEGRATION, HEALTH AND SOCIAL INITIATIVES IN TERMS OF SOCIAL ASPECTS



with GRI standards that provide for the fulfilment of the information in the GRI universal standards series and those in the series of GRI specific standards, in line with the identified material topics. More information on the approach to sustainability reporting can be found in the methodological note in the appendix.

APOT also decided to submit the GRI content index for review by the *Global Reporting Initiative*, to ensure alignment with requirements regarding stakeholder engagement, and reporting practices to positively check their proper placement in both the GRI content index and the final report text.

Finally, the approach and development of the report activities have been carried out with constant reference to the goals and targets of the 2030 Agenda for Sustainable Development of the United Nations. At the beginning of each chapter the applicable goals are identified and these are then described in detail in the appendix together with the targets that were achieved.

ROBERTO DELLA CASA EXTERNAL ASSURANCE MANAGER



THE FRUIT FARMS

(GRI 2-6)

Total farms with apple orchards in the Province of Trento went from just under 6,000 in 2010 to just over 4,600 in 2020, a reduction of 21%, while the area invested decreased by 1%, given the 4% increase in total area allocated to woody crops (Tab 1.1). With regard to APOT, the number of active farms in associated co-operatives in 2022 is 3,913, of which more than 90% are specialized in apple cultivation.

The average area of farms involved went from 1.8 hectares in 2010 to 2.3 in 2020 and continues the process of company restructuring remains ongoing in the Trentino fruit-growing sector. The incidence of companies belonging to APOT with a UAA below 0.5 hectare fell from 26% in 2015 to 20% in 2022 (it was 31% in 2010), while those over 2.5 hectares went from 15% in 2000 to 31% in 2022 (Tab 1.2). The high level of parcelization remains one of the biggest limitations of companies, with a total of 24,710 parcels, which are often far from each other and the main company premises. In terms of altitude, 53% of the companies are located more than 600 metres above sea level, with the terrain gradient also being a distinctive factor, as on average 40% of the apple cultivation area sits on slope of more than 10%. A detailed analysis reveals

diverse data in the various areals and, in the specific case of Melinda, orchards with a slope of more than 10% represent 41% of the total, while for La Trentina the figure is around 7%.

These features, which represent a positive process in some regard, are the result of the sale or rental of smaller companies to contribute to more structured and professional companies, with a fall in "part-time" fruit growers. It is important to note, however, that the total area is essentially stable, in the face of a downward trend in Italy, thus confirming a good level of competitiveness for the system.

Finally, while on the one hand the ageing of entrepreneurs, that was already highlighted in the previous report, with the share of individuals aged over sixty increasing by 1% in the APOT structure, for the first time since the 1990s, this is offset by an equivalent increase in entrepreneurs aged under forty, the first timid sign of a trend reversal in the age of farmers (Tab. 1.3).

FARMS AND RESPECTIVE AREA IN THE PROVINCE OF TRENTO

TAB 1.1

Farms	2010	2020	2020/2010
Apple	5,864	4,608	-21%
Wood crops	13,565	10,854	-20%

Area (ha)	2010	2020	2020/2010
Apple	10,797	10,716	-1%
Woody crops	22,780	23,764	4%

Source: our processing of ISTAT data, General Agriculture Census

TRENTINO SUSTAINABLE FRUIT-GROWING PROJECT



APOT (LA TRENTINA + MELINDA)

MEDIUM SIZE OF FARMS	APPLE		
UAA-CLASSES	2000	2015	2022
< 0.5 ha	31%	26%	20%
from 0.5 to 1 ha	24%	18%	18%
from 1 to 2.5 ha	30%	31%	31%
> 2.5 ha	15%	25%	31%

APOT (LA TRENTINA + MELINDA)

AGE CLASS OF MANAGERS OF MEDIUM-SIZED FRUIT FARMS	CROPS		
AGE_CLASS	2019	2022	
< 40 years	14%	15%	
40 to 60 years	42%	40%	
> 60 years	44%	45%	

APOT APPLE FARMS BY CLASS OF SIZE

TAB 1.2

Source: our calculations using APOT data

APOT FRUIT GROWERS BY AGE CLASS

TAB 1.3

Source: our calculations using APOT data



APOT IN DETAIL

HISTORY AND OBJECTIVES

(GRI 2-1)

The Association of Trentino Fruit and Vegetable Producers (Associazione dei Produttori Ortofrutticoli Trentini, APOT) was founded as a cooperative in 1993 to be the point of reference in the coordination of fruit-growing in Trentino.

The current members of APOT are the POs. (Producer Organisations according to EU Reg. 1308/2013) Melinda and La Trentina, as well as the cooperative Copag.

In 2019, with the resolution of the Provincial Council of Trento n. 1.570 APOT has been confirmed as A.O.P., Association of Producer Organisations, according to the EU Reg. 1308/2013.

APOT thus directly represents the three companies mentioned above and indirectly represents 18 first degree cooperatives and about 4000 producers.

APOT is now the point of reference for the associated P.O.'s, as well as a standard-bearer for the entire sector. 98% of the volume and 96% of the value of products it represents are apples, the rest being "other fruit" (cherries, kiwis, plums, small fruits, strawberries, etc.) and potatoes, with the latter being the characteristic product of the Copag Cooperative.

The 0.Ps Melinda and La Trentina have progressively intensified their level of collaboration and since 2018 created an integration project for the joint marketing of their respective products. Since the 2019-2020 season the commercialization of the production of both companies is entrusted to A.O.P. and since 2022 the latter is also responsible for the management of the Operational Plan for 2023-2029. The sharing of their respective commercial skills, the expansion of the range of varieties available to customers, as well as the improvement in the management of logistical aspects and the rationalisation of costs, have led the two POs towards the objective of a more solid collaboration.

The legal basis stems from the EU Regulations under the Common Market Organisation (CMO) for fruit and vegetables and, in particular, EU Reg. 1308/2013, new Re. EU 2115/2021, EU Reg. 2393/2017 (Omnibus), Reg. EU 891 and 892/2017, now partially replaced by Reg. EU 126/2022, as well as the subsequent implementing measures at national level.

All the areas of operation and operating procedures are summarised in Article 3 of the Articles of Association and, in greater detail, in the General Rules of the Association, the main features of which are set out in the Appendix.



SERVICES FOR MEMBERS

(GRI 2-6)

QUALITY, CERTIFICATION AND PRODUCTION SAFETY

With resolution no. 1675/2014 of the Autonomous Province of Trento APOT was identified as the body for the coordination of the activities for defining the annual integrated production specifications for the fruit and vegetable sector and the respective controls and checks on compliance. This role was redefined and confirmed by Resolution 130/2020.

As a result of the 2020 revision order to streamline the existing system, APOT and its member co-operatives decided to merge all activities and tasks related to integrated and organic production, including technical advice and initiatives to support research and innovation into a single commission. However, field inspections are fully outsourced to an independent inspection commission consisting of experts from the E. Mach Foundation.

With regard to certifications, please refer to the specific section.

TECHNICAL CONSULTANCY

In order to ensure the proper implementation of integrated and organic production and continue the growth process towards sustainable farming methods, APOT - assisted by the E. Mach Foundation - provides the necessary technical advice to the sector. Guidance on how to work and support in technical and environmental decisions is provided to members.

CONTROL OF ATOMIZERS/ SPRAYERS

In accordance with EU Directive 128/2007, APOT is responsible for checking the correct functioning of the machines for phytosanitary/ plant health treatments, the so-called sprayers. The actual verification and calibration work is entrusted to suitably qualified companies included in the authorised parties list. With this process, atomizers are optimized to ensure the correct doses are used in the best possible technical conditions. In 2022, 1,023 atomizers were checked, with a significant increase to meet the obligation to control all atomizers every three years starting from 2021.

COLLECTION OF PLANT PROTECTION PRODUCT PACKAGING

APOT coordinates a collection programme for phytosanitary product packaging in late spring and autumn; the programme aims at proper disposal and is carried out in cooperation with an authorised operator.

After being duly informed, fruit growers can go to their local cooperative, transporting the packaging, which is generally classified as 'special hazardous waste', as well as other materials identified in the programme agreement approved by G.P. 1839/2018 and classified as 'non-hazardous' and thereby exempt from the normal documentation. The cost of disposal is then charged to each individual company.

RENEWAL OF FRUIT PLANTATIONS

APOT has for some time been discussing with the Autonomous Province of Trento the preparation and activation of a financial accommodation instrument for the renewal of apple orchards, the last cycle of which started in 2017 and is still ongoing.



The motivations behind the project are mainly related to the evolution of the market and consumer tastes, but include environmental and sustainability objectives. Clear and precise intervention addresses allow the development of new varieties that are resistant or tolerant to the most known melo pathologies. Thanks to their contribution, it is possible to reduce the quantities of plant protection needed for the treatment and defence of plants and mitigate the "drift" effect associated with their distribution and improve the relationship between fruit and vegetable producers and civil society.

CADASTRAL/LAND REGISTRY DATA

APOT collects, organises and monitors data on cultivated areas, from the PO level to the individual farm and/ or fruit grower. This activity is important for the purposes of the requirements of the CMO for the disbursement of grants with the proper implementation of "company files". In addition, it is useful for defining fruit farming strategies in the territory, both in terms of future trends, for example through various renewal projects, and in the context of current activities, such as the management of the major diseases.

RENEWAL OF FRUIT PLANTATIONS

In order to promote the pursuit of the strategic objectives related to surface knowledge and research related to varietal innovation, APOT has helped set up two specific companies in which it holds shares. The first is the Centro Assistenza Agricola (CAA) Cooptrento s.r.l., in which APOT holds 85.47% of the shares. The aim of this company is to manage and organise the cadastral information and business files of all agricultural producers in the provincial cooperative sector.

The second is the Consorzio Innovazione Fruit (CIF) soceità consortile s.r.l., a research centre in which APOT owns a 67.74% stake. The Consortium's activities, developed in partnership with FEM, contribute to varietal innovation for different types of fruit bearing plants in order to strengthen the competitiveness of the sector and to mitigate the effects on the environment and on the society linked to the use of plant protection in the production cycle.

GOVERNANCE STRUCTURE AND VALUES

(GRI 2-9; 2-13; 2-14)

APOT's operational structure reflects both traditional and newer competencies, by also dividing the related responsibilities through specific external expertise, in order to achieve maximum effectiveness without burdening the internal structure. The fundamental bodies for the functioning of APOT are the Shareholders' Meeting, the Board of Directors, the Executive Committee and the Board of Statutory Auditors, the characteristics of which are described in the appendix.

TRENTINO SUSTAINABLE FRUIT-GROWING PROJECT

SUSTAINABILITY GOVERNANCE

At APOT sustainability falls under theresponsibility of the General Manager, Alessandro Dalpiaz, as confirmed by resolution no. 261 of 29 November 2022.

Along with the Quality Manager, he coordinates a working group made up of consultants and members' representatives. In addition, in order to respond to the needs and critical sustainability issues identified by stakeholders, an external audit was set up and is periodically involved. This consists of representatives of local communities and citizens, the public administration, suppliers, the scientific community, trade associations and trade unions. In addition to this, a number of public meetings on sustainability were organised within the period covered by this report and are detailed in the appendix.

By means of resolution 258 of July 20, 2022, the role of Sustainability Manager was established, which will be implemented during 2023, with the aim of:

- managing the collection, classification and systematization of sustainability-related data;
- managing relations with public entities and organisations in the field of sustainability;

- collaborating with the POA's marketing department to support sustainability related initiatives;
- representing APOT in technical seminars/conferences;
- managing internal communication on related topics.



2025 TARGET: PREPARE THE SUSTAINABILITY REPORT FOR LA TRENTINA CONSORTIUM, THE SECOND SUSTAINABILITY REPORT FOR THE MELINDA CONSORTIUM AND THE FOURTH SUSTAINABILITY REPORT FOR APOT

OUR VALUES

(GRI 2-23; 416-1; 417-1)

APOT's daily choices and actions are based on six values that inspire the activity of all the people in the cooperative.

I. HISTORY AND TRADITION: we draw our strength from tradition and decades of experience in our province.

II. COOPERATION: cooperation is the basis of our system and, through their work, members are the cornerstone of our system. The services we provide help our farmers obtain healthy, safe and high quality products.

III. INNOVATION: we believe in the importance of the ability to imagine the future. We face new challenges with determination and courage, ensuring promptness and speed in the development of our ideas.

IV. EXCELLENCE: we aim to offer our members the best possible services. Knowledge and expertise in the sector are crucial for ensuring APOT's success.

V. PASSION: we work every day with dedication and energy to grow and create value for our members and the whole community._____

VI. TERRITORY AND LANDSCAPE: Trentino's territory and landscape are our starting points and we use them in the best possible way, by trying to preserve them while also enhancing them for future generations.

CERTIFICATIONS

The Trentino fruit and vegetable system developed by APOT- along with its associates Melinda, La Trentina and Copag, has been certified for over 15 years according to the international standard "GlobalGAP", version 5, a recognition process that, through commitment and determination, has led to a substantial improvement of the local production system. Moreover, the working procedures are ISO 9001/2015 'certified' and third-party audits are entrusted to the company CSQA in Thiene.

GLOBAL G.A.P. is the reference standard for more than 200,000 agricultural companies across the planet, based on international standards to achieve food safety and, increasingly, the broadest and most comprehensive sustainability objectives. Its main purpose is to achieve a single standard of *Good Agricoltural Practices* with different product applications, to satisfy agriculture, retail chains and respond, in the best possible way, to the requirements of the market and consumers.

In particular, APOT refers to the GLOBAL G.A.P. standard. IFA (*Integrated Farm Assurance*) version 5, which verifies the production system in four areas: environment, food safety, worker protection and traceability. A clear example of how the management system that has been set up for years is able to operate in accordance with current regulatory and international standards, and above all able to meet the respective needs of member consortia, leading companies and local communities.

2025 TARGET: ADAPT THE ISO 9001/2015 CERTIFICATION

APOT entrusts the training of its members and support in the control phase regarding GlobalG.A.P. to the E. Mach Foundation.

After obtaining GLOBAL G.A.P. certification, the Trentino system decided to integrate this with the "GLOBAL G.A.P. *Risk Assessment on Social Practice"* (GLOBAL G.A.P. Risk Control in Social Practices, GRASP), a module designed to evaluate social practices in companies. In order to obtain this certification, producers of APOT, Melinda and La Trentina must demonstrate that they meet the 55 requirements. This standard addresses specific aspects of workers' health, safety and welfare and the main ones are shown in the appendix.

GLOBAL G.A.P. certification is the best way to manage business-related risks for APOT members involved in farming and fruit processing activities. For each point of the checklist that is checked for the purposes of the certification, it is specified how to act in case of potential problems. The identification of food safety risks must ensure that all inputs come from safe and secure sources by making information available on all employees and any subcontractors.

