

Sustainability Report

5th Edition __non-financial report prepared according to GRI Standards

<https://www.globalreporting.org/standards>

In accordance with the **United Nations' Global Action Programme for Sustainable Development** established in 2015, Gruppo Mezzacorona has **strategically prioritized 8** of the 17 **Sustainable Development Goals** that closely align with its core business and organizational model.



This document provides an account of the Group's **progress on ESG** (Environmental, Social, Governance) **factors** for the 2022-2023 period. It also presents its **evolving commitments** for the future.

Realizing Sustainable Growth.
Our Achievements & Future Aims
through:



8 Strategic Development Goals



Goal



Goal 2: end hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Material topic: give continuity to the adoption of sustainable agricultural practices using low-risk plant protection products, thus supporting applied research and experimentation.

Commitment

Gruppo Mezzacorona actively promotes **sustainable farming** among members and suppliers. We **invest in research** to minimize agriculture's environmental impact while **preserving soil health**.

Recognizing water's critical role, we also prioritize **water careful management** for agricultural resilience.

Gruppo Mezzacorona provides ongoing **professional technical support** to its members, assisting them in choosing the most effective strategies for managing their vineyards.

Achievement

- 100% **mating disruption** for **pest control**, avoiding conventional insecticides.
- Collaboration with the **Technical Health Committee** supervised by *Consorzio di Tutela Vini del Trentino* and the *Istituto Superiore di Sanità* to phase out less safe active ingredients in plant protection products.
- **Water efficiency improvement** and evaporation reduction, by transitioning from drip to **sub-irrigation** to combat climate change and drought in Sicily.

- Vineyard assistance: **7,200 vineyard visits** (April-September) by 5 agronomists.
- Soil nourishment through **organic fertilizers**.
- Selective and need-based use of phytosanitary products.
- **Proper and efficient water resource management**.
- **100% completion** of **electronic operation logs** by members for accurate tracking.

Goal



Goal 3: ensuring health and well-being for all and for all ages.

Material topic: ensuring health and well-being for everyone and for all ages by focusing on the health and safety of workers and consumers in the production and marketing of wine.

Commitment

- **Workplace Health & Safety**

Continuous improvements and preventative measures ensure workplace safety. Regular training, infrastructure upgrades, and strict adherence to safety standards are key.

- **Consumer Health & Safety**

Extensive internal and third-party checks guarantee product quality and safety. Promotion of responsible and convivial wine consumption.

- **Environmental Sustainability**

Actively evaluating and improving pesticide quality to minimize environmental impact. Investing in advanced technologies and expertise to exceed legal standards in water quality.

Achievement

- **Training for Members:** av. of 906 members, with over 6 training hours/each.
- **Training for Employees:** av. of 3,823 hours/year = 18.7 training hours/each.
- **Safety:** continuous investments in training, safety devices, facilities and infrastructure upgrading.
- **SMETA Audit:** successful compliance with ethical and environmental standards.
- **SQNPI Certification:** obtained for 7 consecutive years, guaranteeing sustainable practices in grape and wine production.
- **Laboratory Expansion:** enhanced capabilities for multi-residual wine analysis, ensuring product quality and safety.
- **Carbon Footprint and Water Footprint Certification:** achieved under Equalitas Certification for Nosio, highlighting measurable efforts to reduce environmental impact.
- **VIVA Certification for Nosio and Solsicano:** recognized for wine sustainability, measuring performance in air, water, territory and vineyard management.
- **IFS Food Certification:** guarantees compliance with global food safety standards.
- **Organic Certification and SOSTain Sicily Certification:** for certain wine selections, ensuring compliance with EU regulations on organic production.
- **Ambassador Company for Wine in Moderation (WIM),** an international non-profit association, promoting responsible and moderate wine consumption.

Goal



Goal 6: ensure availability and sustainable management of water and sanitation for all.

Material topic: contributing to water consumption efficiency, less waste and maintaining water quality.

