INTERNATIONAL WINERIES FOR CLIMATE ACTION

2025

Profit with purpose.

Emission reduction can future-proof the wine industry.

GOLD MEMBERS

SILVER MEMBERS

APPLICANTS

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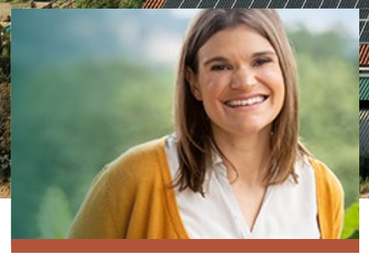


Courtesy: Familia Torres – Spain

As members of International Wineries for Climate Action (IWCA), we are united by a shared belief: that climate action is not only a moral responsibility, but a strategic business opportunity.

We all know first-hand how reducing carbon emissions strengthens our operations, enhances our brand and improves our bottom line.

The wine industry is uniquely vulnerable to climate volatility. Rising temperatures, erratic weather and resource scarcity are already impacting grape quality, harvest timing and long-term vineyard viability.

Katie Jackson

PRESIDENT & CO-FOUNDER, IWCA
2ND GENERATION PROPRIETOR,
SVP OF CORPORATE SOCIAL RESPONSIBILITY,
JACKSON FAMILY WINES

INVESTMENT

By investing in low-carbon technologies, optimizing energy use and rethinking supply chains, wineries can reduce operational costs and improve efficiency. In fact, many IWCA members have found that emission reduction efforts – such as lightweight packaging, renewable energy adoption and regenerative farming – deliver measurable financial returns alongside environmental benefits.

DIFFERENTIATION

Moreover, the market is shifting. Consumers are increasingly choosing brands that align with their values, and sustainability is becoming a key differentiator. Retailers and distributors are prioritizing climate-conscious producers, and regulatory frameworks are evolving to reward low-carbon operations. In this landscape, carbon reduction isn't just about compliance – it's about competitiveness.

COLLABORATION

This report reflects the momentum we've built together as IWCA members over the past six years. It showcases how emission reduction can future-proof our businesses, protect our terroirs and unlock new growth. It also reinforces the importance of collaboration – sharing data, strategies and innovations to accelerate our collective impact. When it comes to sustainability, there are no geographic boundaries, and the make-up of our membership throughout the globe is a testament to our industry's commitment to protect our planet.

PROGRESS

I am proud of the progress we've made and the strong dedication of all our members. By aligning profitability with purpose, we are redefining what it means to be a successful wine producer in the 21st century. Let's continue to lead with ambition, act with urgency and inspire the broader industry to follow our example.

> By aligning profitability with purpose, we are redefining what it means to be a successful wine producer in the 21st century.

Six years years ago, IWCA began as a bold idea: that wineries could lead the charge against climate change through measurable, science-based action. Today, that idea has become a global movement.

This year's report – Profit with Purpose: Carbon Emission Reduction Can Future-Proof the Wine Business – captures the essence of what we've learned: that sustainability is not just a moral imperative, but a strategic advantage.

Our members are proving that reducing emissions strengthens resilience, lowers costs and builds consumer trust. From renewable energy adoption to supply chain innovation, these efforts are reshaping what it means to be a successful wine producer. Collaboration remains our greatest strength, and I'm proud to see how far we've come together. Let's keep pushing forward – with urgency, innovation and unity.

► Miguel A. Torres
VICE PRESIDENT & CO-FOUNDER, IWCA
FOURTH GENERATION & PRESIDENT, FAMILIA TORRES

BOARD OF DIRECTORS

► Adrian Chitty
SUSTAINABILITY, A TO Z WINEWORKS,
STE. MICHELLE WINE ESTATES

► Mafalda Guedes
HEAD OF CORPORATE COMMUNICATIONS
& SUSTAINABILITY, SOGRAPE

► Andree Piddington
SUSTAINABILITY MANAGER,
YEALANDS WINE GROUP

► Josep María Ribas
CLIMATE CHANGE DIRECTOR,
FAMILIA TORRES

► Louisa Rose
WINEMAKER & HEAD OF SUSTAINABILITY,
HILL-SMITH FAMILY ESTATES

► Aaron Stainthorp
DIRECTOR OF SUSTAINABILITY,
JACKSON FAMILY WINES

IWCA GLOBAL REACH 2025

GOLD MEMBERS

- ABADÍA RETUERTA
- ALMA CARRAOVEJAS
- COMPAÑÍA VINÍCOLA DEL NORTE DE ESPAÑA (CVNE)
- FAMILIA TORRES
- HENSCHKE
- HERDADE DOS GROUS
- HILL-SMITH FAMILY ESTATES
- JACKSON FAMILY WINES
- MIGUEL TORRES CHILE
- OPUS ONE WINERY
- SPOTTSWOODE ESTATE VINEYARD & WINERY
- ST SUPÉRY ESTATE VINEYARDS AND WINERY
- SYMINGTON FAMILY ESTATES
- VIÑA CONCHA Y TORO
- VIÑA UNDURRAGA
- VIÑAS FAMILIA GIL
- VSPT WINE GROUP
- YEALANDS WINE GROUP LIMITED