In its commercial function, which began in 2019, APOT had to implement the GLOBAL G.A.P. *Chain of Custody* - CoC), which guarantees that any product labelled "GGN" (GLOBAL G.A.P. *Number*) really comes from a GLOBAL G.A.P. certified production process. The CoC provides an additional level of safety with strict requirements for the proper separation and traceability of products throughout the supply chain. The CoC standard is an essential tool to safeguard the integrity of the product from the farm to the retailer and offers the necessary guarantees of integrity of the GLOBAL G.A.P. system.

The APOT system also adopts the standards of *Biodiversity Alliance* and is certified by the British Retail Consortium (BRC), the International Retail Consortium (IFS) and *Naturland*, with regard to organic products. APOT is also the licensee of the "Quality Trentino" system since 2013.



SUSTAINABILITY REPORT 2023

MANAGEMENT OF RISK ____

The climate change that we are experiencing requires increasingly careful choices, especially in the structuring of a correct management of business risk. This is a historic moment that requires a change of approach, a new culture and new knowledge in terms of risk management. At the same time, it is of strategic importance to mitigate and promote better adaptation to ongoing climate and structural changes, with the aim of protecting farm income, as well as improving competitiveness and sustainability. These objectives were strongly targeted by the Common Agricultural Policy (CAP) which has allocated over EUR 3.1 billion for risk management measures for the period 2023-2027. The most important revolution in the new CAP involves the activation of the mutual "Agricat" fund for all farmers in our country to protect them against catastrophic risks (gel-brine, wind and drought). The share of the fund's endowments that will be attributable to farmers will be a compulsory withholding tax of 3% on payments to farmers under the first pillar. The remainder of the fund's endowments will be a 70% EU grant. This revolutionary tool will require all risk management actors to participate in a major change of approach and paradigm shift.

It is evident that in a sector that is, on the one hand, increasingly strategic and important for the country, and on the other, strongly influenced by *climate change* and increasingly complex dynamics (market, financial, policies, etc.), risk management must be based on a comprehensive and holistic vision, in which active and passive defence must be complementary tools to support farms to encourage resilience and foster an ability to adapt to sudden changes. Active defence actions, supply chain policies, circular bioeconomy processes, research innovations (both agronomic and technological), investments in infrastructure, accompanied by the necessary public support (PSR, CMO, etc.), must be integrated into a synergistic and complementary action with passive risk management tools (insurance policies, mutual funds, IST Funds, "Agricat Fund").

For this reason, constructive cooperation between Co.Di.Pr., APOT and the OP system it represents is of fundamental importance. The analysis of the risk management figures in Tab. 1.4 and 1.5 shows that the value insured in the Province of Trento increased significantly from 2017 to 2021 (+ 22%), with an almost stable number of insured farms, which is explained by an increase in the value of production as well as by the aggregation of companies that are registered in our territory, mirroring the ongoing trend at the national level.



THE MANAGEMENT OF RISK 2021 IN BRIEF ____

TAB 1.4

RISK MANAGEMENT	2017	2018	2019	2020	2021
Insured values in €	288,376,693.77	319,182,406.77	320,364,119.70	322,209,797.96	350,782,890.41
No. of insured companies	4,862	5,132	5,217	5,151	5,127
Overall compensation	153,429,046.08	24,027,715.30	42,126,898.07	14,693,506.23	77,436,005.76

Source: our processing of Co.Di.Pr.A. data

MUTUAL FUNDS 2021 IN BRIEF

FUNDS	MEMBERS	PROTECTED VALUE	COMPENSATION	TAB 1.5
Plant Disease Fund for Production Facilities The fund provides compensation for the damage suffered by companies which see a drastic reduction in income (above 30%) as a result of serious plant disease ("proliferation", flavescence dorée, sharka and fire blight) up to the limits of its financial endowments.	4,514	EUR 324,985,79.67	EUR 21,261.90 (*)	
Income Stabilisation Fund for Fruit Cooperatives The fund, which was established in 2002, compensates damage to product in respect of a lack or decrease of production and quality damage caused by adverse weather conditions and plant diseases.	6,388	EUR 36,718,450.76	EUR 6,125,845.95	
Sub-threshold Fund	4,850	4,850	1,264,695.14	
IST Mele Fund Upon the occurrence of the "trigger event" (threshold event), the fund compensates member companies for losses resulting from a drastic drop in income (above 20%) compared to the average annual income in the previous three years up to the limits of its financial endowments.	1,750	EUR 159,121,699.00	EUR 25,812.341.25 (**)	(*) refers to 2020 (**) Endowment as
Plant Disease Fund Upon the occurrence of the "trigger event" (threshold event), the fund compensates member companies for losses resulting from a drastic drop in income (above 20%) compared to the average annual income in the previous three years up to the limits of its financial endowments.	2,899	EUR 224,535,691.17	EUR 3,243,067.89 (**)	Source: our processing of Co.Di.Pr.A. data

SUSTAINABILITY REPORT 2023

OUR PROVINCE

(GRI 2-1; 304-1; 304-3; 304-4)

Agricultural areas in Trentino are surrounded by a very special and distinctive environment. About 60% of the province is located at an altitude of more than 1,000 metres, 56% of the area is represented by woods, 12% by grassland, 22% by rocks and ice, while rivers and lakes cover a further 1%. Only 15% of the province's area is available for agriculture and settlements. Agriculture has therefore evolved and specialised in a "green" environment, which has been essentially stable for decades. Today fruit growers also have an even wider broader perspective of their business beyond a farm's borders and which considers cultivation needs along with the requirements of the surrounding environment and citizens. Thanks also to the Trentino Sustainable Fruit-Growing project, local fruit growers who are APOT members want to preserve the environment and people's quality of life, without compromising the needs of their businesses.



TRENTINO SUSTAINABLE FRUIT-GROWING PROJECT

PEOPLE AS THE CONSULTATION CENTRE FOR THE FUTURE

(GRI 2-29)

The development of a sustainable territorial system is based primarily on listening to the environment, society and the economy at a local level, especially when the productive environment is deeply rooted in the territory in which it grows. For this reason, with the "Trentino Sustainable Fruit-Growing" project and this third sustainability report, we have maintained a focus on what we call shareholders and all the system's internal stakeholders. Since the cooperative model is the fundamental driving force of agriculture in Trentino, producer members, employees and seasonal workers, together with their families, are the beating heart from which to continue the process of consultation and reflection on the future of "Trentino Sustainable Fruit-Growing".

- APOT members
- (Melinda, La Trentina, Copag)
- Producer members of member cooperatives and their families
- · Employees and their families
- Seasonal workers and their families
- Subsidiary businesses
- Trade associations and representatives



EXTERNAL STAKEHOLDERS TO UNDERSTAND THE DIRECTION

(GRI 2-29)

Aside from attention to the feelings and suggestions of the men and women who, through their work, contribute on a daily basis to the development of the Trentino fruit and vegetable system, in their capacity as internal stakeholders of the system, since the outset, APOT has given great importance to the demands of external stakeholders, i.e. actors who are not directly involved in the Trentino fruit and vegetables system but who have an ongoing and continuous relationship with it and, therefore, contribute decisively to its evolution. These include, first of all, the local communities with whom the Trentino fruit-growing system has a constant connection, followed by the final consumers of the fruit that is produced, the customers who help to distribute the product, the

suppliers who are essential for development and finally the scientific community and institutions that help local farmers and their organisations.

Each external stakeholder is essential for understanding the direction we must all take to ensure the development of a truly "Sustainable" "Trentino Fruit-Growing" system.

- Local communities
- Final consumers
- Customers
- Suppliers
- · The scientific community
- Competitors
- Medium
- · Public bodies
- · Non-governmental organisations



MATERIALITY ANALYSIS _

Based on the results of the research carried out with both internal and external stakeholders of the Trentino Sustainable Fruit-growing Project, which were supplemented by debates during annual internal and external audit meetings, the material topics were first updated and, subsequently sorted in terms of their relative importance low, medium, high with intermediate categories - with the help of external assurance parties, in order to identify the most significant topics of mutual interest on which to focus. 38 material topics were considered for 2023, 5 more than the 33 in the second edition, and are divided between environmental, economic, social and local community topics.

The identification and definition of the material topics considered the different perspectives and points of view of internal stakeholders - led by producers - and external stakeholders, both locally and internationally. In this way the Trentino fruit production sector will be able to focus on those shared objectives considered to be of the highest priority and importance for sustainable development by focusing activities and investments accordingly.



(GRI 3-1; 3-3)

SUSTAINABILITY REPORT 2023

MATERIALITY MATRIX

(GRI 3-2)

SCOPE: LOCAL COMMUNITY

İNTERNAL STAKE- HOLDERS	External stake- holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium	high	413	Direct induced development	Consolidate their commitment to communities by supporting the local economy. Enhance relationships with all stakeholders	Goal 8. Decent work and economic growth Goal 11. Sustainable cities and communities Goal 17. Partnerships for objectives
medium	high	2-7	Employment development	Support employment development and secure labour rights in a secure environment for economic growth in the community	Goal 8. Decent work and economic growth Goal 10: Reduce inequalities Goal 11. Sustainable cities and communities
medium	medium	413	Support for sport	Strengthen its commitment to sports activities, especially at the local level. Enhance relations with all industry stakeholders	Goal 5. Gender equality Goal 10. Reduce inequalities Goal 11. Sustainable cities and communities Goal 17. Partnerships for objectives
medium-high	medium	413	Social inclusion and integration	Ensure the protection of human rights throughout the APOT value chain, by countering all forms of violence and discrimination. Strengthen relationships with all stakeholders	Goal 5. Gender equality Goal 10. Reduce inequalities Goal 11. Sustainable cities and communities Goal 17. Partnerships for objectives
high	high	413	Attention to residents' health	Reduce and manage the health risks of every citizen, ensuring the protection of individuals in vulnerable situations. Strengthen connection with the system's stakeholders	Goal 11. Sustainable cities and communities Goal 17. Partnerships for objectives

TRENTINO SUSTAINABLE FRUIT-GROWING PROJECT

İNTERNAL STAKE- HOLDERS	External Stake- Holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
high	medium	404	Vocational training for workers	Train all staff to adopt safe, professional and sustainable behaviour.	Goal 3. Health and well-being Goal 4. Quality education Goal 8. Decent work and economic growth Goal 10. Reduce inequalities Goal 12. responsible consumption and production Goal 17. Partnerships for objectives
high	low	413	Services for workers' families	Support local communities and reducing disparities of all kinds. Provide access to adequate, secure and affordable services at the local level	Goal 10. Reduce inequalities Goal 11. Sustainable cities and communities
medium-high	high	404	Training and integration of young people	Increase the number of young people with state-of-the-art skills in technical, professional and managerial fields to ensure their employment in decent and non- alienating jobs	Goal 3. Health and well-being Goal 4. Quality education Goal 8. Decent work and economic growth Goal 10. Reduce inequalities Goal 12. Responsible consumption and production Goal 17. Partnerships for objectives

SCOPE: ENVIRONMENT

medium	high	302	Use of renewable energy	Use only energy from renewable sources to safeguard the local area by ensuring sustainable development of the entire supply chain with a reduction of the environmental impact, in particular CO2 emissions	Goal 3. Health and well-being Goal 7. Clean and accessible energy Goal 12. Responsible consumption and production Goal 13. Fight against
high	high	302	Saving energy	Ensure the adoption of concrete solutions for reducing energy consumption in order to limit the environmental impact	climate change Goal 7. Clean and accessible energy Goal 12. Responsible consumption and production Goal 13. Fight against climate change

SCOPE: ENVIRONMENT

INTERNAL STAKE- HOLDERS	External Stake- Holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium	high	304	Protecting biodiversity	Protect the ecosystem for the health and well-being of every animal species and safeguard plant species	Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 14. Life below water Goal 15. Life on earth
medium	high	413	Development of sustainable production	Adopt sustainable production methods that minimise the impact on the local area and its inhabitants	Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 14. Life below water Goal 15. Life on earth
medium-high	high	413	Reducing chemical use	Reduce the use of chemicals in agricultural activities with particular reference to those with the most critical toxicological effect and those with greater persistence in the environment	Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 14. Life below water Goal 15. Life on earth
medium-high	medium	303	Reducing water use	Seek concrete solutions for the efficiency and reduction of water consumption in order to limit environmental impact	Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change

INTERNAL STAKE- HOLDERS	EXTERNAL STAKE- HOLDERS	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium-high	high	303	Protection of water	Protect the waters in the local area both by increasing efficiency of use for agricultural purposes and by minimising water pollution for the health and well-being of every species in the local environment	Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change
medium-high	high	305	Protecting the air	Reduce emissions of volatile compounds that are potentially harmful to the environment, starting from greenhouse gases, through sustainable actions along the entire value chain	Goal 3. Health and well-being Goal 12. Responsible consumption and production Goal 13. Fight against climate change
medium	high	306	Reduction of food waste	Research and ensure the recycling of waste materials and proper waste management through the optimisation of production processes and efficient distribution practices	Goal 2. Beat hunger Goal 12. Responsible consumption and production
high	high	301. 306	Development and use of sustainable packaging	Research and develop the best solutions for the packaging of products to guarantee the highest quality and safety as well as the minimum environmental impact	Goal 9. Enterprises, Innovation and Infrastructure Goal 7. Clean and accessible energy Goal 12. Responsible consumption and production
medium-high	high	306	Waste reduction and proper waste management	Improve waste management by optimising processes and researching ways of exploiting waste and by-products	Goal 2. Beat hunger Goal 3. Health and well-being Goal 12. Responsible consumption and production Goal 14. Life below water Goal 15. Life on earth

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SCOPE: ENVIRONMENT

İNTERNAL STAKE- HOLDERS	External Stake- Holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
high	low	304	Protection of plants	Protect fruit species by providing them with optimal health while minimising the impact of actions to protect them from pests and diseases	Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 15. Life on earth
medium-high	high	304	Protecting land and landscape	Protect the local area and landscape through the adoption of sustainable practices for the welfare of animal species and the protection of plant species	Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 14. Life below water Goal 15. Life on earth
medium	high	302; 303; 304; 305; 306	Climate change mitigation actions	Take sustainable action to improve environmental impact and mitigate climate change	Goal 6. Clean water and sanitation Goal 7. Clean and accessible energy Goal 12. Responsible consumption and production Goal 13. Fight against climate change

SCOPE: ETHICS

INTERNAL STAKE- HOLDERS	External Stake- Holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium	high	416	Scientific research on health	Promote and support basic scientific research on health and applied research on the effects of human activities on the health of citizens and consumers	Goal 3. Health and well-being Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure Goal 12. Responsible consumption and production