Commitment

Attention to **water conservation** and **wastewater quality improvement** across all sites. The use of environmentally friendly cleaning products is also promoted.

Achievement

- **Water Purification Plants:** all production sites in Trentino and Sicily are equipped with appropriately sized and technologically **advanced water purification plants** to process wastewater effectively.
- **Reduction in Water Consumption:** process water consumption has been **reduced by 21%** compared to 2019.
- **Wastewater Analysis:** laboratory analysis of wastewater has shown **zero non-conformities**.
- **Sub-Irrigation Systems:** in Sicily, 96.7% of vineyards at Villa Albius have adopted sub-irrigation systems, progressively replacing drip systems to **minimize water waste**. At Solsicano, we are converting to sub-irrigation wherever the geomorphological conditions are suitable.

Goal (1/2)



Goal 7: ensure access to affordable, reliable, sustainable and modern energy for all.

Goal 12: ensure sustainable patterns of consumption and production.

Goal 13: call for urgent action to combat climate change and its impacts.

Material topic: prioritizing investments in energy efficiency and climate change adaptation.

Commitment

Use **renewable energy resources** and undertake **emission reduction actions**.

Commitment to using the **best available technology (BAT)** to increase **energy efficiency** in offices, processes and all production sites.

Achievement

- **51% Renewable Energy:** over half of the total energy consumed annually comes from renewable sources.
 - **Self-Generated Energy:** 6% of the Group's energy needs are met through self-generated **solar thermal** and **photovoltaic systems**.
 - **4,469 tons of CO2 emissions avoided** for the fifth consecutive year through consumption of renewable and self-produced energy.
 - **Electricity Monitoring Systems:** introduced at Cittadella del Vino to track and optimize energy consumption.
 - **Low-Emission Vehicles:** 51.9% of the company fleet consists of vehicles meeting Euro5 and Euro6 emission standards.
-
- **LED Lighting Upgrade:** replaced 1,154 additional fixtures with a lighting control system, reducing electricity consumption by approximately 50% compared to non-LED fixtures.
 - **Natural Lighting:** offices are designed to maximize natural light, reducing reliance on artificial lighting.
 - **Underground Cellar Construction:** 75% of cellar rooms are built underground to leverage natural cooling, minimizing energy use for temperature control.
 - Improving the efficiency of Nosio **refrigeration**, air conditioning and air distribution systems.

Goal (2/2)



Goal 7: ensure access to affordable, reliable, sustainable and modern energy for all.

Goal 12: ensure sustainable patterns of consumption and production.

Goal 13: call for urgent action to combat climate change and its impacts.

Material topic: prioritizing investments in energy efficiency and climate change adaptation.

Commitment

Constant commitment to **raw material** and **waste reduction**. Optimized **waste collection** in bottling. Recovery and disposal of waste by all members.

Management control, validated by a third party. Commitment to issue periodical **sustainability report**.

Achievement

- **Elimination of Non-Recyclable Materials:** completely phased out non-recyclable synthetic caps and PVC caps, opting for sustainable alternatives.
- **Packaging Reduction:** 17% reduction in cardboard usage and 18% reduction in steel packaging. Adoption of systems to eliminate the use of pallets during storage and transportation, further minimizing material waste.
- **Automated Waste Separation:** organic waste is separated from plastic waste at the end of the sparkling wine production process using a separating machine (automated vibrating screen), ensuring efficient waste categorization.
- **Waste Program Agreement:** in compliance with the Program approved in 2013 by the local government (Autonomous Province of Trento), all waste produced by members is delivered to the winery within an **organized recovery circuit**.

- The company prepared its fifth **non-financial report using the GRI standards**, aligning its strategy with the **Sustainable Development Goals**.
- Gruppo Mezzacorona presented its reports at **Bocconi University's CSR exhibition** in 2022 and 2023, discussing wine industry commitment and responsible consumption.

Goal



Goal 8: promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.