SILVER MEMBERS

- A TO Z WINEWORKS
- BODEGAS LAN
- BODEGAS RAMÓN BILBAO
- CAKEBREAD CELLARS
- CEDARCREEK ESTATE WINERY
- CHÂTEAU KSARA
- CHÂTEAU TOUR DES TERMES
- CHÂTEAU TROPLONG MONDOT
- CRIMSON WINE GROUP
- DOMAINE BOUSQUET
- DOMAINE LAFAGE
- BODEGAS EMINA
- FELTON ROAD WINES
- FROG'S LEAP WINERY
- HERÈNCIA ALTÉS
- KIR-YIANNI
- PIPER-HEIDSIECK, CHARLES HEIDSIECK & RARE
- RIDGE VINEYARDS
- SILVER OAK CELLARS
- SOGRAPE
- STE. MICHELLE WINE ESTATES
- TIKVEŠ
- VOYAGER ESTATE

APPLICANTS

- BODEGA SOMMOS
- BÖTZINGER
- ESPORÃO
- MULLINEUX & LEEU FAMILY WINES
- NELEMAN
- QUINTA NOVA

IWCA IN THE MEDIA

FEBRUARY, 2025

Read Full Article:

IWCA ANNOUNCES NEW CLIMATE IMPACT CALCULATOR FOR LATIN AMERICA

International Wineries for Climate Action (IWCA), in collaboration with a number of leading Chilean and Argentinian wineries, has announced the launch of the first greenhouse gas (GHG) calculator for the Latin America wine industry.

The wineries involved in establishing the new tool included Domaine Bousquet, Grupo Peñaflor, VSPT and Miguel Torres Chile. The free tool will allow Latin American wineries, both members and non-members of the IWCA, to measure their carbon footprint across Scope 1, 2 and 3 emissions.

The development of the Latin America calculator was undertaken in 2024 in the lead-up to this February 2025 release. IWCA has already developed similar GHG calculators for wineries in the US, Australia and New Zealand. Each calculator is adjusted to the GHG World Resources Institute protocols and the ISO 14064 greenhouse gas reporting standard.

JULY, 2025

Read Full Article:

HOW THE 'ONE BIG BEAUTIFUL BILL' IMPACTS THE DRINKS INDUSTRY

The drinks industry is both celebrating and bemoaning HR1, the sweeping set of measures signed into law by President Donald Trump on July 4, after passage in the Republican-led Congress – officially dubbed the One Big Beautiful Bill Act .

The green rescissions have climate-smart drinks producers particularly worried. "The wine sector has yet to experience the full impact of this bill, but we are seeing that the withdrawal of support for green initiatives from the administration means that some wineries are reassessing their priorities," says Charlotte Hey, executive director of International Wineries for Climate Action (IWCA). In other words, without federal grants and credits for green projects, the industry at large might backslide on climate action. Overseas IWCA members are watching the results of HR1 carefully.

MARCH, 2025

Read Full Article:

KATIE JACKSON IS MAKING JACKSON FAMILY WINES CLIMATE POSITIVE BY 2050

When Katie Jackson was growing up, her backyard was her parents Jess Jackson and Barbara Banke's Stonestreet Winery in Sonoma County. "I played in the vineyard and made forts out of the canes," she recalls. "I remember us taking hikes around our properties and being outside a lot."

In 2019, Jackson cofounded International Wineries for Climate Action to promote science-based practices for decarbonizing the wine industry. "As the new generation," says cofounder Miguel A Torres of Spain's Familia Torres winery, "Katie had the strategic vision to trigger other wineries to start rigorous carbon emissions reduction programs."

This is all a way of paying forward her own sylvan upbringing for future generations, Jackson feels. "As a larger wine company, it's imperative that we demonstrate meaningful actions and progress. Particularly now that I have children, it's become more personal to me that our company acts truly responsibly."

APRIL, 2025

Read Full Article:

HILL-SMITH FAMILY ESTATES REDUCES EMISSIONS BY 38% SINCE 2011

The Australian producer Hill-Smith Family Estates has announced a 38% reduction in greenhouse gas (GHG) emissions since 2011.

This figure, from the producer's 2024 Annual Sustainability Report, sees the antipodean wine group remain on track in terms of its two main GHG reduction targets of 50% by 2030 and 100% by 2050. Hill-Smith Family Estates also slightly exceeded its regenerative land promise, which seeks to preserve an area of native vegetation equal to the area of vineyards owned.

The large-scale winemaker also exceeded its renewable energy target, self-generating 2,679mWh of renewable energy from its own solar installations, meaning 21% of its operating energy is supplied from this source. The company also joined International Wineries for Climate Action (IWCA) in 2021, with its head of sustainability, Louisa Rose, elected to the IWCA board in 2024.

OCTOBER, 2025

Read Full Article:

WHAT WINE CAN TEACH US ABOUT CLIMATE CHANGE

Wine can become a symbol of resilience against climate change. Wineries – and businesses in general – have the responsibility and the tools to adapt their business models toward a common goal, prioritizing long-term vision and generating a positive impact on people and the environment.

However, this is too great a task for any one company to tackle alone, so forging alliances is key. In 2019, the association International Wineries for Climate Action (IWCA) was born to accelerate the decarbonation of the global wine industry through collective action. This coalition has today more than 170 wineries from 14 countries, representing over 3.5% of the world's wine production.

JUNE, 2025

Read Full Article:

INSIDE FAMILIA TORRES' DRIVE TO DECARBONIZE WINE

For Miguel A Torres, the turning point came in 2007 – not in a vineyard, but in a cinema. "I remember it very well," he recalls. "I went to the movies with my wife to see Al Gore's documentary *An Inconvenient Truth* and I was shocked." At the time, he had already noticed shifts in the vineyards – earlier harvests, disrupted ripening patterns – but it wasn't until that screening that the cause snapped into focus: climate change. "I realised climate change was the reason and that we had to do something about it," Torres says, "not just to prepare for the future, but also to try and mitigate its effect by reducing our carbon footprint."