INTERNAL STAKE- HOLDERS	External stake- holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium-high	high	417	Transparency in processes and products	Ensure the traceability of products, from the cultivation of raw materials to distribution at the point of sale, ensuring adequate, transparent and accurate communication.	Goal 3. Health and well-being Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure Goal 12. Responsible consumption and production Goal 14. Life below water Goal 15. Life on earth
high	high	416	Food safety and health	Constantly pursue food safety through the adoption of safe and sustainable practices for the well-being of all stakeholders. Protect the health and rights of every worker	Goal 2. Beat hunger Goal 3. Health and well-being Goal 8. Decent work and economic growth Goal 12. Responsible consumption and production
high	high	416	Scientific research on food quality and safety	Strengthen scientific research to increase and improve food quality and security through the development of sustainable agriculture	Goal 9. Enterprises, Innovation and Infrastructure Goal 13. Fight against climate change
high	medium-high	416	Responsible supply chain management	Monitor and refine resource management across the entire value chain while considering ethical and social implications as well as economic and environmental aspects	Goal 2. Beat hunger Goal 3. Health and well-being Goal 8. Decent work and economic growth Goal 12. Responsible consumption and production Goal 14. Life below water Goal 15. Life on earth
high	medium	416	Environment and safety at work	Protect safety and ensure suitable working environments for all employees, including for the purpose of minimising exhaustion and alienation	Goal 3. Health and well-being Goal 8. Decent work and economic growth Goal 12. Responsible consumption and production
medium-high	medium-high	416	Scientific research on sustainability	Strengthen scientific research to increase and improve the sustainability of production and distribution processes as well as related activities	Goal 9. Enterprises, Innovation and Infrastructure Goal 17. Partnerships for objectives

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SCOPE: ETHICS

INTERNAL STAKE- HOLDERS	EXTERNAL STAKE- HOLDERS	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
medium	high	416	Promotion of safe and healthy food regimes	Promote the adoption of diets based on appropriate and balanced nutrients in safe and sustainable foods	Goal 2. Beat hunger Goal 3. Health and well-being
medium-high	high	413	People's well-being	Ensure for every local inhabitant conditions of life in which there is a balance between physical, mental and spiritual health	Goal 2. Beat hunger Goal 3. Health and well-being Goal 6. Clean water and sanitation Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 14. Life below water Goal 15. Life on earth

SCOPE: ECONOMY

high	high	413	Sustainable product innovation	Research and develop species and varieties capable of ensuring the highest quality and safety as well as the minimum environmental impact possible	Goal 3. Health and well-being Goal 9. Enterprises, Innovation and Infrastructure Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 17. Partnerships for goals
high	medium	413	Farm holidays development	Support the development of farm holidays in the local area to boost the economic growth of the entire local community	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure
high	medium	413	Value creation	Build value for all stakeholders through supply chain activities thanks to responsible and sustainable management	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure

İNTERNAL STAKE- HOLDERS	External stake- holders	GRI	MATERIAL TOPICS	DEFINITION	UN 2030 goals
high	high	413	Sustainable product innovation	Research and develop species and varieties capable of ensuring the highest quality and safety as well as the minimum environmental impact possible	Goal 3. Health and well-being Goal 9. Enterprises, Innovation and Infrastructure Goal 12. Responsible consumption and production Goal 13. Fight against climate change Goal 17. Partnerships for goals
high	medium	413	Farm holidays development	Support the development of farm holidays in the local area to boost the economic growth of the entire local community	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure
high	medium	413	Value creation	Build value for all stakeholders through supply chain activities thanks to responsible and sustainable management	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure
high	low	202. 203. 204	Economic performance	Manage the profitability of agricultural activities and satellite activities in the knowledge that true sustainability is achieved only when economic conditions are also met	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure
high	low	413	Sustainable investing development	Promote investments to develop a system aimed at responsible and sustainable innovation to reduce environmental impact throughout the supply chain	Goal 8. Decent work and economic growth Goal 9. Enterprises, Innovation and Infrastructure Goal 12. Responsible consumption and production Goal 13. Fight against climate change
high	low	413	Centrality of the cooperative system	Strengthen relations both within the cooperative system and between the latter and other stakeholders in the knowledge that these are prerequisites for sustainable development	Goal 9. Enterprises, Innovation and Infrastructure Goal 17. Partnerships for objectives
medium	medium	404	Digitisation	Maximise the benefits of digitalisation in a sustainable way by adopting and perfecting all technologies that minimise environmental impact, reduce stress and maximize value	Goal 9. Enterprises, Innovation and Infrastructure Goal 17. Partnerships for objectives

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2_FOR THE CARE OF THE ENVIRONMENT

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Fototeca Trentino Sviluppo S.p.A. Photos by Ronny Kiaulehn Val di Genoa, Nardis waterfall

SUSTAINABLE SPECIALIZATION

(GRI 302-5; 305-1; 305-2; 305-3; 305-4; 305-5)

Carbon dioxide is considered the GHG par excellence and the reduction of the amount of this gas that is released into the atmosphere as a result of human activities is now one of the priorities of both macro and micro environmental policies. In this context, optimization in the use of energy in the phases of production, conservation and processing of apples is an important factor in reducing the carbon footprint and contributing to the preservation of the environment. From the analyses carried out annually by Assomela - which APOT is a member of - to define the energy required to manage its members' apple supply chain, it emerged that the agricultural, processing and subsequent packaging and distribution phases, each account for about 30% of total energy, while the remainder relates to packaging and end-of-life operations for production factors.

From 2019 to 2021, the carbon impact of the process of producing and processing apples for bulk sales, measured using the *Environmental Product Declaration*(EPD) method, as described in more detail in the box, amounted to an average of 148 gr of CO2 equivalent for each kg of fruit (Diagram 2.1).

The significant reduction in the carbon footprint recorded from 2020 to 2021 was not achieved from substantial changes in the process and is principally attributable to the 2020 update of the parameters used to calculate the impact of the energy mix by having the model reflect the fact that the electricity used by the associated OPs and AOPs derives mostly from renewable sources (hydroelectric). With this approach the goal of the 2020 budget was satisfied and exceeded.

WHAT IS EPD?

The "Environmental Product Declaration" (EPD) is a procedure that describes the environmental impacts related to the production of a specific quantity of a product: e.g. energy and raw material consumption, waste production, air emissions and discharges into water bodies. The Declaration, which is created on a voluntary basis, must be prepared for the product based on a Life Cycle Assessment (LCA), which defines the consumption of resources (materials, water, energy) and impacts on the environment. The results are presented in summary form through the use of a series of environmental indicators, such as the amount of carbon dioxide emitted (Carbon Footprint) or GWP (Global Warming Potential) per declared unit of product. In the case of apples, the indicators are related to the kg of fruit produced
GRAMS OF CO2 EMITTED PER KG OF APPLE PROCESSED IN A BOX USING EPD METHODOLOGY



DIAGRAM 2.1

Source: our processing of Assomela data

2025 TARGET: MAINTENANCE



WATER AS AN IRRIGATION RESOURCE (GRI 30:

(GRI 303-3; 303-5)

Of the almost 10,000 hectares cultivated for apples in Trentino in 2021, 92% is irrigated by about 180 consortia for land improvement and 89% is micro-irrigated by the same consortia. Out of about 6,000 hectares irrigated by the consortia it was possible to calculate consumption with micro-irrigation through a weighted average of the volumes measured by a representative group of consortia and the volumes calculated by other consortia. The average micro-irrigation consumption in apple orchards for 2021 is 2487 m3/ha (Tab 2.1).

In the three-year period 2019-2021, water was the focus of a major European Innovation Project from APOT, the PEI C&A 4.0. The project was concluded in 2021 and allowed the investigation of methods to develop rational use of water in order to test and improve the efficiency of the various active defence techniques, including frost-free systems with low water consumption, making it possible to evaluate in the field these innovative methods that require less water than traditional systems, while retaining similar effectiveness. The project involved APOT as a partner within the Operating Group comprising Co.Di. Pr.A. (as lead manager), Edmund Mach Foundation, Bruno Kessler Foundation, Provincial Federation of Irrigated consortia and land improvement and Fruit Innovation Consortium.

As part of the P.E.I. "Sustainable walkable orchard", led by CIF and involving FEM and APOT, additional research was evaluated for the multifunctional use of water resources, such as testing of overhead systems for phytosanitary treatments, which can rationalise the use of water, plant protection products, decrease drift and improve intervention timeliness, especially in organic farms, where timing is fundamental.

Moreover, as part of the training activity for fruit farmers, issues related to the sustainability of production, including water, were discussed, both in terms of quality and quantity, during the three-year period 2020-2022. In particular, mitigation measures, and procedures for managing and maintaining sprayers were analysed to improve the health of surface water bodies. In particular, in 2021-2022, continuing training was made available to more than 3,000 fruit growers each year, mainly thanks to the introduction of remote training modules and the prompt response of members to this new method. Indeed, this approach was adopted by 87% of participants in 2021, thus enabling the targets set in the previous report to be met.

2021	UAA APPLES	TOTM ³	m³ / ha
Measured	2,239	6,421,913	2,868
Calculated	3,821	8,646,119	2,263
Average values	6,060	15,068,032	2,487

WATER CONSUMPTION FOR APPLE IRRIGATION

TAB 2.1

Source: our processing of APRIE / Comifo Trentino data

2025 TARGET: FORMALISING OF AN AGREEMENT WITH COMIFO TRENTINO (PROVINCIAL FEDERATION OF IRRIGATION CONSORTIA AND LAND IMPROVEMENT) AND APRIE (PROVINCIAL AGENCY FOR WATER RESOURCES AND ENERGY) FOR THE MONITORING OF ANNUAL CONSUMPTION DATA

ONLY RENEWABLE ENERGY

(GRI 302-1)



Fruit growers in Trentino have been using only renewable energy sources for some time now. Average annual consumption in the three-year period 2019-2021 was 63 million kWh, of which 91% came from hydroelectric production and 9% from photovoltaics, thereby reaching the goal set in the previous report. The production of annual photovoltaic energy is more than 5.5 million kWh, produced by a total of almost 30,000 m² of photovoltaic panels installed on the roofs of factories or storage systems. Thanks to the energy systems of the Trentino fruit-growing sector, we can guarantee the energy needs for the public lighting of a city of more than 60,000 inhabitants, for a per capita consumption of 100 kWh, as estimated by the Observatory on Public Accounts at the Cattolica University in Milan.1

¹ https://osservatoriocpi.unicatt.it/

2025 TARGET: INCREASE PHOTOVOLTAIC PRODUCTION BY 4 MILLION KWH

(GRI 302-4)

CONSOLIDATION UNDERGROUND

Apples collected in Val di Non by members of the Melinda Consortium are the only apples in the world that are left to rest underground, protected in caves carved within the dolomite rocks that distinguishes the territory of the Trentino valley. A unique global example of a sustainable use of natural resources, land and energy.

These underground cells have been obtained from tunnels excavated for the extraction of building materials that now have a new function as natural refrigerators which were used to preserve 40,000 tonnes of apples in 2022, thus satisfying about 10% of refrigeration requirements and meeting the targets set in the 2020 report.

To understand the importance of this operation, in terms of energy and, more generally, its sustainability, it should be noted that refrigeration accounts for 70% of the energy used by APOT members in post-harvest activities, while 30% is used for processing and packaging. In traditional above-ground cells, about 25% of the energy used in refrigeration is employed to bring apples to the optimal storage temperature, while 75% of energy is employed to maintain internal temperature around 0.5 - 1.0 °C.

In the two methods the amount of energy required to reduce the temperature of apples upon arrival remains the same, what changes is the energy lost due to thermal dispersion. Thanks to the insulating power of the rock, underground cells disperse six times less energy and reduce consumption by more than 80%.

These caves offer many other advantages, from the absence of thermal insulation panels, to a better use of water in the cooling cycle, through to the saving of land.

Overall, the experience of the apple conservation project in caves shows that from the third year energy savings of 30% can be made in refrigeration.



2025 TARGET: TRANSFER OF APPLES FROM THE PACKAGING CENTRE TO CAVES WITHOUT TRANSPORT BY ROAD

LANDSCAPE IMPACT

Trentino is a geographical area in which "nature" plays a dominant role; 56% of the territory is covered by woods, 27% by areas with high natural integrity, by meadows and pasture and 1% by rivers and lakes. The very presence of wooded and protected areas between fruit-growing farms plays an important ecosystem role by maintaining a high level of biodiversity and encouraging the life and presence of animals and even insects to contrast other invertebrates that are potentially

LAND USE IN TRENTINO

harmful to crops. A real synergy between man and the environment is thus achieved, demonstrating that nature and agriculture can coexist in a harmonious manner. The environment is not only a resource for agriculture, as forests and natural parks characterise and qualify the territory of Trentino for other sectors too, such as tourism, which agriculture can be integrated with through farm stays for citizens during their leisure time.

DIAGRAM 2.2



Source: our data processing APPAG

2025 TARGET: IMPLEMENTATION OF NEW INITIATIVES TO PROMOTE AREAS OF NATURALISTIC INTEREST

BEEKEEPING AND FRUIT-GROWING -TOWARDS NEW SYNERGIES (GRI 413-1)

Beekeeping and fruit-growing have always existed in inseparable symbiosis. The progressive increase in beehives in Trentino - which has been ongoing for over 10 years - has been mirrored by the development of fruit-growing. In 2021, the Italian Veterinary Service surveyed more than 35,000 beehives in the province and more than 5.000 located outside the province, which are owned by Trentino beekeepers. Compared with 2019, there was a growth of about 20% in the number of beehives despite a 15% reduction in the number of beekeepers, as the sector follows the same specialisation processes as other agricultural activities (Diagram 2.3).

The more agricultural activities specialise and advance, the more we need a continuous search for technologies and techniques to improve the production environment and, in this specific case, promote a synergy between bees and other pollinating insects. In this context, the agreement signed at the beginning of 2022 between the Province of Trento, Apot, the Beekeepers Association of Trentino and the Edmund Mach Foundation, aimed at improving the relationship between fruit-growing and beekeeping, as well as identifying new lines of development for both business sectors. The protocol was set as a target in the previous sustainability report and has therefore been achieved.



EVOLUTION OF BEEKEEPING IN TRENTINO

DIAGRAM 2.3

Source: our processing of the Data Bank of the Provincial Services Company of the Province

2025 TARGET: SHARING USER GUIDELINES FOR PLANT PROTECTION PRODUCTS THAT ARE INCREASINGLY RESPECTFUL OF BEES

ORGANIC FARMING - BETWEEN NICHE AND A SEGMENT (GRI 304-2)

The pandemic and the war have had a tangible impact on the market structure of organic products by clearly changing the ongoing growth trend that had been seen in the last decade. Supply, especially for fruit and vegetables was about to exceed the niche category ad become something closer to a fully-fledged market segment. The resulting greater price sensitive in buyers, as a result of the exceptional events mentioned earlier, together with a greater focus by distributors on appearing affordable, reversed the trend more recently, with significant repercussions on the market structure even for basic products such as apples.