Goal 9: build resilient infrastructure, promote sustainable industrialization and innovation.

Material topic: achieving ever greater economic performance for the growth of Gruppo Mezzacorona, for its members, employees and those who collaborate with it. Strengthen the cooperative identity, give continuity to the centrality of members and their remuneration. Create employment opportunities especially for the younger generations.

Commitment

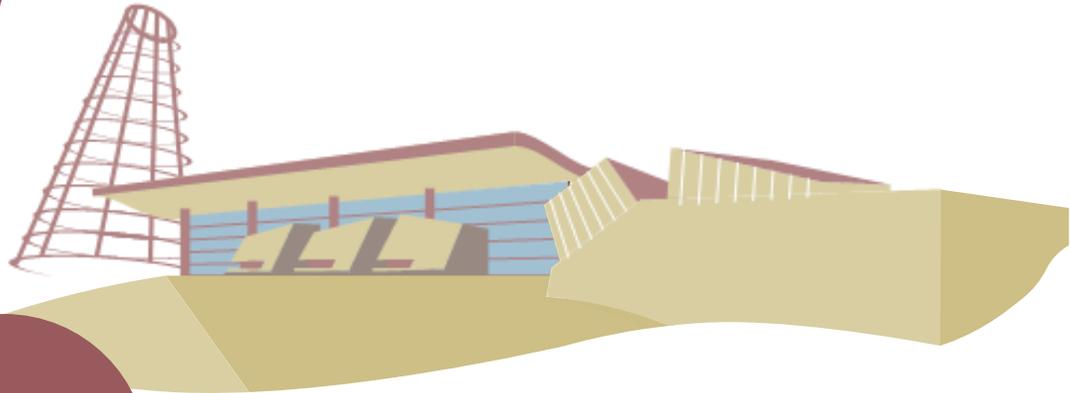
The Group is dedicated to fostering a positive socioeconomic impact on its **local area and community** by ensuring the growth and development of its cooperative members, and by creating job opportunities to support the professional growth of young generations.

The Group actively **promotes wine culture and products** organizing tours and events; partnering with **local tourism initiatives** to enhance regional promotion and marketing; backing **high-profile cultural events** to strengthen community engagement.

Achievement

- **Shareholder Remuneration:** +2.4% compared to 2020/21.
 - **Group Net Bank Debt:** -14.4% over the two-year period.
 - **Suppliers in Trentino-Alto Adige:** 33.2% of the suppliers of Nosio and Mezzacorona are in Trentino-Alto Adige.
 - **Employee Training:** training provided to employees (excluding legal obligations) averaged 1,329 hours, or 7.8 hours per employee.
 - **Recruitment:** 58 new hirings, with 47 under the age of 35.
 - **22 internships** provided, including school-work alternation and university collaborations.
 - **University Partnership:** agreement with the School of International Studies at the University of Trento to award a degree dissertation on topics such as sustainability, international trade, legislation, and food safety.
-
- **Guided Tours and Events:** 40,000+ attendees participated in activities at PalaRotari, Winery events, guided tours and winery museum tours.
 - **Hosted Events:** over 160 events held at the Winery and at PalaRotari.
 - **Cultural Events:** 5 cultural events/year are supported.
 - **"Musivum" Project:** valorizing six native wine varieties cultivated in Salorno, Ala, and Mezzacorona villages.

In over 30 years Gruppo Mezzacorona invested in **modernizing** the Wine Citadel, Arco Winery, and the Sicilian Villa Albius and Solsicano, **enhancing the entire production process.**



HEADQUARTERS

- Headquarters
- Offices
- Wine shop

PALAROTARI

Venue for the members association congress

BOTTLING

- Storage capacity over 90,000 hl
- Wine storage cellar
- 3 bottling lines:
 - 6,000 bottles/hour
 - 12,000 bottles/hour
 - 15,000 bottles/hour
- Bottled wines warehouse
- Finished products warehouse - 8,000 pallet places
- Packaging warehouse