One way Torres sees this being tackled is through participation in International Wineries for Climate Action (IWCA), which he co-founded with Jackson Family Wines in 2019.

JULY, 2025

Read Full Article:

KUDOS FOR CARDBOARD AND ECO-FRIENDLY PACKAGING FROM AWARD-WINNING WINERY

Ridge Vineyards, which was founded in 1962, has always considered itself a leader in environmental preservation, director of marketing Ryan Johnson said. In 2023, the winery joined International Wineries for Climate Action (IWCA) and formed a sustainability committee at the winery, the same year that Johnson found himself on the hunt for a new way to ship Monte Bello.

Sustainable packaging is just one of the pillars of IWCA and was the inspiration for Ridge to switch to lighter, domestically produced glass, opt for natural cork and even start distributing some of its wines in keg to on-premise accounts. As for Monte Bello, it was time to think outside the wooden box.

"We started looking at cardboard solutions," Johnson shared. "The wooden box was pretty heavy; we're saving so much weight with cardboard."

AUGUST, 2025

Read Full Article:

ZAMORA CUTS CARBON EMISSIONS AS RAMÓN BILBAO MARKS 100 YEARS

Zamora Company, owner of brands including Licor 43, Martin Miller's Gin and Ramón Bilbao, has reported an 8% year-on-year reduction in Scope 1 and 2 carbon emissions, as part of its ongoing Conscious Company Plan.

The results were published in the group's fifth Conscious Company Report, released as Ramón Bilbao marks its centenary. The company said it has also increased the number of suppliers certified under its Sustainable Procurement Model to 1,500, with 90% of them based in Spain.

Ramón Bilbao was awarded the IWCA Silver seal last year, reinforcing its commitment to cutting greenhouse gas emissions across the wine industry. Zamora described the Haro-based winery, founded in 1924, as a leader in "precision agriculture".

Courtesy: Bodega Sommos – Spain

FROM THE IWCA BOARD

The IWCA Board of Directors provides strategic leadership across our membership-building, partnership, communications and other mission-driven efforts.

Leaders in the wine sector and strong advocates for climate action, these individuals help to position and strengthen IWCA as the pre-eminent, most rigorous collective movement for climate action across the wine industry.

Courtesy: Château Troplong Mondot – France

Together, we can transform our industry into a symbol of resilience and a force for positive change."

► Josep María Ribas
FOUNDING BOARD MEMBER, IWCA

INVESTING IN LONG-TERM SUCCESS

"Reducing carbon emissions isn't just about environmental responsibility – it's a strategic choice to protect the future of our wines. Climate change is already impacting our vineyards through earlier harvests, more extreme weather and changing grape quality. ***By taking meaningful climate action, we're safeguarding the unique microclimates and ecosystems that define our wines.*** *From investing in renewable energy to using lighter packaging and streamlining logistics, we've seen how sustainability can lower our footprint while also improving efficiency and resilience. These actions aren't just good for the planet – they're smart business. As markets and consumers demand greater transparency, setting clear emissions targets positions us to lead, grow and meet the expectations of a more climate-conscious world. For us, sustainability is not a cost – it's an investment in the long-term success of business and the legacy of our land."*

► Mafalda Guedes,
BOARD MEMBER, IWCA

DEEP COMMITMENT TO LEGACY

"At Sogrape, we believe that reducing carbon emissions is not only an environmental responsibility, but a strategic necessity for the future of our business. ***As a member of the founding family, I feel a deep commitment to ensuring that the legacy we've built is preserved – not just for the next generation of winemakers, but for the communities and terroirs that make our wines unique.*** *Embracing low-carbon practices allows us to strengthen resilience across our value chain, drive innovation and demonstrate that profitability and purpose can – and must – go hand-in-hand."*

► Andree Piddington
BOARD MEMBER & SECRETARY, IWCA

LOOKING BEYOND BENEFITS

"It comes as no surprise that managing carbon emissions is imperative for the sustainability of the wine industry, as successful winegrowing is so intimately braided with climate. But we can also look beyond the immediate agricultural benefits and see that optimizations in the supply and distribution chains, ***finding efficiencies in production and packaging, and shifting to renewable sources of energy also have material positive impacts on the bottom line."***

► Adrian Chitty
BOARD MEMBER & TREASURER, IWCA

► Aaron Stainthorp
FOUNDING BOARD MEMBER, IWCA

SHARING SOLUTIONS

"IWCA is more than a coalition – it's a global movement proving that climate leadership and winemaking excellence are part of the same story. Our members are setting bold targets, sharing solutions and demonstrating that climate action drives efficiency, innovation and long-term business resilience. ***By uniting purpose with profit, we're not just future-proofing our industry – we're showing the world that protecting our climate and crafting exceptional wines can thrive together.*** *This is how we ensure that generations to come inherit both great wine and a stable planet."*

EARNING OUR PLACE

"If we want wine to have a place in the future world, we can't afford not to implement a more sustainable approach to doing business. We can't be sustainable without drastically reducing GHG emissions and slowing down the freight train that is climate change. ***On a planet experiencing significant climate change, increasing stress on our environment and farming lands, and an expected 2bn more people by 2050 who will need to eat, is there going to be a place for the luxury of growing and making wine?*** *If there is, we must all work to earn this place and keep our social license. We can't do this without taking a leading and active approach to sustainability, and we can't do it on our own. Joining IWCA gives us the tools to measure our GHG emissions and access to experts and combined knowledge, from which we can build business cases and prioritize actions and projects."*