The choices made by the Trentino fruit-growing sector to support the development of the organic market on the basis of the suitability of areals' soil and climate conditions and the will of business owners, by promoting the development of "biological oases" - like Riomaggiore and Dardine in Val di Non - rather than passively accepting the spontaneous development of production techniques, have been vindicated despite these unpredictable events and has cemented an approach to sustainable production with both consumers and farmers, with integrated production and organic production both representing technical solutions which drive sustainability.

Despite the macroeconomic situation impacting demand, in 2021 APOT members' organic areas amounted to 483 hectares, an increase of 4% compared to 2019, and progressively acquiring a foothold as envisaged in the 2022 targets from the previous report, which can therefore be considered to have been reached. Against this backdrop, there was a 'wait and see' approach towards organic fruit-growing on the whole, with hectares invested falling from 1,065 in 2019 to 1,021 in 2021 (Diagram 2.4).



EVOLUTION OF ORGANIC ORCHARDS IN THE PROVINCE OF TRENTO

DIAGRAM 2.4

Source: our processing of PAT and APOT data

2025 TARGET: ECONOMIC SUSTAINABILITY ANALYSIS AND ORGANISATIONAL ADJUSTMENT OF THE BIOLOGICAL OASES SYSTEM

THE USE OF RESISTANT VARIETIES IS CONSOLIDATED ______(GF

(GRI 304-2)

Developing sustainable agriculture also means optimising the use of available technologies and techniques in line with specific conditions and situations. The parcel trials, first and the use in full-field, then, of varieties of apple resistant to one of the most serious diseases of the cultivation, the tile, has made it possible to make available to Trentino farms located in the vicinity of towns and, in particular, those adjacent to settlements most sensitive to the impacts generated by anthropic activities - such as schools, hospitals and residential areas - plants capable of producing with limited use of pesticide treatments and, therefore, to produce less timely impact on the part of farming practices. As with organic farming, the approach used for the development of resistant varieties prioritised the construction of virtuous examples to promote the spread of initiatives throughout the Trentino fruit-growing territory. One of the successful examples is the Municipality of Tuenno in Val di Non, where from 2016 to 2021 more than 11 hectares of resistant varieties have been planted.

While, on the one hand, this approach allows us to provide tangible examples, on the other, it immediately affects the speed of development of the system, slowing it down in the initial setting up phase until the conditions are right for development in a specific area. Despite this, the development of resistant cultivars in 2020-2022 took place at a double-digit pace (+62.5%) with 75 hectares planted and, as a result, the objectives set out in the previous edition of the sustainability report were largely achieved, with there being a total of 195 hectares in 2022.



2025 TARGET: INCREASE OF A FURTHER 60 HECTARES OF RESISTANT VARIETIES PLOTS WITH RESISTANT VARIETIES IN THE MUNICIPALITY OF TUENNO (VAL DI NON)

Photos Google Earth

EVOLUTION OF ACTIVE SUBSTANCES

(GRI 304-2)

The focus of Trentino fruit-growing on sustainability is not only a recent phenomenon, as demonstrated by the adoption of integrated production by a large proportion of farmers at the end of the last millennium. Indeed, this is the reason it it is now so widespread. In this area there has been a parallel search for new molecules for the protection of fruit and vegetables that are increasingly non-toxic and virtuous in terms of selectivity and environmental impact. This process - which often occurred in advance of changes in European and Italian legislation - has taken place at the same time as the development and improvement of distribution techniques and the optimisation of intervention times, in order to gradually reduce the amount of plant protection products used.

Indeed, the results obtained in the three-year period 2019-2021 highlight a downward trend in the use of pesticides, from 3.6 g/sqm in 2019 to just over 2.9 gr/sqm in 2021 (-19%). In particular, insecticide use fell from 3.3 g/sqm in 2012 to the current level of 1.4 g/sqm, a reduction of almost 60% (Tab 2.2). As such, the 5% reduction targets set in the 2020 budget are largely exceeded, and a risk assessment indicator has also been adopted.

In 2021 the method for calculating the "risk" associated with the use of pesticides was improved with the adoption of the Hazard Risk Index (HRI) used at EU level. In practice this measures the risk in terms of that which is actually used and which replacestheEnvironmental Impact Quotient(EIQ), that had previously been introduced on a voluntary basis. Even here the reduction is very significant and, using 2012 as the base year, the technical choices introduced by the APOT system in collaboration with the E Foundation Technology Transfer Centre. Mach, have led to a reduction in the risks associated with the use of pesticides by more than 40% in six years (Tab 2.3).

This reduction confirms a considerable improvement in quality, as well as quantity, in choices surrounding the use of plant protection products. In the near future, quality assessments will become a benchmark in the new National Action Plan for the Sustainable Use of Pesticides.

The need to maintain adequate levels of defence instruments may be reduced further through integration with more modern plant protection strategies and compliance with the safety parameters established at an EU and Italian level. This will enable a more marked reduction in the risk index (HRI) associated with the use of pesticides.

2025 TARGET: 5% REDUCTION IN THE AMOUNT OF PLANT PROTECTION PRODUCTS USED AND A 5% REDUCTION IN THE HRI INDICATOR



USE OF ACTIVE SUBSTANCES TO PROTECT PLANTS IN TRENTINO

TAB 2.2

	2012	2014	2016	2017	2018	2019	2020	2021
number of campaign records analysed			1,793	3,370	4,225	3,940	3,871	3,805
ha analysed	961	1,519	3,481	6,677	8,232	8,460	8,117	8,013
Category	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.	g/sqm s.a.
Acaricides	0,001	0,001	0,001	0,001	0,000	0,001	0,001	0,001
Herbicides	N/a	N/a	0,058	0,041	0,030	0,026	0,033	0,026
Plant growth regulators	0,009	0,014	0,015	0,014	0,013	0,010	0,011	0,011
Fungicides	1,883	2,627	1,915	1,692	1,561	2,123	1,813	1,465
Insecticides	3,305	1,980	2,546	2,377	2,015	1,450	1,144	1,427
Overall total	5,198	4,622	4,535	4,126	3,619	3,611	3,002	2.929

Source: our calculations using APOT data

HARMONISED RISK INDICATOR (HRI1)

YEAR	* EU reduction Source: Eurostat)	*Decrease Italy Source: Eurostat)	*APOTreduction Source: APOT
2014	-5%	-10%	-12%
2016	-9%	-1%	-13%
2017	-18%	-4%	-19%
2018	-17%	-9%	-22%
2019	-21%	-15%	-32%
2020	N.a.	N.a.	-44%
2021	N.a.	N.a.	-45%

TAB 2.3

(*) average reference 2011-13 (**) 2012 reference

Source: our calculations on Eurostat data

HRI MEANING AND METHODOLOGY

The Harmonised Risk Indicator (HRI1) estimates the evolution of risks and impacts on human health and the environment resulting from the use of pesticides in the EU and its Member States, based on statistics on the quantity of pesticide active substances used, for which the placing on the market is governed by EC Regulation No 1107/2009. These measures are classified in 4 risk groups and weighted for the different groups of active substances regulated by EU Commission Directive 2019/782.

BIODIVERSITY OF TRENTINO'S SOIL

(GRI 304-2)

Acknowledging the importance of soil has always been the basis of agriculture in Trentino and within the framework of the Trentino Sustainable Fruit-growing project, APOT has analysed and evaluated the state of biodiversity in soils and, in particular, in the areas used for apple cultivation, in the knowledge that biodiversity and agriculture are strongly interconnected. While agriculture can contribute to maintaining a high level of biodiversity, the latter represents the basis of essential ecosystem services, like forests and rivers, which support agriculture and human well-being; on the other hand, the coexistence of different animal and plant species in the same ecosystem contributes, at various levels, to the regulation of diseases and pests, pollination, maintenance of the water and nutrient cycle and soil fertility, erosion control, climate regulation, as well as carbon sequestration.

Through the Biodiversity Alliance tool promoted by CCPB, APOT wishes to develop a greater awareness of the biological quality of soils used for the cultivation of apple and other fruits, by measuring level through the QBS-ar index. This index is based on the analysis of edaphic microarthropods living near the surface of the soil, where their activity is more concentrated.

The analysis of the surveys conducted in 2021 showed an average QBS-ar value of 137 a scale of 60 (poor) to 160 (excellent), which is highly consistent with previous years, with QBS-ar of 137 in 2019 and 140 in 2020. This data positions Trentino fruit-growing soils at a medium-high biological quality and satisfy the target that was set in the 2020 report (Diagram 2.5).



2025 TARGET: CONFIRM MONITORING OF SOIL BIODIVERSITY AND CORRELATIONS WITH THE EDAPHIC CHARACTERISTICS OF APPLE ORCHARDS

BIODIVERSITY OF TRENTINO SOILS





Source: our processing of Timesis - CCPB data



SUSTAINABLE METHODS: SEXUAL CONFUSION __

(GRI 304-2)

More than fifteen years ago, the technique of sexual confusion was introduced in Trentino fruit-growing. This innovative tool is the result of the efforts of producers and research bodies and reduces the use of plant protection products to control insects through natural substances that simulate the effect of the pheromones emitted by females and disorientate males, thus reducing the birth rate and, consequently, the development of subsequent generations of pathogens. Today this technique covers 100% of the Trentino apple-growing area managed by APOT - which is affected

by the presence of the coding moth (*Cydia pomonella*) - with significant results that have certainly contributed to the reduction in the use of plant protection products. The refinement of this technique continues year after year with the aim of extending its use to other apple insects and pathogens, like so-called embroidering bugs. In line with the 2020 budget targets, in 2021 there were 178 hectares affected by sexual confusion on embroidering bugs, to add to the more than 7,000 for Carpocapsa and 334 for Ermine (Tab 2.4).

THE SPREAD OF SEXUAL CONFUSION IN TRENTINO IN 2021 (DATA IN HA)

Parasite	SCIENTIFIC NAME	LA TRENTINA	Melinda	АРОТ
Carpocapsa	Cydia pomonella	950	6,230	7,180
Тір	Grapholita molesta	141	193	334
Embroidering bugs	Pandemis heparana, Pandemis cerasana, Adoxophyes Orana, Ljungian Argyrotaenia, Archips podanus	12	166	178

TAB 2.4

Source: our calculations using APOT data

2025 TARGET: EXTENSION TO 300 HECTARES OF SEXUAL CONFUSION AGAINST EMBROIDERING BUGS

RESPECTFUL PACKAGING

(GRI 301-1; 301-2; 301-3)

In recent years, packaging materials have been the focus of analyses carried out for the sustainability of processes and products. Recycling and re-use has been prevalent as has product safety and chemicals in the fields. Fruit-growing in Trentino is committed to sustainability in a structured form since the launch of this project and has given great attention to both single-use and reusable packages. Nowadays the main varieties are cartons and boxes made from corrugated cardboard, wood and plastic, with the latter using as much recycled material as possible (R-PET, PE).

The vast majority of paper and wood-based containers utilise sustainably produced raw materials. The cellulose used comes from specially created plantations, where felled adult trees are replaced by new ones, with the replanting exceeding the cutting coefficient. In 2021, a total of about 50 million packages were used by the APOT system single.

The Trentino fruit and vegetable system has therefore developed a virtuous system for packaging, as both the plastic and the paper used can be recycled to create secondary materials with which to restart the cycle. Alternatively, the packaging itself may be produced directly with secondary materials from this cycle. Finally, circular economy experiments are ongoing to utilise waste products to produce cartons through innovative industrial processes.

With regard to transport and display packaging, moreover, APOT has contributed to the adoption of reusable plastic containers (*RPCs: reusable plastic containers*) in retail supermarket chains. In 2021, the fruit and vegetable system moved over 12 million and a half of RPCs. This system makes it possible, on the one hand, to reduce the use of raw materials to produce the packaging and, on the other, to optimise transport costs thanks to the lowering of the sides on the way back to the washing centres.



2025 TARGET: MAINTAINING THE SYSTEM

SUSTAINABILITY REPORT 2023

SPECIAL WASTE RECOVERY

The programme agreement between the Autonomous Province of Trento and the Organisations of the agricultural sector, which APOT is part of, for the collection and disposal of the packaging of plant protection products, expired plant protection products, filters and also other waste materials from operational activities, resulted in over 3,000 annual contributions as occurred in the previous three-year period, to achieve the targets set out in the previous report (Tab. 2.5). With regard to the various types of material collected, between 2019 and 2021 saw the highest contribution levels, thus confirming the importance of the service APOT offers its members to ensure maximum respect for the environment in cultivation practices and all related activities, based on the type of circular economy approach underpinning all sustainability drives.

SPECIAL MATERIAL CONTRIBUTIONS BY APOT SHAREHOLDERS

TAB 2.5

(GRI 306-1; 306-2;

306-3: 306-4)

YEAR	CONTRIBUTIONS (NO.)	Pesticide packaging (kg)	EXPIRED PESTICIDES (KG)	Filters (kg)
2017	3,440	27,691	1,615	809
2018	3,487	32,662	1,247	842
2019	3,495	35,126	1,876	819
2020	3,337	35,900	1,547	1,168
2021	3,282	34,463	1,075	766

2025 TARGET: MAINTAINING THE SYSTEM Source: our calculations using APOT data

INTEGRATED PRODUCTION CONTROLS

The wholesomeness of products is at the heart of the Trentino fruit and vegetable system and is monitored through strict ad hoc controls in the field and in processing warehouses, with sample numbers far higher than those required by both compulsory and voluntary certification systems.

Thus, in order to increase efficiency and, consequently, reduce the need for plant protection products, the Trentino fruit and vegetables system uses a control plan that is processed by a computerised system. The availability of extensive data allows for the analysis and understanding of the dynamics surrounding the use of these products. Thanks to sophisticated and accurate controls introduced by the system, consumers can enjoy state-of-the-art food safety. Checks on residues of pesticides in apples carried out by the Trentino fruit-growing system showed that, in the three-year period 2019-2021, from 2,602 samples analysed, 99.58% were compliant

A total of 875,975 checks were conducted on samples collected in the last three years and 99.99% were found to have no residues or residues of less than 30% of the maximum residue limits (MRLs). This data is in line with figures for the previous three years, thus confirming the target from the previous sustainability report.

THREE-YEAR PERIOD 2019-2021

2,602 SAMPLES 99.58% COMPLIANT

875,975 ASSESSMENTS 99.99% WITHOUT RESIDUES OR WITH RESIDUES LESS THAN 30% OF THE MRL

2025 TARGET: MAINTAIN THE SYSTEM







3_FOR PEOPLE AND LEISURE TIME

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MAN AT THE CENTRE OF THE SYSTEM ____

(GRI 2-1; 2-7)

The mutual aspects of the cooperative system, which is based on the concept of people before capital, have always been the cornerstone of the Trentino fruit-growing system. The 5,865 members active in the province, of which 3,913 are represented by APOT, are the engine of this system. As in the case at national level, there is also a progressive reduction in the number of associated producers in Trentino, the result of a shift towards larger and more structured companies. This trend is aligned with the trend for national agriculture in general, although at a country level Italy has seen a reduction



in the area cultivated. In Trentino the decrease in the number of farms, from 7,764 in 2016 to 5,864 in 2021, saw the cultivated area remain stable at above 10,000 hectares. This dynamic can be read as a positive evolution towards larger and more professional companies.