ROTARI TRENTODOC SPARKLING WINE CELLAR

- Classic method production of Rotari Trentodoc.
- Stabilization treatment
 - Bottle refermentation
 - Remuage
 - Tirage 10,000 bottles/hour
 - Disgorgement 5,000 bottles/hour
 - Wine fermentation capacity is 60,000 hl/year

FORMER HEADQUARTERS CELLAR

- "Excellence" line - 6,000 bottles/hour
- Wine storage and aging : 130,000hl
- Barrique cellar with 2,000 fine oak barriques.
- Bag-in-box production line
- Packaging warehouse

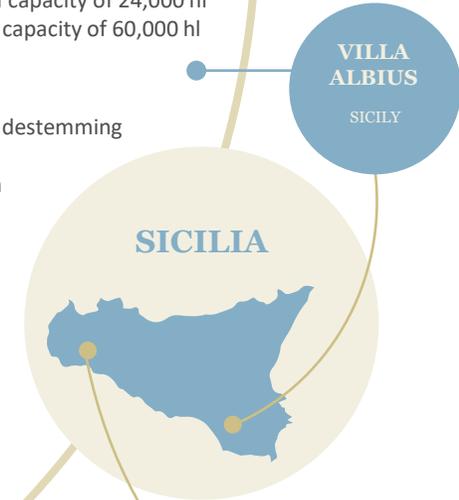
- Receptive capacity of 250,000 quintals /year
- Fermentation capacity of 150,000 hl /year
- Underground cellar for aging and storage of 2,000 fine oak barriques.

MEMBERS' GRAPE DELIVERY AREA WINE CELLAR

ARCO WINE CELLAR
COLLECTION AND VINIFICATION CENTER

- Receptive capacity of 70,000 quintals
Fermentation capacity of 33,000 hl
- Weighing
 - Unloading
 - Crushing and destemming
 - Fermentation
 - Storage
 - Wine shop

- Receptive capacity of 60,000 quintals
- Fermentation capacity of 24,000 hl
- Total storage capacity of 60,000 hl
- Weighing
- Unloading
- Crushing and destemming
- Pressing
- Fermentation
- Storage



SOLSICANO SICILY

- Receptive capacity of 40,000 quintals/year
- Fermentation capacity of 18,000 hl
- Wine aging and storage cellar of 1,500 barrels
- Total storage capacity of 43,000 hl
- Weighing
- Unloading
- Crushing and destemming
- Pressing
- Fermentation

A 40-Year Commitment to the Integration of Agriculture and Nature

1983/87

Re-introduced copper, replacing synthetic anti-downy mildew products, reducing hazardous pesticides and eliminating acaricides, favoring beneficial mites.

1989

Publication of the volume "*Nature and Agriculture, Integrated Protection Through Knowledge and Valorization of Useful Insects and Mites*" to educate members on natural pest control.

1990

Established a Self-Discipline Protocol for "integrated viticulture".

1991

Introduced "*sexual confusion*" (mating disruption) for the European grapevine moth in Mezzocorona.

2000

Publication of the volume "*Nature and Agriculture, Integrated Production Through Knowledge of the Main Fungal Diseases of Apple and Grapevines*" to educate members on controlling major fungal diseases in apple and grapevines.

2001

Extended "*sexual confusion*" (mating disruption) for the European grapevine moth to all Mezzocorona members.

2002

Introduced "*sexual confusion*" (mating disruption) double dispenser for European grapevine moth and grape berry moth.

2003

Applied "*sexual confusion*" (mating disruption) double dispenser across 9,700 hectares of Trentino vineyards.

2009

Adopted criteria for selecting plant protection products in the Self-Discipline Protocol.

2013

Introduced a triple "*sexual confusion*" (mating disruption) dispenser for European grapevine moth, grape berry moth and leafroller.

2016

Achieved Sustainable Quality certification for grape production (SQNPI compliant).