SAVINGS AND RESILIENCE

"Reducing carbon emissions is not just an environmental imperative, it is a strategic business decision that secures the future of our wineries. At Familia Torres, we have seen how investing in sustainability drives operational efficiency and innovation, opens new markets and strengthens our brand's value. ***Far from being a cost, carbon reduction initiatives such as renewable energy, lighter bottles and regenerative viticulture often lead to significant savings and resilience, besides reducing our environmental impact.*** *As more partners, customers and investors demand credible climate action and science-based targets, embracing sustainability becomes a clear competitive advantage. By working together through IWCA, we are demonstrating that profit and purpose go hand-in-hand, and that the wine sector can thrive by leading the way in climate action. Together, we can transform our industry into a symbol of resilience and a force for positive change."*

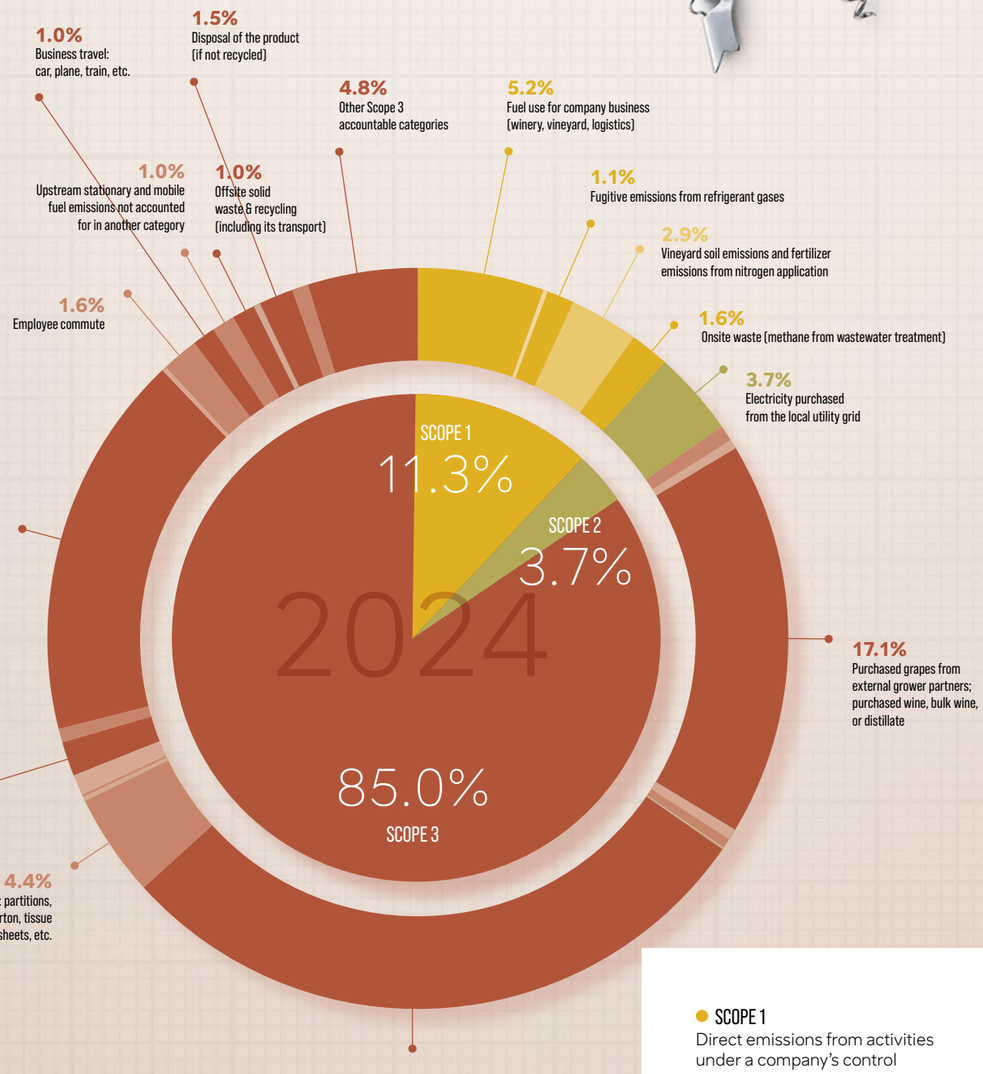
Courtesy: Bötzinger – Germany

► Louisa Rose
BOARD MEMBER, IWCA

IWCA AVERAGE WINERY EMISSIONS **2024**

We crunched the Scope 1, 2 and 3 numbers across the IWCA membership to understand the sources of emissions from throughout the entire wine value chain.

The averages displayed here are calculated from 41 IWCA member wineries' baseline GHG inventory data, third-party audited and adhering to ISO-14064 standards.



Activities representing less than 1% of total emissions have not been labeled.
See all emissions categories that must be accounted for by IWCA Members' inventories here.
Scope 2 data include a mix of location-based and market-based emissions.

- **SCOPE 1**
  Direct emissions from activities under a company's control
- **SCOPE 2**
  Indirect emissions related to a company's purchase of electricity, steam, heat, or cooling
- **SCOPE 3**
  Indirect emissions derived from the company's activity across its value chain

2025 KEY NUMBERS

IWCA MEMBERS ACCOUNT FOR

3.5%

of global wine production

175 wineries | 14 countries | 6 continents

In 2025, IWCA has 18 Gold Members, up from 10 in 2024...

...and we welcomed members from two new countries: Germany and South Africa

A YEAR IN REVIEW

LEADING THE WINE INDUSTRY THROUGH CLIMATE TRANSFORMATION

The wine industry stands at a pivotal crossroads. Climate change is no longer a distant concern – it is a daily reality that challenges the way we grow, produce and distribute wine. **Executive Director of International Wineries for Climate Action (IWCA), Charlotte Hey** sees this moment not as a crisis, but as an extraordinary opportunity to reshape our industry for the better.