Indeed, thanks to the combination of many specialised and state-of-the-art small and medium-sized producers, the Trentino system provided work to 1,811 employees in 2021 within their cooperative structures (Tab 3.1) thus achieving the targets set in the 2020 report.

The 2020-2021 campaign saw a contribution of 534,000 tonnes of fruit that resulted in a turnover for the system of 589 million euro, an increase of 11% compared to the previous year and payments to producer members of more than 295 million euro, corresponding to approximately 0.5 euro per kg and close to 30,000 euro per hectare.

FRUIT-GROWING COOPERATIVES IN TRENTINO IN 2021

	ACTIVE PRODUCER MEMBERS	COOPERATIVE EMPLOYEES
АРОТ	3,913	1,451
OTHER	1,952	360
TOTAL	5,865	1,811

TAB 3.1

Source: our processing of APOT and Trentino Cooperation Federation data

2025 TARGET: MAINTAINING EMPLOYMENT

FOREIGN LABOUR SPEAKS TRENTINO

The structure of the phenological cycles of the fruits cultivated in Trentino and, as a result, the related cultivation operations, such as pruning, weeding and, in particular, harvesting means there is a significant seasonal fluctuation in labour requirements. Over time, this fluctuation has been increasingly satisfied with the use of foreign workers given the progressive reduction in Italian workers. In 2021, about 68% of seasonal workers came from abroad, mainly from the countries of Eastern Europe, with 57% coming from Romania. In 2019-2021 foreign seasonal employment for the agricultural sector as a whole increased by more than 1,500, from 14,249 to 15,920 employed, against an increase of just over 200 units of seasonal workers.

Of particular importance in this dynamic is the incidence of young people aged under 25, which represent

26% of the total compared to 22% in 2019, while the proportion of women (25%) is also growing (Tab 3.3).

The development of fruit-growing in Trentino can also rely on the attractiveness of the province for foreign seasonal workers, thanks to the high quality of accommodation with direct stays with the families of farmers, in comfortable and dignified conditions in their homes or premises built or adapted for this purpose. Thanks to this special relationship of "familiarity" between fruit farmers and workers, long-lasting partnerships have often been established and over time foreign workers have started speaking dialects.

	2019	2020	2021
seasonal workers	23,243	22,966	23,470
young people < 25	5,097	6,706	6,141
% Under 25s on tot seasonal workers	22%	29%	26%
women	5,280	5,316	5,927
% of women on tot seasonal workers	23%	23%	25%
foreigners	14,494	14,249	15,920
% foreigners on tot seasonal workers	62%	62%	68%

(GRI 2-7)

SEASONAL WORKERS IN TRENTINO AGRICULTURE

TAB 3.2

Source: our processing of Coldiretti data, CIA, Confagricoltura del Trentino

2025 TARGET: STABILISING THE MONITORING SYSTEM

TRAINING FOR THE
FUTURE(GRI 2-24; 404-1; 404-2; 404-3)

APOT organises and promotes training courses for its members in order to spread and establish the concept of sustainability in the Trentino fruit system, where it seeks to focus on the most current themes for the fruit campaign.

In 2021, over 3,000 members took part in lessons, that were provided in both classrooms and remotely, for more than 8,700 hours of training, just under 3 hours on average per employee. In 2020, due to the Covid-19 pandemic, there was a reduction in training hours due to mobility limitations but in 2021 in collaboration with the E Foundation. Mach, APOT tested and introduced the streaming of classes to get round the closure of many businesses, and organised over 7,800 hours of online courses. This service has enabled enables its fruit-growing members and, therefore, the whole system to remain constantly up-to-date with the latest developments in cultivation, new technologies and the prevention of accidents in the workplace.

More specifically, the courses focused on modern agronomic practices, strategies to acquire defences and the biological containment of invasive species of Trentino fruit pests, application of new techniques for the management of trees and the containment of Asian cimicid. Within the regulatory framework, members have been trained for the identification and containment of the fire blight. In addition, in terms of environmental protection, APOT included in the training in 2020 the description and application procedures for mitigation measures to improve the health of bodies of surface water. Finally, in 2021 measures were introduced to reduce drift, with particular reference to weed-killing bars and the proper disposal of pesticides and their containers.



2025 TARGET: MAINTAIN THE SYSTEM AND DEVELOP NEW ON-LINE TRAINING MODULES (E.G. BEEKEEPING)

SEASONAL TECHNICIANS

As already mentioned, Trentino fruit-growing has relied heavily on young people, with seasonal workers under 25 passing from 5,097 to 6,141 over the three-year period 2019-2021, with an average incidence of 26% in total temporary labour. Young people aged under 25 also include the team of seasonal technicians employed by APOT to assist members in business activities and in the management of integrated production activities, with youngsters representing on average 65% of employees. Most had their contracts renewed the following years, giving continuity to the working relationship (Diagram 3.1). The opportunity offered by APOT has enabled them to use their

years of experience with APOT at the start of their careers as a launchpad for more complex tasks both within the organisation and, more generally, in local agriculture. The limitations and difficulties caused by the pandemic in terms of employment, combined with the uncertainty over short-term prospects that also affected the availability of personnel for seasonal activities, contributed to the failure to achieve the target of the 15 annual hires envisaged in the previous report.

SEASONAL WORKERS IN TRENTINO AGRICULTURE



PERSONS EMPLOYED IN THE REFERENCE YEAR

PERSONS EMPLOYED IN PREVIOUS YEARS



DIAGRAM 3.1

Source: our calculations using APOT data

2025 TARGET: 12 DIRECT AND INDIRECT HIRINGS PER YEAR

(GRI 2-7)

CULTURAL AND SPORTS INITIATIVES FOR THE PROVINCE

(GRI 413-1)

APOT supports the communities in which APOT operates by promoting sporting and cultural activities and encourage the sustainable development of the territory and tourism. These activities in turn bring important values and resources to local agriculture. In the 2020/2021 campaign, APOT, its associates Melinda, La Trentina and Copag, invested €617,713 for the sponsorship of sporting, social and cultural activities, such as the Alpe Cimbra FIS Children Cup (formerly Topolino trophy), Trentino sailing, the Half Marathon 19 Garda Trentino and other local sports activities.

In addition, in 2020 Melinda and La Trentina made extraordinary contributions of €400,000 and €100,0000 respectively to the Local Health Board as funds for purchasing equipment and machinery during the pandemic.









4_ FOR THE LOCAL ECONOMY

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Apple orchards in blossom, Val di Non - photo by Carlo Baroni (Fototeca Trentino Sviluppo S.p.A)

THE VALUE OF FRUIT-GROWING

(GRI 2-6; 2-7)

The Trentino fruit system has historically involved the aggregation of family businesses in cooperatives and consortia that work and place fruit on the market. In 2021 this amounted to more than 500,000 tonnes of goods, for a value of the finished product placed on the market of 589 million euro, up 11% compared to the previous year, thanks to the work of 4 Producer Organisations and 28 storage, sorting and packaging centres, which made investments in the year for 310 million euro and employed more than 1,800 people.

APOT, through the Consortia Melinda, La Trentina and Copag, is at the centre of this system; in the 2020-21 season it managed more than 476,000 tonnes of fruit grown by its almost 4,000 members, generating a turnover of 366,110,540 euro.

Most of the employment in the supply chain comes from the families of the

fruit growers themselves, thus allowing them to supplement their family income, ensuring good employment conditions even in the most peripheral areas of the province, where fruit-growing is the engine of the entire economy. Fruit farming is also connected and intertwined with the ancillary activities of production and supply of technical means, as well as with the management of processing and packaging premises, and all activities related to intangible services. Fruit-growing, together with wine-growing and animal husbandry, which it shares several elements with from a district perspective, is therefore the cornerstone of the economy for these areas and keeps them active and attractive for tourist and hotel/ accommodation businesses.



SUSTAINABILITY REPORT 2023

THE IMPACT OF THE SYSTEM

In Trentino agriculture plays a very important role in the provincial economy, so much so that its incidence of 13% on provincial GDP is almost double the national average, despite less cultivable land due to the predominantly mountainous conformation of the territory.

The result is that its agriculture sector specialises strongly in two high added-value categories, namely wine-growing and fruit-growing. 33% of gross saleable production in the agricultural sector is the result of a strong apple specialisation - which accounts for more than two-thirds of the sector - and which makes apple-growing one of the key economic activities in terms of both direct employment and induced value.

Apple cultivation defines and constitutes, as we shall see below, a real district of excellence of international repute. In addition to the direct value generated by fruit farming, the effects on related sectors must be added, including direct effects such as technical means, insurance, transport, and indirect effects, such as tangible and intangible services for the sector's workers and their families.



2025 TARGET: MAINTAIN FRUIT-GROWING ABOVE 30% OF THE GSP FOR THE AGRICULTURAL SECTOR

THE TRENTINO APPLE DISTRICT

(GRI 413-1)

In 2018, the "Trentino apple district" was studied and identified, which fulfils all four evaluation criteria established by the economist Fabio Sforzi, whose methodology is summarised in the appendix. In particular, the ratio of fruit farms to total farms is three times higher than the Italian (Tab. 4.1).

The key element of the Trentino apple district is the direct induced activity that it is able to generate in the territory. Suffice it to say that out of the total turnover of the system of just top 530 million euro between 2019 and 2021, the direct induced income from the agricultural phase alone was in the order of more than 200 million euro. Repeated fertility technical means make up 55%, while simple fertility technical means (27%) and intangible services (18%) make up the remaining 45%.

But the district does not only produce economic effects. From 2001 to 2020

areas with hydrogeological instability in Val di Non were essentially stable, remaining below 7% of the territory, including thanks to the presence of thousands of fruit growers that guaranteed a direct and indirect control over the area. Over the same period in many hilly areas of the Appenine mountains, where fruit-growing has fallen sharply, the increase in hydrogeological risk areas was more than 5% and now exceed 20% of the total. The limitation of instability compared to the situation in the Apennines has led to a reduction in prevention and restoration costs which, on the basis of the growth differential, has been estimated to be more than one million euro per year.

THE TRENTINO APPLE DISTRICT

2020	Fruit-growing in Trentino	Italian fruit farming
Agricultural employees + processing employees FeV/tot employees	7.7%	4.8%
Agricultural employees + workers working for FeV< 250 workers/ agricultural employees + FeV employees	98.5%	97.6%
fruit farms/agricultural farms	43.5%	14.5%
Fruit farms/total companies	17.5%	5.1%

TAB 4.1

Source: source: our calculations using Infocamere and Istat data

2025 TARGET: MORE DETAILS ON THE VALUE OF INDIRECT INDUCED ACTIVITIES AND EXTERNALITIES

The Valli del Noce represent an example of "apple district economy" of particular importance in Trentino's socio-economic system. In these valleys, the district's activity is carried out by almost 4,000 companies who employ more than 13,000 people. The main activity of the district is connected to the direct satellite activities that are directly linked to apple growing and support activities for vegetable production that provide work for 350 companies and 1,350 workers. The "apple district" of the Valli del Noce employs 25% of the resident population between direct and induced activities. These people (not including their families) feed a demand for goods and services in the area that employs more than 1,000 companies and almost 2,500 people indirectly.

THE ECONOMIC SUSTAINABILITY OF APOT (GRI 204-1)

For APOT, economic sustainability means operating responsibly to ensure a stable and prosperous future for the company. With this in mind, there is a commitment to create value over time by offering high-level services and selling top-quality products in a constantly evolving market.

Precisely in view of promoting the economic sustainability of companies and the sector as a whole in the medium to long term, APOT supports widespread access by Trentino-based fruit growers to mutual funds activated by Co.Di.Pr.A. These are handled by a management committee, which is made up of representatives of the supply chain (market, agriculture, public institution). The IST (Income Stabilization Tool) Fund for Apples, for example, is an innovative and recently established tool to protect the income of agricultural holdings in the event of severe market crises, with the aim of compensating significant losses of income and allowing the agricultural activity of the farm concerned to remain viable. For APOT, economic sustainability also

means supporting local growth and the growth of all parties in the company's value chain. The value generated by APOT is largely redistributed in the province of Trento in which it operates through the creation of employment and the use of a high percentage of local suppliers (more than 70% of the total) thus contributing to better employment levels and investments.



2025 TARGET: RETURN TO PLANT RENEWALS OF 4% P.A.

ECONOMIC AND FINANCIAL RESULTS

In 2018, the Melinda and La Trentina Consortia decided to fully centralise the marketing of the product produced by their respective members as they were certain they would be able to strengthen the system and take advantage of the opportunities offered by the European Union for Associations of Producer Organisations (A.O.P.). This is the first such example at national level and one of the few at the EU level. APOT is operating in an extremely complex market where the ongoing concentration of retail giants, increased trade tensions in what has become an international market environment and protectionist measures from some countries have put added pressure on suppliers and the competitiveness of the system. Despite this, APOT has managed to increase its market share thanks to the Melinda and La Trentina brands, which are leaders in Italy for apples.

In the 2020-2021 commercial campaign of apples produced by members of Melinda and La Trentina, the turnover generated by the APOT system, amounted to more than 367 million euro.

The company's results are closely linked to external factors, in particular the European and global geopolitical production context, as well as the varietal structure, the productivity of the system and marketing policies. After a few years of strong renewal, with a trend of over 7% per year, there has been a slowdown, with an incidence that has now stabilised below 3%, which is a critical threshold that must be overcome. Average productivity per hectare stands at 68 tonnes, with the worst performing farms barely reaching 50 tonnes/ha and who will require additional growth efforts. The process of plant renewal and attention to agronomic practices should seek to restore marginal production situations and increase average productivity.



ECONOMIC VALUE DIRECTLY GENERATED AND DISTRIBUTED ____

(GRI 2-6)

Sustainability at a company level is measured both by the ability of an organisation to create value in a sustainable way and on the redistribution of part of the wealth produced to stakeholders - be they employees, suppliers, public administration and the entire reference community - as well as, in the broadest sense, the territory in which it operates.

An analysis of the income statement of the APOT for the years 2020-2021 and 2021-2022 can be summarised as the value generated, the value distributed to shareholders and the value retained for operations.

As can be seen from Table 4.2, APOT uses the most of the economic value generated for the purchase of raw materials - that is, mostly products supplied by members - amounting to € 341,118,608 in the year 2020-2021 and €277,002,138 in 2021-2022, in addition to the remuneration of services from local suppliers. APOT stands out for its commitment to invest in the Italian territory and, specifically, in the Autonomous Province of Trento. This operating model, which is linked to investments based on local suppliers and rootedness to the territory where the company was founded and has developed including through its services, contributes to the distribution of value towards local communities.