2020/23

Specialized teams controlled 6500 hectares for "Flavescence dorée", identifying over 58,000 symptomatic plants, reducing their prevalence from 16.3 to 7.3 per hectare.

2023

To contain Flavescence dorée without insecticide treatments, a trial began on an area of 28.5 hectares with "vibrational disruption".

Flavescence Dorée Trial



Grapevine Flavescence dorée, an epidemic disease first identified in France in the 1950s, was observed in Italy's Oltrepò Pavese in the late 1960s and is now widespread in Northern Italy, including Trentino.

Infection symptoms typically emerge from July until leaf fall in autumn, characterized by downward leaf rolling and color changes (reddish for red varieties, yellowish for white).

Since 2019, **Trentino has implemented mandatory measures**, including controlling the vector insect *Scaphoideus titanus* and immediate uprooting of symptomatic and abandoned vines. Experience indicates that individual vineyard interventions are insufficient; **effective control requires a systemic and integrated approach.**

Since 2020, the Trentino Wine Consortium, in collaboration with the Edmund Mach Foundation, has been working to monitor all vineyards to map the phytoplasma's spread and remove affected vines.

Since 2021, Gruppo Mezzacorona has intensified these efforts by funding a **dedicated technical team to monitor members' vineyards.**



_To contain Flavescence dorée **without insecticide treatments**, a trial began on an area of 28.5 hectares with **"vibrational disruption"**.

SUSTAINABLE AGRICULTURE AND PRODUCTION (1/3)



vineyard cultivation

- **Manual labor** prevails over mechanical work: approximately 600 hours of work per hectare, compared to 60 hours per hectare for fully mechanized vineyards.
- **Traditional systems** – the use of the **Trentino pergola**: it shelters the bunches from direct sunlight, promotes natural ventilation of the bunches and captures sunlight that improves grape quality.