IWCA was founded on the principle that meaningful climate action must be grounded in science, transparency and collaboration. Our members – some of the most respected wineries in the world – have committed to rigorous carbon accounting and ambitious emissions reduction targets. But this movement is not just about environmental stewardship. It's about building smarter, more resilient businesses.

This year has been full-on for IWCA. Changes in the geopolitical climate have meant that commercial concerns have been a priority for our sector. It has been another year of firsts, with the launch of our inaugural Latin American GHG Calculator, which is testament to the collaborative spirit of our members in Argentina and Chile, who made it happen.

Our Knowledge Exchange Sessions have continued throughout the year, with highlights including our seminar with the Scandinavian monopolies and Race to Zero. Live events have included press tastings in Germany and the USA, as well as a presence at international events such as AWITC (Australia) and ProWein (Germany), part of our work to advocate the importance of reducing carbon emissions (see pages 24-27).

It has been another year of firsts, with the launch of our inaugural Latin American GHG Calculator.

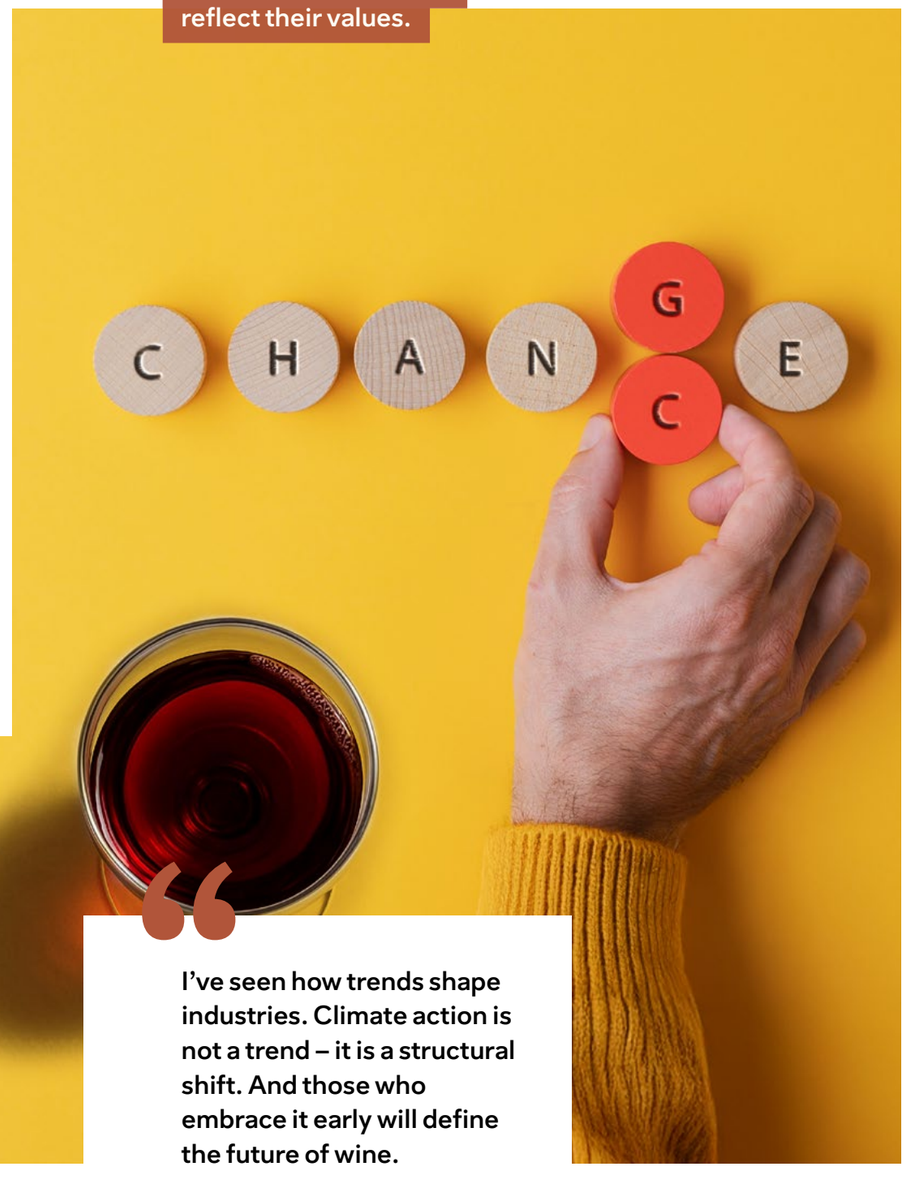
Our members are seeing that this area of sustainability is a catalyst for innovation across the wine sector. From energy-efficient cellar operations to regenerative vineyard practices, wineries are discovering that sustainability and profitability are not mutually exclusive. In fact, many of our members are reporting cost savings, improved operational efficiency and stronger brand loyalty as direct outcomes of their climate strategies.

The business case for decarbonization is growing stronger by the day. Consumers are increasingly seeking out wines that reflect their values.

Retailers and distributors are prioritizing producers with credible sustainability credentials. And governments are introducing policies that reward low-carbon operations. In this evolving landscape, wineries that act now will be better positioned to thrive – not just survive.

IWCA's role is to support and accelerate this transformation.

The business case for decarbonization is growing stronger by the day. Consumers are increasingly seeking out wines that reflect their values.



"I've seen how trends shape industries. Climate action is not a trend – it is a structural shift. And those who embrace it early will define the future of wine.