A specific analysis of the origin of service providers - mainly logistics and plant maintenance providers - shows APOT's contribution to the local and regional supply chains. This represents a major commitment and a constant source of focus for the company. For further details, please refer to the list of the most important suppliers of APOT in the appendix.



Apple orchards in blossom, Val di Non photo by Carlo Baroni (Fototeca Trentino Sviluppo S.p.A)

DIRECTLY GENERATED ECONOMIC VALUE DISTRIBUTED BY APOT

TAB 4.2

FINANCIAL YEAR	2020-2021	2021-2022
Economic value generated	367,054,920	303,877,514
Revenues from sales of services	366,110,540	302,226,138
other revenues and income	1,147,719	159,743
financial income	8,625	1,268,159
foreign exchange gains and losses	-211,964	223,474

Economic value distributed	367,020,863	303,684,249
Operating costs	364,577,904	301,422,332
- for raw materials	341,161,359	277,130,362
- for services	22,859,333	23,637,584
- for use of third party assets	71,245	61,248
- depreciation/amortisation and write-downs	72,244	59,431
- misc. operating expenses	413,723	533,707
Personnel costs	2,358,240	2,204,677
remuneration of capital (other financial charges)	56,570	35,933
payments to P.A. (taxes)	28,149	21,307
Economic value retained	34,057	35,235
Value paid to member consortia	341,118,607	277,002,138
Operating profit	34,057	35,235

Legal reserve	15,158	25,375
Mutual Fund	1,022	1,057
Statutory reserve	636,700	659,518

Source: our calculations using APOT data



SUSTAINABILITY REPORT 2023

(GRI 2-6)

APOT centralises the marketing and export activities of apples produced by producer organisations Melinda and La Trentina. Exports of apples overseas in the 2021-22 season, as was the case in the previous two seasons, saw a setback, with sea shipments often complicated due to rising costs and a low availability of containers and ships to the most distant destinations, as



was the case for trucks and truckers for intra-European shipments, as a result of the serious consequences of the pandemic and now by the continuation of the Russian-Ukrainian conflict.

On a positive note, exports to the Indian market were positive, with strong results particularly for Red Delicious.

Due to global health and socio-economic problems, which hindered the achievement of the 2022 target and the expected increase of exports to 30% of market value, there was a negative trend for exports between 2021 and 2022, with a final tally of 20%, a 5% reduction from the previous period (Tab 4.3).

BREAKDOWN OF REVENUES FROM SALES BY GEOGRAPHICAL REGION

TAB 4.3

REVENUES FROM SALES BY GEOGRAPHICAL AREA	2021	2022	2021	2022
Italy	273,501,456	242,943,516	75%	80%
Exports	92,609,084	59,282,622	25%	20%
Total	366,110,540	302,226,138	100%	100%

Source: our calculations using APOT data

2025 TARGET: RECOVERY OF EXPORTS TO 25% OF THE MARKET VALUE

TOURISM AND AGRICULTURE

In 2020, the pandemic significantly shared objectives of rural development changed tourism flows at all levels. and improving the tourism offer. In this Trentino farms were also affected. perspective APOT, which represents Indeed, while the farmstay movement grew steadily in the number of arrivals and visitors until 2019, there was a reversal in 2020 with a reduction of more than 35% of total arrivals, which reached almost 60% for foreigners (Tab. 4.4). Fortunately, the excellent fundamentals of the local farm system, which did not disinvest even during this period of uncertainty, meant total accommodation levels unchanged and allowed a reversal of trend in 2021, with Italian tourists reaching record levels at more than 230,000 stays, as well as foreign tourists, that were up more than 35% compared to 2020.

These trends show that fruit-growing and tourism can coexist and share the

about 80% of fruit growers in Trentino, indirectly contributes to the increase of tourism in the province by taking care of the territory, the main resource, and guaranteeing for individual companies that are part of the system the income required for them to remain as vital operators in this sector. Obviously, the economic situation has not made it impossible to pursue the objective of the further development of farmstays that was set out in the previous report. This target is now set for the next reporting period and will be included in ongoing discussions between APOT and the Trentino Farmhouse Association.

(GRI 203-2; 413-1)

TOURIST **MOVEMENT IN** FARMHOUSES IN THE PROVINCE OF TRENTO

TAB 4.4

NUMBER OF ARRIVALS

		2018	2019	2020	2021
	Italian tourists	100	101	75	89
	Foreign tourists	100	107	50	84
	Total tourists	100	103	66	88

NUMBER OF VISITS

Italian tourists	100	102	90	104
Foreign tourists	100	108	54	89
Total tourists	100	104	75	98

Source: our calculations using APOT data

2025 TARGET: INVOLVE THE TRENTINO FARMHOUSE ASSOCIATION IN DISCUSSIONS WITH APOT





13 FIGHT AGAINST



17 PARTNERSHIPS FOR OBJECTIVES 8



5_ FOR A SUSTAINABLE FUTURE

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CURRENT SUSTAINABILITY INVESTMENTS AND PROJECTS

The European Innovation Partnership (E.E.I. measure 16.1 of the Rural Development Plan 2014-2020) was the perfect opportunity for APOT to collaborate on sustainability issues: the Sustainable Walkable Apple Orchard (Me.P.S.), Sustainable Alternative Forestry (F.A.S.) and climate and agriculture in mountain areas (C&A).

Me.P.S., a shared project for a temporary association of companies (ATI) with the E. Mach Foundation and the Fruit Innovation Consortium, that had set itself the target of studying an innovative way of fruit-growing through the use of low-cut plants to increase the quality of the production process. Among the results achieved, there is great interest in the positive experimentation of plant health treatments with fixed overhead systems to eliminate drift, increase the effectiveness of interventions and thus reduce the quantities of pesticides, avoid the entry of tractors and, as a result, eliminate risks in particular in sloped areas, as well as reduce the carbon impact of plant protection processes. The project is currently in an advanced transfer phase in some fruit-growing areas.

The project "Sustainable Alternative Forestry (F.A.S.), that is shared with the same ATI as Me.P.S., which was completed in 2021, has achieved useful results for fruit crops. In particular, the variety and clone of the "Dro Susina" has been clearly characterized, with virus-free conservation and the start of production of certified plants that will be available from 2024. For blueberries tests have made it possible to identify the most suitable varieties for the production area of the Non Valley and the technique for the use of sterile male plants has produced positive results for the bio-control of the Mediterranean fly, an insect that is progressively spreading in the provincial areals. The certification of soil biodiversity for cherry and other crops other than apple has been finalised.

Water resources were at the centre of PEI Clima & Environment (C&A) 4.0, concluded in 2021, which allowed the investigation of methods to develop a rational use of water in order to test and improve the various active defence techniques, among them the frost-prevention systems with low water consumption. In addition, the project encouraged further research related to the multifunctional use of water resources. This project involved APOT, as a partner, within the Operating Group comprising Co.Di.Pr.A. (as the leader), Edmund Mach Foundation, Bruno Kessler Foundation, Provincial Federation of Irrigation consortia and Land Improvement Consortium and Fruit Innovation Consortium.

2025 TARGET: 200 HECTARES OF SUSTAINABLE WALKING ORCHARD WITH SUNK DEFENCE SYSTEMS

CONTINUOUS INVESTMENT IN PROJECTS AND SERVICES

APOT and the Edmund Mach Foundation have renewed their decade long alliance with the aim of analysing and promoting at a scientific level various initiatives and activities in support of agricultural development in Trentino. The "Programme of experimental activities, services and Technical Consulting" for the year 2022 identifies 18 areas of collaboration and is updated annually according to emerging needs and problems.

Apot and FEM's commitment is constant over time and includes both asset sharing and cost-sharing.

The total cost, which is the subject of the 2022 agreement, which is estimated at 774,700 euro (Tab. 5.1) sets out several budget headings, which aim to support the Trentino system by proposing the dissemination of advice focused on the sustainability of the production campaign, as well as the updating of innovations and the sector. 49.7% for technical advisory



services and 50.3% for services and experimentation (Diagram 5.1) the latter range from research on improving the most suitable production techniques for newly introduced varieties, to the control of the age of maturation and support for the preservation of fruits, through testing on cultivation and protection techniques for plant diseases with the aim of gradually improving alternatives.

The many areas of work in the 2022 programme include: "Product and system certifications"; "Integrated Production Controls"; "Controls on the maturation and conservation of apples"; "Improving new varieties production techniques"; "Monitoring of mineral nitrogen in apple orchard soil"; "Study of potential new carriers of apple proliferation phytoplasma". In 2022 the project "Pomis", which includes the monitoring of the mineral nitrogen of soils, was included within the APOT "Operating Plan", carried out in reference to EU Reg. 1308/2014 and 2115/2021, with the aim of gradually extending this approach to other projects starting from 2023.

Finally, training is also given a special focus. The intense and continuous training activity, reserved for Apot members for many years, allows farmers to be constantly updated with regard to the most topical and fundamental issues for the growth of the fruit production system while acquiring credits for the renewal of authorisations to purchase and use plant protection products.

> Fototeca Trentino Sviluppo S.p.A. Foto di Pio Geminiani Valle di Non, Lake Santa Giustina, panorama

APOT INVESTMENTS IN PROJECTS AND SUSTAINABILITY SERVICES

TAB 5.1

	AMOUNT		PERCENTAGE	
	2021	2022	2021	2022
FEM Projects and Services 2022	446,700	389,700	52.8%	50.3%
Technical Advisory Services	400,000	385,000	47.2%	49.7%
ANNUAL INVESTMENT	846,700	774,700	100%	100%

Source: our calculations using APOT data

2022 INVESTMENTS, PROJECTS AND SERVICES FOR SUSTAINABILITY

DIAGRAM 5.1



Percentage breakdown

- 42.4% CE productivity, health, safety in the workplace and conditionality, training
- 18.0% Integrated Production Checks
- 11.5% Ripening period control and apple conservation support
 - % Monitoring cherry ripening
 - % Training course for refrigeration technicians
 - Targeted monitoring of apple proliferation phytoplasma and plum pox virus
 - Quality monitoring (microbiological analysis) of water used in agriculture
 - 2% Fertilization of orchards with soil improvers from animal waste
 - % Technical production improvement for new varieties
 - % Sustainable management of sub-row spontaneous vegetation -Pelargonic acid Project
 - % Drosophila suzukii study of the biology and alleopathic effects of association with aromatic plants
 - 1% Monitoring of soil mineral nitrogen in Trentino apple orchards
- 3.6% doctorate: Study on the role of potential new vectors of apple proliferation phytoplasma
- 0.4% Caritro Project: New technologies for the application of pesticides with a reduced environmental impact
- 2.3% Other investments in experimentation

Source: our calculations using APOT data

2025 TARGET: DESIGN NEW TESTING/INNOVATION ACTIVITIES TO BE INCLUDED IN THE OPERATIONAL PROGRAMME OF APOT
OBJECTIVES AND PLANS CURRENT AND PROSPECTIVE

Knowing the environment in which the Trentino fruit-growing system is located is strategic and a priority for APOT and partner consortia. In accordance with the 2022 target a decision was made to develop a system to geo-reference the data collected by APOT and other entities the Association works with. This has created a successful collaboration with a specialist company to build an IT platform, called POMIS (Fruit and Vegetable Platform for Sustainable Integrated Monitoring) that the significant amount of existing information can be fed in to and supplemented in the years to come. The first stages in 2021-2022 involved the mapping of nitrogen in the soil and the results of monitoring on apple proliferation phytoplasma monitoring and the deterioration and blight of apple trees, which was particularly significant

in 2021. Work will continue with mapping of soil biodiversity using state-of-the-art techniques and the mapping information will be further supplemented with the geomorphology of orchard soils. The process of computerising the campaign registers, which all fruit producers are required to compile, has been completed. This process makes it possible to report annually on the use of certain factors of production, particularly pesticides and fertilizers. In order to make the exchange of data and information as fluid as possible for all parties, a specific protocol was approved in 2022 with the Edmund Mach Foundation.



2025 TARGET: SET UP APPLE SUITABILITY MAPS

REFLECTIONS ON THE PRESENT, COMMITMENT FOR THE FUTURE

The constant dedication of Trentino fruit growers towards ensuring a higher quality of product will continue in the future. At the same time, there will be a greater focus on the health and safety of workers and the population of the valleys along with the development of increasingly harmonious production techniques for sustainable production. The initial practical experience of plant disease control technique using overhead distribution nozzles is an example of this. Continuous improvement includes the development of the "Online Field Notebook", with independent use by fruit growers having increased by 20% between 2016 to 2019, and by a further 20% between 2019 and 2021., meaning it now stands at 80% Compared to the use of paper

for recording agronomic activities, this improves security in the application of procedures and also represents a form of training for farmers, making them more independent in the management of cultivation practices and also more aware of the importance of their work.

In 2022, a project was completed with MUSE, as a preliminary step towards larger-scale studies to increase institutional knowledge of the environmental value of wooded and ecotonal areas surrounding orchards, by creating a positive relationship between fruit-growing and surrounding environment that will also help to preserve the distinctive features of the agro-forest landscape of Trentino's valleys.



6_ APPENDIX

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METHODOLOGICAL NOTE

The 2023 Sustainability Report for APOT, that was drafted within the framework of the Trentino Sustainable fruit-growing project, represents the tool for APOT to share with internal and external stakeholders its strategy and progress in terms of sustainability.

The report, which is in its third edition, following the reports published in 2016 and 2020, shows the main results achieved in the three-year period 2020-2022 and the roadmap for years to come to create long-term value

The report has been drafted in accordance with the standards developed by the Global Reporting Initiative (GRI)³ a non-profit organisation that aims to provide concrete support to companies or institutions that wants to present a sustainability report to outline their environmental, social and economic performance.

This report has been prepared in accordance with GRI Standards. The GRI Standards are currently the most widely used and established international reference for non-financial reporting.

The figures and information reported are for the 1 August 2021 - 31 July 2022 tax year, unless otherwise stated. The reporting scope corresponds to that of the financial report for the year ended 31 July 2022; any limitations or extensions to this scope are specified in the document. Data on production aspects refer to APOT members operating in the autonomous province of Trento.

There are no significant events or changes in measurement methods that would affect the comparability of the information contained in this report with that provided in the previous edition, except where appropriately noted.

This report has been prepared with the external assurance of Agroter di Roberto Della Casa &

Partners, a research and consultancy firm specialising in non-financial analysis in the agri-food sector.

For any questions, please write to: info@APOT.it.