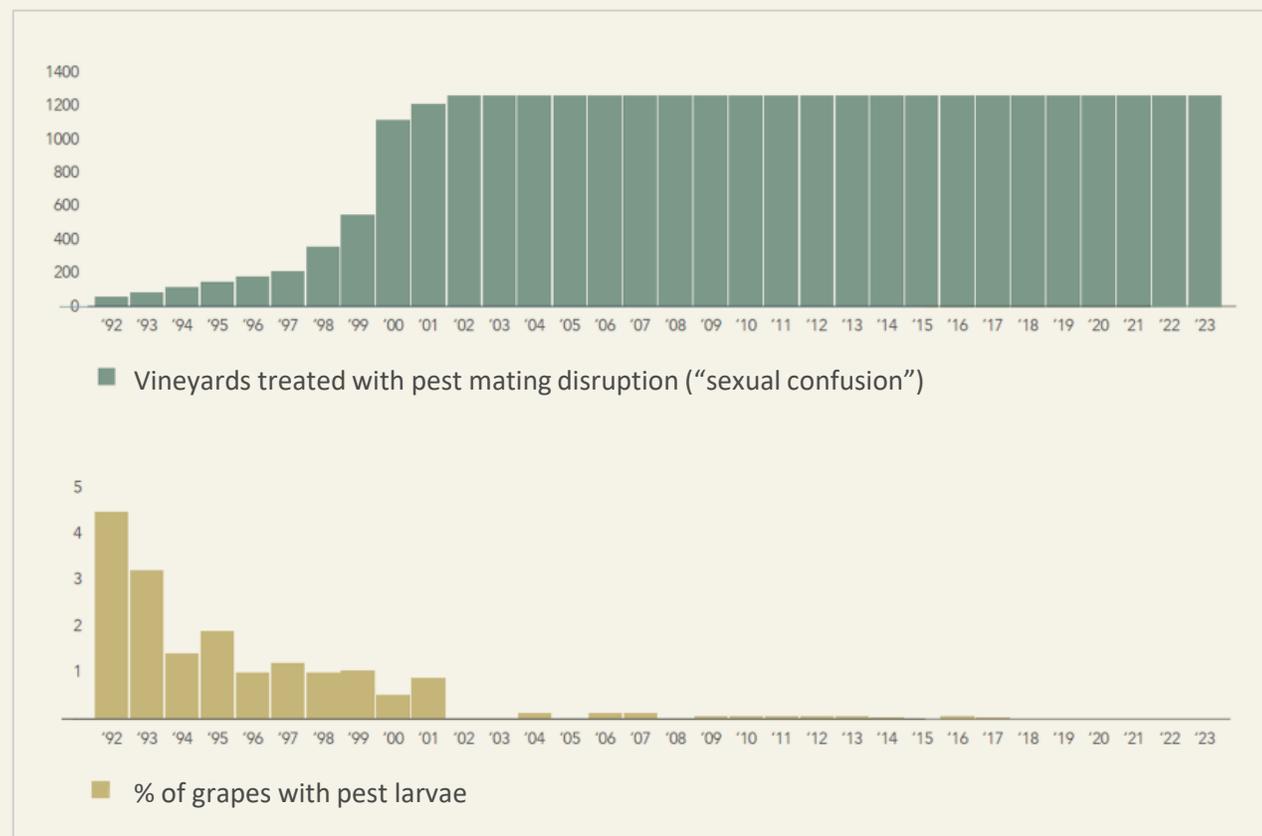
care of the vine and grape

- **Integrated production** and reduced use of plant protection products.
- **Mating disruption** (“*sexual confusion*”), a natural defense technique against harmful insects.
- **Manual management** of vineyards and harvesting.
- Reuse of **pruning material as organic matter**.
- **Drip irrigation** to optimize water resource use.
- Protection of **biodiversity** and maintenance of dry-stone walls to provide **shelter for animal and plant species**.
- Constant **agronomic assistance** to support members in the care of the vines and grapes.

SUSTAINABLE AGRICULTURE AND PRODUCTION (2/3)



Pest mating disruption (“sexual confusion”)



SUSTAINABLE AGRICULTURE AND PRODUCTION (3/3)



grape delivery

- **Total quality control** thanks to the constantly updated register of grapes delivered by each member.
- **Selection of bunches during the harvest.**
- **High-quality production** thanks to a rewarding payment system for raw materials based on quality.
- **Analytical and organoleptic control** of each batch delivered.



from grape processing to wine

- Use of low environmental impact detergents.
- **High-efficiency biological purification.**
- Energy efficiency (**natural lighting** in a large part of the winery, progressive 100% replacement of light fixtures with **LED and a lighting control system**, air handling units for controlled conditioning).
- **100% energy supply from renewable sources.**
- Energy production from **100% renewable sources** via the integrated photovoltaic system on the roofs of the "Cittadella del Vino" (Wine Citadel).
- **Waste reduction** - sending pomace for energy recovery or composting and sending grape marc for distillation.

from refinement to bottling

- Adoption of **physical/natural processes** to prepare wine for bottling (cold stabilization with frigorie recovery, membrane filtration without the use of flours).
- **Recovery and reprocessing of production waste** (wine residues, defective bottles, etc.).
- Energy efficiency thanks to the **underground location of 75% of the spaces.**
- **100% separate collection of total waste.**

€ 19,4
Million



RESPONSIBLE CONSUMPTION AND PRODUCTION



_Gruppo Mezzacorona has invested **€19.4 million over 28 years** to reduce the environmental impact of its operations, focusing on energy, water and emissions.

RESPONSIBLE CONSUMPTION AND PRODUCTION (1/3)



• PROTECTING WATER RESOURCES

Trentino is not currently water-stressed, with 30% of vineyards requiring no irrigation, particularly in the Adige Valley. For the rest, Mezzacorona mainly uses **drip irrigation**, achieving an **11.3% reduction in irrigation water use** in 2023 compared to 2022.

type	%
Without irrigation	29,6
Drip irrigation	56,8
Microjet irrigation	7,4
Slow-drip irrigation	6,2

• FOCUS ON CLEAN ENERGY

The company has **halved its CO2 emissions** in the last 4 years by using **100% renewable electricity** and **self-produced solar energy**, which now meets 51.9% of its needs.