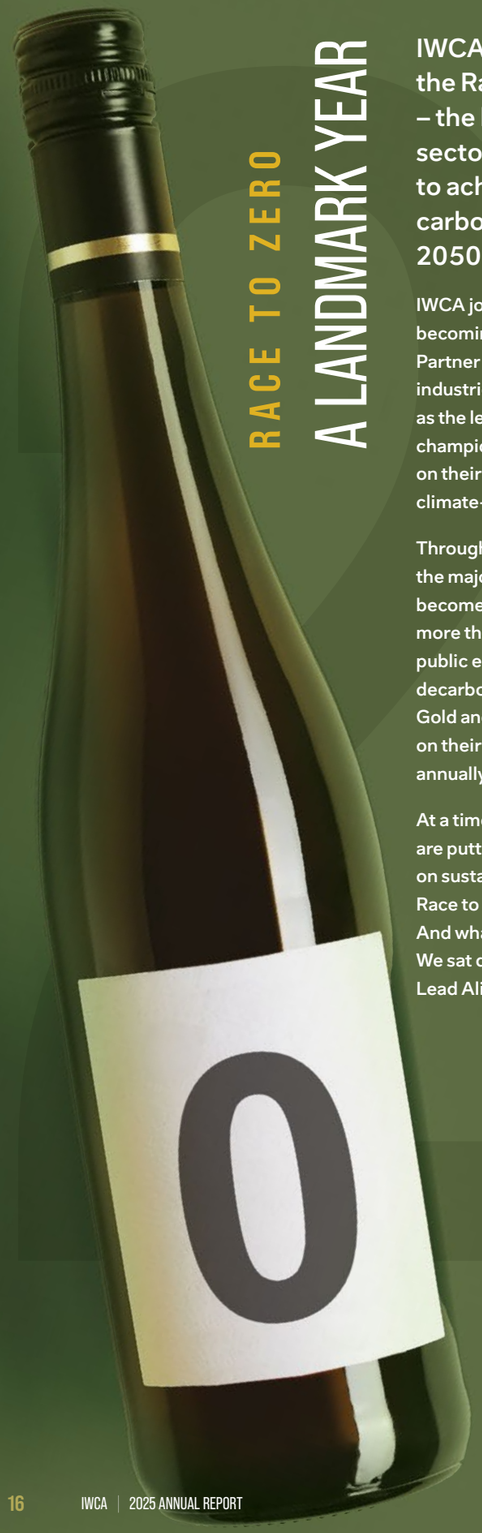
We provide a framework for action, a platform for knowledge exchange and a community of like-minded producers who understand that climate leadership is also market leadership. Our members are not waiting for mandates – they are setting the standard.

As someone who has spent over two decades working across wine communications, publishing and international marketing, I've seen how trends shape industries. Climate action is not a trend – it is a structural shift. And those who embrace it early will define the future of wine.

This report is a testament to the power of collective ambition. It highlights the tangible benefits of carbon reduction, not just for the planet, but for the long-term health of our businesses. It also underscores the importance of strategic planning, data-driven decision-making and cross-sector collaboration.

IWCA is proud to lead this charge. But we know that real change requires broad participation. I invite every winery – large or small, traditional or modern – to consider what role they can play. Together, we can build a wine industry that is not only climate-resilient, but also commercially robust, globally respected and deeply aligned with the values of the next generation. ■

► **Charlotte Hey**
EXECUTIVE DIRECTOR, IWCA



RACE TO ZERO

A LANDMARK YEAR

IWCA is proud to support the Race to Zero campaign – the largest ever multi-sectoral alliance committed to achieving Net Zero carbon emissions by 2050 at the latest

IWCA joined the campaign in 2021, becoming the first Race to Zero Partner from the wine and agricultural industries. Since then, we have served as the leading Net Zero initiative that champions and aids wine producers on their journey to becoming climate-positive.

Through their IWCA membership, the majority of our wineries have also become Race to Zero members, joining more than 15,000 other private and public entities in the mission towards decarbonization. IWCA's participating Gold and Silver Members publicly report on their progress towards Net Zero goals annually through this report.

At a time when geopolitical concerns are putting unprecedented pressure on sustainability initiatives, how is the Race to Zero campaign progressing? And what still needs to be done? We sat down with Race to Zero Lead Ali Sheridan to find out...

IWCA: How has Race to Zero progressed over the past year?

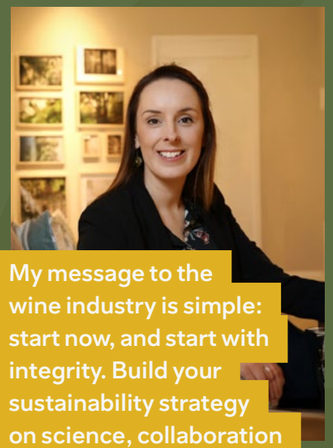
Ali Sheridan: 2024 marked a turning-point for the Race to Zero campaign. In the past year, Race to Zero has expanded by 17%, engaging 15,754 non-Party stakeholder members (as of December 2024) across more than 150 countries, from businesses and investors to subnationals, hospitals and universities.

This momentum is further reflected by the launch of the 2025 Net Zero Stocktake, which shows that target-setting is still rising, despite political headwinds. As of September 2025, at least 1,935 entities have net zero (or similar) targets – up from 769 in December 2020. Globally, target-setting is expanding across companies, regions and cities.

These diverse actors are not simply making ambitious pledges; they are taking tangible steps to reduce emissions, developing ambitious transition plans, accelerating renewable energy adoption and advocating for systemic change.