(GRI 2-2; 2-3; 2-4; 3-2)

THE REPORT HAS BEEN DRAFTED IN ACCORDANCE WITH THE STANDARDS DEVELOPED BY THE GLOBAL REPORTING INITIATIVE (GRI), A NON-PROFIT ORGANISATION THAT AIMS TO PROVIDE CONCRETE SUPPORT TO COMPANIES OR INSTITUTIONS THAT WANTS TO PRESENT A SUSTAINABILITY REPORT.

³ www.globalreporting.org



SUSTAINABLE DEVELOPMENT GLOBAL GOALS

PRINCIPLES FOR DEFINING THE CONTENTS OF THE REPORT ______GRI 2

(GRI 2-3; 3-1; 3-3)

Completeness	Aspects that are detailed in qualitative terms, the qualitative-quantitative indicators and the reporting scope reflect APOT's economic, environmental and social impacts in the province of Trento and in the contexts in which its activities may have a significant influence on stakeholders.
Balance between positive and negative aspects	From the perspective of complete transparency, the document describes the main performances, reporting both positive aspects and areas for improvement and future challenges.
Comparability	Where available, comparisons with the previous financial years (ending 31 July 2020) are included.
Accuracy	In order to ensure the reliability of the information in the report, priority has been given to directly measurable quantities and the use of estimates has been avoided as much as possible. Where necessary, these estimates are based on the best available calculation methodologies or on sample surveys and their use is appropriately reported.
Timeliness	APOT's reporting cycle is three years
Clarity	The description of activities and projects contains information that is as clear as possible and usable by any stakeholder of the company, with a fairly detailed reporting of technical data and specificities.
Reliability	Data collection and control involves multiple functions and company representatives and is supported by computerised data collection systems. This is followed by a process of consolidation and validation by the representatives of the working group for their respective areas of responsibility. The report was submitted to the external assurance of Agroter di Roberto Della Casa & Partners. The ultimate responsibility for the data and information in the report lies with APOT's management.

DEFINITION OF MATERIAL TOPICS

(GRI 3-1; 3-3)

The 2023 Sustainability Report has been structured according to the material topics identified by APOT and the Stakeholders, as reported in the materiality matrix. First of all, the material topics for the sector identified by the Sustainability Accounting Standards Board (SASB) for agricultural products were considered. These issues represent the aspects with the most important impacts for APOT and for stakeholders connected to the organisation itself in different ways.

In order to define in detail the material topics, APOT then adopted a process that first included:

1. the identification of issues that could potentially be significant for the company;

2. the evaluation of issues whose impacts are most significant;

3. the validation of the issues for the materiality matrix.

In order to weigh up the issues identified, a scenario analysis and sample market research interviews were conducted as part of the project with both internal and external stakeholders, as well as on the outcomes of the annual internal and external audit meetings.

The external Assurance firm then listed the material topics in terms of their relative importance - low, medium, high and intermediate - precisely in order to identify the most pressing issues of shared interest to focus on.

Once the relevant issues were identified and weighed, during a workshop with company management, the materiality matrix was created by ordering the issues based on their potential impact on APOT and the company's ability to manage these impacts. The material topics that were defined and prioritised primarily impact Trentino's fruit-growing system and Trentino's society. Only some of these, such as the development of sustainable production, the use of sustainable packaging, product innovation, scientific research on food quality and safety as well as related food health and safety, have an impact beyond the borders of Trentino in the marketing of products distributed by APOT. Similarly, the impacts generated are mostly caused by Trentino's fruit-growing system in both positive and negative terms.



INSIGHTS INTO THE CONTENTS OF THE REPORT

1 - INTRODUCTION REFERENCES

1a: APOT'S HISTORY AND OBJECTIVES

The fundamental objectives of APOT, defined in Article 3 of the Articles of Association, are:

- plan production and adapt it to demand, in terms of both quality and quantity;
- promote the concentration of supply, marketing and commercialisation of members' production;
- provide technical assistance and advice, in particular on environmentally friendly cultivation practices and production techniques;

- manage promotion programmes;
- prepare and implement multi-annual or annual operational programmes, in whole or in part;
- represent all the interests of Trentino's producers with the outside world, particularly public bodies;
- manage relations with public bodies with regard to existing or future regulations and legislation;
- organise and manage the 'integrated production specification';
- organise and manage the registers of members and producers.

1b: GOVERNANCE STRUCTURE OF APOT _____

(GRI 2-9; 2-10; 2-11; 2-12; 2-14; 2-18)

The General Assembly is the collective body that expresses the will of the members. In particular, the Ordinary Shareholders' Meeting appoints the members of the Board of Directors and the Board of Statutory Auditors, approves the budget, decides on funds necessary for achieving the company purposes and approves the regulations determining the criteria and rules for the performance of mutual activities.

The Extraordinary Shareholders' Meeting deals with amendments to the articles of association, the dissolution of the company and the appointment of liquidators and determines their powers. The Shareholders' Meeting approves reports and the pursuit of the aims of the articles of association and development guidelines, including the development of the objectives envisaged in the sustainability report at a three-year basis. The evaluation is also carried out on the basis of the findings of the research carried out by delegated independent external bodies (CCPB, University of Bolzano and FEM). On the basis of the results of the three-year reports, new objectives are formulated, with the choice of instruments left to the seniormost management body. The shareholders' meeting is responsible for appointing and revoking members of the Board of Directors.

The Board of Directors consists of 11 members who have a three-year term of office. The Board is vested with the broadest powers for the management of the company and carries out all acts of ordinary and extraordinary administration with the exception of those that the law or the articles of association reserve for the Shareholders' Meeting. In addition, the



Board of Directors defines the significant impacts generated by the organisation on the basis of the results of internal and external audit meetings and in relation to evidence emerging from research and analysis carried out by delegated independent external bodies (CCPB, University of Bolzano and FEM).

The Board may delegate part of its tasks to an Executive Committee whose composition and powers are laid down in the Rules of Procedure and which operates in accordance with the instructions of the Board. The Executive Committee has been delegated to manage commercial activities, quality and marketing and must report to the Board every three months on the general performance of the delegated management and its outlook, as well as on the most important operations. The management body shall prepare the partial or full multi-annual operational programme in accordance with the applicable EU and national legislation, as amended and supplemented, for approval by the Shareholders' Meeting.

Finally, the Board of Statutory Auditors is the body responsible for the statutory audit of the accounts.

1c: APOT'S SUSTAINABILITY GOVERNANCE

Dialogue with stakeholders

The two-year period 2020 - 2021 was marked by the pandemic, which significantly affected the project for establishing relationships and dialogues within and outside the organisation. The dialogue process resumed in 2022, with meetings restarting at the various levels needed to drive the improvement of relations with its stakeholders.

An effective involvement process enables companies to enrich and make their strategic decisions more 'sustainable' and, above all, to steer their social, environmental and economic performance in the direction of coordinated growth.

The way in which stakeholders are involved and the frequency of dialogue with each of them varies depending on the issues being addressed and the opportunities for discussion. APOT involves its stakeholders through the Trentino Sustainable Fruit (TFS) project, whose objective, as highlighted above, is the economic, environmental and social sustainability of fruit-growing in the Autonomous Province of Trento.

This project is carried out through participation and productive exchange within internal and external audits. The internal audit involves producer members, employees, subsidiaries and trade associations. The external audit involves representatives of local communities, customers, suppliers, trade unions, the scientific community, public administration and local authorities. External audit meetings to discuss sustainability and how to improve this were held on 17 January 2020, 4 April 2021 and 28 October 2022. The internal dialogue with APOT, with the relevant coordination committee, took place in 5 meetings on 17/01 and 29/10 in 2020, 26/03 and 23/07 in 2021 and 19 September 2022.

(GRI 2-16; 2-17; 2-25; 2-26; 2-28; 2-29)

SUSTAINABILITY REPORT 2023



The traditional annual conferences with stakeholders were held on 21 February 2020 at the COCEA Cooperative Conference Room in Taio, on February 18, 2021 by videoconference and on 22 February 2022 at the Social Theatre in Trento, which were preceded by presentation press conferences.

The imminent sustainability targets require a systematic dialogue, which APOT has pushed for vigorously, in the search for innovative and attractive means of motivating the social base and involving external stakeholders. In the future the aim is to continue and further enhance the level of commitment.

Over the course of the year, the director of APOT participated in various meetings within the framework of the Trentino Sustainable Fruit-Growing project.

14/01/2022	MUSE	Promotion of Biotopo Rocchetta
27/01/2022	NOVAMONT	Perlargonic acid project set-up
02/03/2022	Fiera Verona	Carbon Farming Conference
07/03/2022	АРРА	Project for the exploitation of animal wastes
18/03/2022	Co.Di.Pr.A	PEI C&A Coordination Committee
22/03/2022	АРОТ	PAT & MUSE Protected Areas Service
24/03/2022	АРОТ	Beekeeping Committee
29/03/2022	Video call	CoopItalia Sustainability Event
27/04/2022	Coop Italia	Project for alternatives to weeding
11/05/2022	University of Bolzano	Project on the study of the carbon footprint of the supply chain
24/05/2022	АРОТ	MPA Meeting for POMIS project
20/06/2022	MUSE	Trentino Wines Consortium sustainability report
28/06/2022	АРОТ	Beekeeping round table
19/07/2022	Coop. COBA	APOT/OP seminar
22/07/2022	FEM/CTT	Apple blight seminar
29/07/2023	Assomela	Zero residue seminar
20/09/2022	Melinda	Meeting on overhead treatment systems
22/09/2022	Co.Di.Pr.A	participation of APOT sustainability report
23/09/2022	Melinda	Discussion on activities with APSS

10/10/2022	Freshfel (call)	Sustainability Coordinating Committee
27/10/2022	MUSE	Seminar with PO on MUSE projects
04/10/2022	Melinda	Planning Committee
15/11/2022	Global Gap (call)	Sustainability Focus Group
13/12/2022	Ministry of Health	Meeting with Director of Department of Hygiene and food safety

The main ways of communicating with stakeholders and issues of interest are summarised below.

ECONOMIC, ENVIRONMENTAL AND SOCIAL SUSTAINABILITY		
STAKEHOLDERS	SUBGROUPS	ENGAGEMENT AND COMMUNICATION METHODS
MEMBERS	APOT members (Melinda, La Trentina, Copag)	Shareholders' Meeting, periodic financial reports, Trentino Sustainable Fruit-growing Internal Audit
CUSTOMERS	Supermarket chains, wholesalers, retailers and end buyers	Trentino Sustainable Fruit Farming external audit
STAFF	Administrative, Commercial/ sales	Trentino Sustainable Fruit Farming internal audit
LOCAL COMMUNITIES	Valle dei Laghi, Valsugana	Trentino Sustainable Fruit Farming external audit
TRADE UNIONS	Agricultural trade unions	Trentino Sustainable Fruit Farming external audit
PUBLIC ADMINISTRATION AND LOCAL AUTHORITIES		Trentino Sustainable Fruit Farming external audit
TRADE ASSOCIATIONS AND OTHER ORGANISATIONS	Direct association: Trentino Federation of Cooperatives, Assomela, Fruit Innovation Consortium (CIF), CAA Coop Trento, Promocoop spa, Cooperfidi CO.Di.Pr.A	Trentino Sustainable Fruit Farming external audit
	direct association through Assomela: FRESHFEL, WORLD APPLE AND PEAR ASSOCIATION,	
SCIENTIFIC COMMUNITY	MUSE, FEM and others	Trentino Sustainable Fruit Farming external audit

STAKEHOLDER MAP

1d: GLOBALGAP AND GRASP CERTIFICATIONS

Particularly relevant are:

 The self-declaration on good social practices. This requirement requires management and workers' representatives to sign, display and enforce a self-declaration of good social practices and respect for human rights towards all workers. At the very least this declaration contains a commitment to comply with the main conventions of the International Labour Organisation (ILO), such as those on discrimination, minimum age for admission to employment and child labour, forced labour, freedom of association, the right to organise trade unions and collective bargaining, fair remuneration and minimum wage, transparent and non-discriminatory recruitment procedures and a whistleblowing procedure. The self-declaration states that workers' representatives may submit complaints without personal sanctions. Workers must be

informed about the self-declaration and it is reviewed at least once every three years or whenever necessary.

- Employment contracts. This requirement means that for each worker there is a contract to show to the evaluator who requests it (on a sample basis). Contracts must be in line with applicable laws and/or collective bargaining. Contracts must be signed by both the employer and the employee. Contracts must contain at least the full name, nationality, a description of the function, date of birth, date of commencement of work, hours of regular work, salary and contract period and, for workers with foreign nationality, the relevant legal status and work permit.
- Working hours and breaks. This requirement sets forth that working hours, breaks and rest days must be documented and in line with applicable laws and/or collective bargaining. Unless there are more





restrictive legal requirements, records must indicate that the ordinary work does not exceed 48 hours per week. During peak periods (e.g. harvest), working hours must not exceed 60 hours per week. Daily breaks and rests must also be guaranteed during seasonal peaks (e.g. harvest).



1e: APOTemployees _

APOT WORKFORCE 2021/22		
Permanent contract	23	
Men	13	
Women	10	
Fixed-term contract	8	
Men	6	
Women	2	
Full-time contract	28	
Men	19	
Women	9	
Part-time contract	3	
Men	0	
Women	3	
Total employees	31	
Men	19	
Women	12	

SEASONAL TECHNICIANS 2021/2022	
Seasonal contracts 11	
Men	7
Women	4

Source: our calculations using APOT data

2 - REFERENCES TO CHAPTER 4 "FOR THE LOCAL ECONOMY"

2a: METHODOLOGY FOR IDENTIFYING THE APPLE DISTRICT IN TRENTINO

The constituent element of a production district is the localised interaction between a community of people (with a historically defined identity and particular values, rules and institutions) and a population of businesses, specialised in a certain sector and organised in such a way as to achieve a division of labour by phases that results in greater efficiency and flexibility of the production process.

Fabio Sforzi, professor of Economic Geography at the Faculty of Economics of the University of Turin, was the first to tackle the quantitative analysis of districts, experimenting with an identification procedure that was then adopted by ISTAT as a working tool⁴.

The methodology consists of two distinct steps. In the first step, by means of a cluster algorithm, local labour systems (SLL) are identified after being defined on the basis of daily commuting movements from census data. In the second step, a subset of SLLs is classified as a district on the basis of a set of characteristics of the economic structure based on a comparative analysis of local population and industry census data in relation to national data.

In this second step, which is the structural basis and methodological difference between Sforzi's 1990



and 1995 work, the idea is that a Marshallian industrial district is simply an SLL that possesses certain structural characteristics that can be measured through:

1) the share of manufacturing employees in total employment in non-agricultural sectors, which must be higher than the national average;

2) the share of manufacturing industry employees in enterprises with up to 250 employees, which must be higher than the national average;

 the share of employees in at least one sector of the manufacturing industry in total manufacturing employment, which must be higher than the national share;

4) the share of employees in at least one sector referred to in the previous point, in enterprises with up to 250 employees, which must be higher than the national average.