Most areas of the **Cittadella del Vino** are **underground** for temperature control, using natural light and installing LED lighting.

RESPONSIBLE CONSUMPTION AND PRODUCTION (2/3)



- **WASTEWATER TREATMENT**

The Trentino **treatment plant's capacity has been tripled** from 2,400 kg COD/d to 7,200 kg COD/d, increasing its potential from 16,000 to 30,000 equivalent inhabitants since 2018.

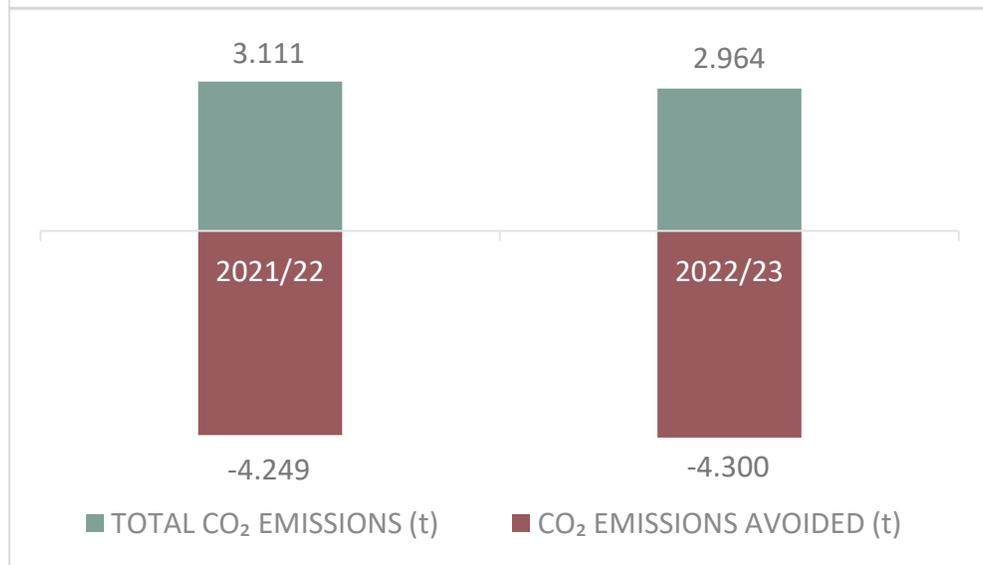
- **EFFICIENT REFRIGERATION**

We limited refrigerant leaks through a more efficient system, resulting in a **reduction of greenhouse gas emissions** from 2.7% to 0.1% of total emissions.

Additionally, a refrigerant with a much lower Global Warming Potential (GWP) has been adopted.

CO₂ emissions avoided (t)

	2021/22	2022/23	%
Renewable electricity	-4.062,9	-4.026,8	-0,9%
Photovoltaic	-526,2	-528,3	0,4%
Solar thermal	-90,4	-91,7	1,4%
LED lamp installation	-8,3	-87,8	954,5%
Electric/hybrid vehicles	-0,9	-0,8	-4,6%
Air conditioning system Villa Albius	-17,6	-17,6	0,0%
CO₂ EMISSIONS AVOIDED	-4.249,3	-4.299,9	1,2%



RESPONSIBLE CONSUMPTION AND PRODUCTION (3/3)



_CARBON FOOTPRINT

The calculated organizational carbon footprint is **1.04 kg CO₂ per bottle of wine, 42% lower** than the average of the industry (1.8kg of CO₂ per bottle)*

*Joseph Poore and Thomas Nemecek's 2018 research, published in the journal *Science*, titled "Reducing food's environmental impacts through producers and consumers"

SUSTAINABLE PRODUCTION IN SICILY (1/2)



THE FAVORABLE SICILIAN CLIMATE SUPPORTS
SUSTAINABLE VITICULTURE.