The voluntary climate movement has already delivered measurable progress: it has mainstreamed net zero throughout organizational leadership around the world, pushed governments to strengthen policies and accelerated the deployment of clean technologies at an unprecedented pace. These efforts have built momentum that cannot be undone.

But to stay on course for 2030, we must double down, scaling solutions, ensuring accountability and pushing for systemic change that transforms ambition into reality. We must recognize the limits of volunteerism and move beyond pledges to practice. The path to net zero is not inevitable; this is a race where there are no solo winners – either we all cross the finish line together, or we all fall short.



My message to the wine industry is simple: start now, and start with integrity. Build your sustainability strategy on science, collaboration and transparency. Real action today will secure your resilience and competitiveness tomorrow.

ALI SHERIDAN,
RACE TO ZERO LEAD

IWCA: What role can the wine industry, and IWCA, play in this?

Ali Sheridan: Wineries and farmers are at the front line of the climate crisis as a warming world changes where and when crops can be grown. Agricultural emissions contribute to nearly 30% of global emissions, demanding urgent action from the sector, while also presenting opportunities for innovative and regenerative practices.

International Wineries for Climate Action (IWCA) is a strong example of leadership in this space. Its members are showing that credible, science-based targets and transparent reporting are possible. By sharing best practices, reducing emissions across the value chain and advocating for systemic change, IWCA members are helping to define what genuine climate leadership looks like for agriculture and beyond.

IWCA: How important is it for wine businesses to recognize that sustainability can have commercial benefits, as well as being good for the planet?

Ali Sheridan: The estimated damages from climate change continue to grow, and are now calculated to be six times higher than previously thought – with just a 1°C increase in global temperature linked to a staggering 12% decline in global GDP. Forward-looking companies understand that a 1.5°C-aligned world isn't just about climate stewardship. Actors that embrace climate action are already seeing tangible results, proving that the transition to a low-carbon economy is both a financial and strategic opportunity.

Investor sentiment is also shifting: three in four investors now believe that "environmentally responsible companies" are more likely to succeed financially. Sustainability-focused roles have been growing, with 2024 seeing the highest increase in green salaries in over a decade.

For wine producers, efficiency in energy, water and packaging translates directly into cost savings, while regenerative practices improve soil health and long-term vineyard productivity. More importantly, sustainability drives brand value: consumers and buyers are increasingly choosing wines that align with their values.

Investing in sustainability is about future-proofing – reducing risk, ensuring supply chain resilience and strengthening reputation. The wine businesses that understand this aren't treating sustainability as a cost, but as a source of innovation, competitiveness and long-term growth. ■

IWCA is showing how collective action in wine and agriculture can drive real climate impact. By setting ambitious targets, sharing knowledge and demonstrating transparency, they are not only transforming their own sector but also offering a model for others. As the world prepares for COP 30, initiatives like IWCA remind us that climate leadership must be practical, global and urgent.

► Nigar Arpadarai
COP 29 CLIMATE HIGH-LEVEL CHAMPION, AZERBAIJAN

PROFIT WITH PURPOSE

EMISSION REDUCTION CAN FUTURE-PROOF THE WINE INDUSTRY

As the wine industry grapples with the inescapable realities of climate change, IWCA members are leading the way with innovative projects and partnerships aimed at achieving meaningful emissions reduction.

Their pioneering efforts are not only helping to pave the way for a more sustainable future – they are also bringing commercial benefits, boosting profitability and building long-term business resilience. There's much more to be done – but IWCA member wineries are facing up to the climate challenge with determination and ingenuity.

Large distributors and supermarket chains require certifications such as FSSC 22000, which include environmental criteria.

THE CHALLENGE

For wine businesses, a comprehensive sustainability strategy is no longer a nice to have, but a must have – to satisfy legislators, trade partners and the end consumer.

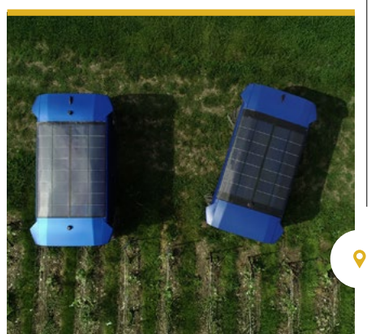
"Identifying, measuring and reducing greenhouse gas (GHG) emissions is no longer optional for wine producers – it's becoming a commercial necessity, driven by a convergence of external pressures."

Aaron Stainthorp, IWCA board member and director of sustainability at Jackson Family Wines, speaks for many when he highlights the fact that a sustainability strategy is no longer a luxury for wine producers, but an imperative.

From Madrid to Melbourne, the regulatory landscape is shifting, and legislators are moving to enshrine the measurement and reduction of carbon emissions in law – meaning that IWCA member wineries are often ahead of the game when it comes to complying with new legal demands.

"Sustainability risk and climate risk is financial risk," points out Julien Gervreau, sustainability practice leader at Sensiba LLP and former IWCA Board Member. *"Essentially, what is happening is the global financial community is moving to standardize sustainability standards, in a similar way to accounting standards."*

From 2026, large companies doing business in California will have to publish a TCFD (Task force on Climate-related Financial Disclosures) report, which sets out a company's climate-related risks and how it is managing and measuring them. While this may not directly impact many wine businesses, it will affect trade customers such as large retailers – and their wine suppliers will fall under their measurement of Scope 3 emissions. *"So you need to be prepared,"* says Julien. *"Even if you're not in the direct scope of that regulation, if you sell into the three-tier market, these guys are going to be asking you for your emissions data."*



Courtesy: Piper-Heidsieck, Charles Heidsieck and Rare Champagne – France

Sustainability risk and climate risk is financial risk... Essentially, what is happening is the global financial community is moving to standardize sustainability standards.