If conditions 1 and 2 have been fulfilled in a local system, and, if for at least one sector, conditions 3 and 4 have been fulfilled jointly, the local sector is called a district, and the sectors for which conditions 3 and 4 have been fulfilled are called specialisations of the district. From these sectors of specialisation, the one in which the index referred to in condition 3 is highest is called dominant and defines the district.

⁴ Sforzi F. (edited by), I sistemi locali del lavoro 1991, ISTAT, Collana Argomenti, n. 10, 1997.

Fototeca Trentino Sviluppo S.p.A. Photos by Marco Simonini Farfalla - Papilio machaon on a lavander flower

2b: APOT'S SUPPLY CHAIN

Below is a list of APOT's main suppliers:

- AGROFILEA: an association of agricultural technicians dealing with environmental monitoring.
- AGROTER DI ROBERTO DELLA CASA & PARTNERS SAS : is the specialised company in charge of external assurance for the Trentino Sustainable Fruit-Growing project and for consumer research.
- CCPB SRL: is an accredited certification body entrusted with the measurement of soil biodiversity.
- CSQA SRL CERTIFICATIONS: it is responsible for the ISO 9001:2015 certification of the integrated production control system, the GlobalGAP Custody Chain certification, as well as IFS Broker.
- ICEA CERTIFICA: deals with Organic certification.
- EDMUND MACH FOUNDATION (FEM): through a service contract it provides

technical advice and is involved in research and testing.

- TRENTINA FEDERATION OF COOPERAZIONE: is responsible for auditing and managing sensitive data.
- MICHELI RENATO & C. SNC: is a mechanics company which overhauls sprayers using APOT's equipment,.
- MPA SOLUTIONS: the software house that deals with the IT and mapping infrastructure.
- TRENTINO SVILUPPO SPA: is responsible for organising trade fairs APOT attends.
- VASSANELLI LAB SRL and WATER & LIFE LAB SRL: are two laboratories carrying out residue analysis in apples. Both laboratories are outside the region and were chosen for their third party status and impartiality compared to local laboratories that might be more influenced by APOT's role in Trentino.



Val di Non, apple orchards - photo by Pio Geminiani (Fototeca Trentino Sviluppo S.p.A)

GRI CONTENT INDEX



For the Content Index - Essentials Service, GRI Services verified that the index of GRI content is clearly presented, in a manner consistent with the Standards, and that the references for information from 2-1 to 2-5, 3-1 and 3-2 are aligned with the appropriate sections in the body of the report.

DECLARATION OF USE		Apot has reported in accordance with the GRI Standards for the period from 1-7-21 to 31-12-22.
GRI 1		GRI 1: 2021 FUNDAMENTAL PRINCIPLES
GENERAL DISCLOSURE		
	INFORMATION NUMBER AND NAME	Reference or Reason for Omission
GRI 2: General disclosure 2021	2-1 organisation details	Apot s.c.a.Via Brennero 322, 38121 Trento p. 14 - 22 - 53organisation size - 2021/2022Total number of employees42Services provided6Revenues from sales302,226,138Source: our processing of APOT data
	2-2 Entities included in reporting on the sustainability of the organisation	p. 75
	2-3 Reporting period, frequency and contacts	Reporting party: APOT s.c.a. Via Brennero 322, 38121 Trento info@apot.it p. 75 - 76

	INFORMATION NUMBER AND NAME	REFERENCE OR REASON FOR Omission
	2- 4 Auditing of information	р. 75
	2-5 External assurance	Agroter di Roberto Della Casa & Partners SAS p.10
	2-6 activities, value chain and other business relationships	p. 12 - 15 - 59 - 64 - 66 - 85
	2-7 Employees	p. 53 - 54 - 56 - 59 - 83
	2-8 Self-employed workers	At APOT all workers are employees that are duly employed in accordance with the agreements set forth by the applicable national bargaining agreement.
	2-9 Governance structure and composition	p. 16 - 78
	2-10 Appointment and selection of the senior governing body	p. 78
	2-11 Chairman of the senior management body	p. 78
GRI 2: General disclosure 2021	2-12 Role of the senior governing body in the control of impact management	p. 78
	2-13 Delegation of responsibility for managing impacts	р. 16
	2-14 Role of the senior governing body in sustainability reporting	p. 16 - 78
	2-15 Conflicts of interest	Governance bodies shall be structured so that there are no conflicts of interest.
	2-16 Communication of critical issues	р. 79
	2-17 Collective knowledge of the senior governing body	p. 79
	2-18 Evaluation of the performance of the senior governing body	p. 78
	2-19 Rules for remuneration	The chairman of the Board of Directors has a fixed remuneration and directors receive a €100 fee for each board meeting in addition to the reimbursement of expenses. In addition, directors have pensplan for retirement benefits. which the company contributes to.

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	INFORMATION NUMBER AND NAME	Reference or Reason for Omission
	2-20 Remuneration determination process	In the Federation of Trentino Cooperatives, which is the reference for the bargaining agreement for employment contract, there is a committee called EBOT (Trentino Fruit and Vegetable Bilateral Entity) which trade unions participate in and which specifically deals with the sector's wage policies.
	2-21 Total annual remuneration report	The analysis on RAL (gross annual remuneration) reveals a ratio of 74.37% in 2020 between the highest paid individual in the organisation and the median total annual salary for all employees which increased slightly to 74.56% in 2022. The highest paid individual had a 5% increase in the overall annual remuneration, while other employees had a 4.57% increase over the past year.
	2-22 Sustainable Development Strategy Declaration	p. 7
	2-23 Policy commitments	р. 18 - 20
GRI 2: General disclosure 2021	2-24 Integration of policy commitments	At APOT, Director Alessandro Dalpiaz is responsible for sustainability commitments. He guides and directs the Trentino Sustainable Fruit-Growing project. He is supported by the Head of the team dedicated to quality and certification, Loris Marchel, and the Technical Committee Manager, Massimiliano Gremes. Massimiliano Gremes works with Paolo Gerevini, head of the Executive Committee, for the transfer of the quality system to member POs. Over the next three years, Apot aims to pursue the integration of commitments in organisational strategies and operating procedures. p. 55
	2-25 Negative impact mitigation processes	р. 79
	2-26 Mechanisms for requesting clarification and raising doubts	p.79
	2-27 Compliance with laws and regulations	APOT adopts conduct and actions which comply with laws and regulations.

	INFORMATION NUMBER AND NAME	Reference or Reason for Omission
	2-28 Membership of associations	р. 79
	2-29 Stakeholder engagement approach	p. 23 - 24 - 79
	2-30 Collective bargaining agreements	PROVINCIAL BARGAINING AGREEMENT FOR EMPLOYEES AND ASSISTANT MANAGERS OF FRUIT AND VEGETABLE COOPERATIVES IN TRENTINO, which in Trentino also incorporates the Italian national law for agricultural managers. The source for the contract is the Trentino Cooperation Federation It covers 100% of employees.
MATERIAL TOPICS		
GRI 3: Material topics 2021	3-1 Material topics determination process	p. 25 - 76 - 77
	3-2 List of material topics	p. 26 - 33
Economic performance		
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
GRI 202: Presence on the market 2016	202-1 Standard entry wage ratio by gender and local minimum wage	Not applicable, because no employee is remunerated according to minimum wage rules
	202-2 Percentage of executives employed from the local community	For APOT local means that senior managers come from the province of Trento. All 5 executives come from the province of Trento.
Economic performance		
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
GRI 203: Indirect economic impact 2016	203-1 Investments in infrastructure and services supported	Not applicable, because the organisation does not carry out infrastructure investments or generate funded services
	203- 2 Significant indirect economic impacts	p. 67
Economic performance		
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
GRI 204: Procurement practices 2016	204-1 Expense percentage for local suppliers	p. 62

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	INFORMATION NUMBER AND NAME	REFERENCE OR REASON FOR Omission
Development and use of sustainable packaging		
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
	301-1 Materials used by weight or volume	p. 49
GRI 301: Materials 2016	301-2 Recycled input materials used	p. 49
	301-3 Recycled products and respective packaging materials	p. 49
Use of renewable energy, ene	rgy conservation, Climate change mitigatior	actions
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
	302-1 Internal energy consumption within the organisation	p. 38
GRI 302: Energy 2016	302-2 Consumption of energy outside the organisation	In the current report no data on external energy consumption is available, but APOT expects to analyse this in the next publication.
	302-3 Energy intensity	The energy intensity per tonne of processed apples is 124 kwh.
	302- 4 Reduction of energy consumption	р. 39
	302-5 Reduction of energy requirements for products and services	please refer to EPD Assomela 2021 p. 35
Water use reduction, Water st	torage, Climate change mitigation actions	
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77
	303-1 Interaction with water as a shared resource	This is not reported in APOT's sustainability report because it is not a direct impact produced by APOT, but reference can be made to the data of the associated POs.
GRI 303: Water and effluents 2018	303-2 Management of impacts linked to water discharge	This is not reported in APOT's sustainability report because it is not a direct impact produced by APOT, but reference can be made to the data of the associated POs.
	303-3 Water extraction	p. 37

	INFORMATION NUMBER AND NAME	REFERENCE OR REASON FOR Omission		
	303-4 Water discharge	This is not reported in APOT's sustainability report because it is not a direct impact produced by APOT, but reference can be made to the data of the associated POs.		
	303-5 Water consumption	p. 37		
Biodiversity preservation, Plant defence, Land and landscape conservation, Climate change mitigation actions				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 304: Biodiversity 2016	304-1 Operating sites owned, leased or operated in protected areas and areas of high biodiversity outside or close to protected areas	p. 22		
	304-2 Significant impacts of activities, products and services on biodiversity	p. 42 - 43 - 44 - 46 - 48		
	304-3 Protected or restored habitats	p. 22		
	304-4 Species in the national preservation list and IUCN's Red List with habitats in areas affected by operations	p. 22		
Air protection, Climate change mitigation actions				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 305: 2016 emissions	305-1 Direct GHG emissions (Scope 1).	р. 35		
	305-2 Indirect energy (Scope 2) GHG emissions	p. 35		
	305-3 Other indirect emissions (Scope 3) of GHG	p. 35		
	305-4 GHG emissions intensity	р. 35		
	305-5 Reduction of GHG emissions	р. 35		
	305-6 Emissions of substances that deplete the ozone layer (ODS)	Not applicable because we do not emit substances that deplete the ozone layer		
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx) and other significant atmospheric emissions	see EPD Statement - Assomela for SO2 data		

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	INFORMATION NUMBER AND NAME	Reference or Reason for Omission		
Waste reduction, Sustainable packaging development and use, waste reduction and proper waste management, Climate change mitigation actions				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 306: Waste 2020	306-1 Generation of waste and significant impacts relating to waste	p. 50		
	306-2 Management of significant impacts relating to waste	p. 50		
	306-3 Waste generated	p. 50		
	306-4 Waste redirected from disposal	p. 50		
	306-5 Waste destined for disposal	not applicable because all waste is diverted from disposal and recycled		
SOCIAL				
Vocational training of employees, Training and youth inclusion, Digitalization				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 404: Training and education 2016	404- 1 Average hours of training per year per employee	p. 55		
	404-2 Programmes for employee skills updating and assistance in transition	p. 55		
	404-3 Percentage of employees who periodically receive performance evaluations and professional development	p. 55		
Direct Induced Development, Support for sport, Inclusion and Social Integration, Attention to residents' health, Services for workers' families, Sustainable Production Innovation, Reducing chemical use, Wellbeing of people, Sustainable Product Innovation, Farm holidays Development, Value Creation, Sustainable Investment Development, Centrality of the Cooperative System				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 413: Local communities 2016	413-1 operations with local community involvement, impact assessments and development programmes	p. 41 - 57 - 61 - 67		
	413-2 Operations with significant real and potential negative impacts on local communities	Not applicable because the organisation does not directly generate significant negative impacts on local communities, even at a potential level		

	INFORMATION NUMBER AND NAME	Reference or Reason for Omission		
Scientific research on health, food safety and health, Scientific Research on Quality and Food Safety, Supply Chain Management, Environment and Safety at Work, Scientific Research on Sustainability, Promoting healthy and safe diets				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 416: Customer Health and Safety 2016	416-1 Evaluation of the health and safety impacts of product and service categories	p. 18		
	416-2 Episodes of non-conformity with regard to health and safety impacts of products and services	There were no non-conformities in terms of health and food safety labelling		
Transparency in processes and products				
GRI 3: Material topics 2021	3-3 Material topics management	p. 25 - 76 - 77		
GRI 417: Marketing and labelling 2016	417-1 Labelling and information requirements on products and services	p. 18		
	417-2 Episodes of non-conformity concerning labelling and information on products and services	There were no non-conformities in terms of health and food safety labelling		
	417-3 Episodes of non-conformity regarding marketing communications	There were no instances of non-conformity of marketing communications concerning health and food safety		



ACKNOWLEDGEMENTS

The third edition of the Trentino Fruit-Growing Sustainability Report summarises the strong commitment of APOT but, above all, of every single fruit grower to the "Sustainable Trentino Fruit-Growing " project.

Without their constant daily efforts to improve from both the technical and the social point of view there would have been no progress to present and comment upon since the first and second edition, and we would not have been able to offer the community such solid evidence of a sustainable growth process in the sector. As time passes we are becoming increasingly aware of the seriousness of environmental issues and the need for constant progress in seeking improved solutions of cultivation techniques towards the concept of "sustainability" within which, together with environmental and social factors, we can also improve the financial outlook of fruit-growing businesses. For their constant and invaluable support to the project we must also thank everyone who has contributed to this process, providing guidance and impetus to the directions and projects undertaken. First on the list is the Autonomous Province of Trento, starting with its agricultural departments but also including a steady growth in active cooperation with the Environmental, Territorial, Health and Trentino Marketing sectors. A channel of frank discussion has also been strengthened with local communities, intended not so much to convince as to inform, contributing knowledge that is of use in making informed decisions to respect the needs of the production chains as well as the public. Even more outstanding, as this publication highlights, is the extensive technical and scientific support of the

E. Mach Foundation, along with the ever-increasing contribution of the Museum of Natural Sciences (now known as MUSE), with which major joint ventures have started to ensure the supply chain is even more aware of and proactive towards environmental issues. The crucial support of the agricultural unions and Co.Di.Pr.A, also merits particular gratitude, with their immediate recognition of the APOT proposal as a high-quality and well-balanced opportunity to tangibly express the efforts, results and plans of fruit-growing businesses in Trentino. Last but not least, we would like to thank the Beekeeping Association of Trentino, whose valuable collaboration creates a perfect synergy between agriculture and beekeeping. We finally also thank all those voices within society who, sometimes in strongly critical terms, urge the production sector to accelerate the pace towards the objectives of safety, tranguillity and enjoyment of the environment. We wish to confirm, as this report demonstrates, that we are progressing in this precise direction.

A PROJECT PROMOTED BY



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