Since establishing 911-hectare estates, Gruppo Mezzacorona has minimized chemical use with **alternatives** like **copper** and **sulfur**, **mechanical weeding**, **low-nitrogen organic** fertilizers, and **mating disruption** (*sexual confusion*), **eliminating insecticides** and **herbicides**.

SUSTAINABLE PRODUCTION IN SICILY (2/2)



Water efficiency has been key since 2001 in our Sicilian estates, **crucial due to climate change.**

Gruppo Mezzacorona has invested in **water conservation** through:

- **SUB-IRRIGATION:** since 2016, we've switched to **sub-irrigation** on vineyards, directly watering roots and **cutting water use by about 20% in 2023**. This method also leads to **healthier vines** and extends the life of our irrigation systems.
- **9 ARTIFICIAL LAKES:** with a total capacity to hold 1 million cubic meters of water.
- **IMPERMEABILIZATION OF ACCUMULATION BASINS:** for rainwater, well water, water from the Villa Albius desalination plant, the recovery of spring water at Solsicano, and residual water from the local irrigation consortium.
- **PURIFICATION PLANTS:** equipped with microfiltration membranes and authorized for discharge into surface waters.
- **DESALINATOR:** to enable the reuse of treated wastewater for irrigation purposes.
- **INTERNAL DESALINATOR & UV DEBACTERIZATION SYSTEM:** to reduce the need for potable water and the demand on the public water supply, at the Villa Albius estate.
- **DESIGN OF A NEW DESALINATION PLANT:** at the Villa Albius estate - with double capacity of the existing one - to increase the ability to reuse well water which has high salinity due to its proximity to the sea.

Gruppo Mezzacorona has obtained these Consumer Health and Safety Certifications





The **SQNPI Ministerial Certification**, issued by the Ministry of Agriculture, Food and Forestry Policies, recognizes agricultural production adhering to regional integrated production standards and those of the Autonomous Provinces of Trento and Bolzano. Selected product lines and grapes from Trentino-Alto Adige hold this certification.



The **VIVA Ministerial Certification**, issued by the Ministry of Ecological Transition, recognizes wine sustainability by evaluating the environmental performance of the entire vine-to-wine supply chain across key areas: air, water, territory and vineyard. Solsicano in Sicily, a Gruppo Mezzacorona company, holds this certification.



EQUALITAS champions sustainability through a framework built upon three core pillars: social, environmental, and economic. For each, it establishes verifiable and measurable requirements and indicators. Nosio has obtained its organizational certification under this comprehensive system.



SMETA (Sedex Member Ethical Trade Audit) is an audit and verification protocol designed to demonstrate the company's commitment to social, ethical, and environmental standards throughout its supply chain. Nosio has undergone this audit.



EMAS is an EU environmental certification recognizing direct and indirect activities showing compliance with current legislation, a commitment to continuous improvement in environmental management, and to publicly disclose environmental information. Solsicano owns this certification.



The **ORGANIC Certification** guarantees compliance with European Union regulations governing organic production. This certification is applied to select wine lines.



IFS Food (International Featured Standard Food) is a globally recognized control model that ensures adherence to international food safety standards.



BRC Food (British Retail Consortium) is a food safety standard recognized by the Global Food Safety Initiative (GFSI), with the primary aim of strengthening and promoting food safety throughout the supply chain.



SOSTAIN for its Sicilian productions, Nosio S.p.A. has obtained SOSTain Sicilia certification, as promoted by the Sicilia DOC Consortium and Assovini Sicilia. This certification is based on several fundamental requirements, including vineyard management, a ban on chemical weeding, biodiversity protection, the use of eco-friendly materials, the use of local raw materials, the application of VIVA indicators and limits on the residual content in wines.

Issued on May 2025

Thank
you.