Beyond California, other states – including Oregon, Washington, New York and Illinois – are considering similar moves. Beyond the US, there is the EU's Corporate Sustainability Reporting Directive (CSRD) – and new mandatory climate-related financial disclosures introduced this year in Australia.

"This means that businesses will need to understand their GHG emissions and report on them, as well as having to assess and disclose their climate-related risks and opportunities under various scenarios," explains Louisa Rose, IWCA board member, and winemaker & head of sustainability at Hill-Smith Family Estates. *"This has been talked about as one of the most significant changes to reporting in Australia in a generation. As members of IWCA, we are ahead of many other businesses as we already have a good understanding of our GHG emissions."*

But the pressure doesn't just come from legislators. *"Large distributors and supermarket chains require certifications such as FSSC 22000, which include environmental criteria,"* says Miguel Gil Vera, CEO of Viñas Familia Gil. *"And large buyers prioritize organic wines or those with sustainability certifications, such as SWfCP or IWCA, in their purchases."*

Rodrigo Berner, head of corporate sustainability at Viña Concha y Toro, echoes this. *"Several of our major distributors and retailers are demanding detailed emissions and sustainability data so they can meet their own climate targets,"* he says. *"This pushes us to collaborate more closely across the supply chain, ensuring transparency and consistency in reporting."*

The consumer too is becoming more demanding, at a time when sustainability is exerting a small but expanding influence on purchasing decisions. *"There is increasing demand for organic and sustainably produced wines, as well as attributes such as renewable energy use or regenerative farming practices,"* says Rodrigo. *"However, we have also seen that consumers are not always willing to pay a premium for these attributes, which means we must absorb much of the effort internally to remain competitive."*

THE RETAIL VIEW: SYSTEMBOLAGET

As IWCA continues to collaborate with Swedish alcohol monopoly Systembolaget on standardized carbon footprint protocols, Linda Johansson, Systembolaget's sustainability manager, assortment and responsible purchasing, stresses the importance of a partnership approach.

"We believe collaboration across the value chain, based on sustainability practices, is a cornerstone in our commercial relationships, creating opportunities," she says. *"By sharing data, best practices and innovations, we all move faster – and more cost-effectively – toward a sustainable future."*

With sustainability **"at the core"** of Systembolaget's mission, wineries strengthen their chances of securing listings by measuring and reporting their products' carbon footprints, setting clear emissions reduction targets and showing progress over time. They should also engage with soil health and biodiversity – while certifications remain an **"important tool"** in the buying process.

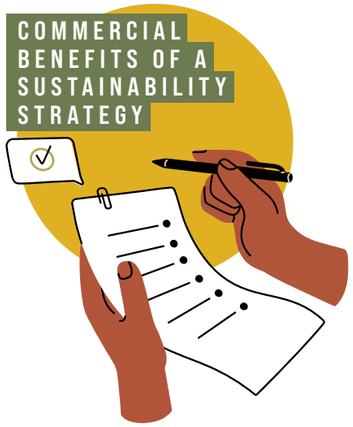
Ultimately, our goal is to make sustainable wine production not just possible, but profitable, resilient and inspiring," Linda explains. "Climate action is a shared journey, and the more we collaborate across the value chain, the stronger and more sustainable our industry becomes."

Linda Johansson
SUSTAINABILITY MANAGER, SYSTEMBOLAGET

THE OPPORTUNITY

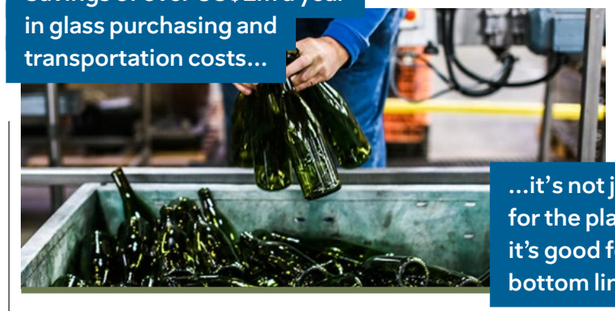
The benefits that IWCA members derive from investing in sustainability transcend the simple reduction of emissions, making their businesses more profitable, more resilient and more competitive.

Ask Josep María Ribas, IWCA board member and climate change director at Familia Torres, about the commercial benefits of a sustainability strategy and he will tick off a long list, including enhanced brand value and differentiation, plus access to new markets and partnerships, thanks to distributors and retailers prioritizing or requiring carbon emissions management and net zero goals.



"Also," he adds, *"operational efficiency and cost savings, since most of the initiatives inherently bring cost reductions in the short, mid or long term. If wineries are aware of such benefits, sustainability is a no brainer."*

Savings of over US$2m a year in glass purchasing and transportation costs...



...it's not just good for the planet; it's good for the bottom line

Anyone remaining unconvinced might like to consider the example of Jackson Family Wines, where a single sustainability initiative – the company's bottle lightweighting program – has saved over US$2m a year in glass purchasing and transportation costs. *"That's not just good for the planet,"* points out director of sustainability Aaron Stainthorp. *"It's good for the bottom line."*

At Viña Concha y Toro, Rodrigo Berner, head of corporate sustainability, concurs. "Many of the actions we are implementing – such as regenerative farming practices, reducing the weight of our packaging, increasing the share of recycled materials, or developing upcycling initiatives for winery by-products – directly translate into efficiency gains and cost savings," he says. "At the same time, they help us reduce our carbon footprint and meet the expectations of our stakeholders."

Building on this latter point, Carolina Gotuzzo, corporate affairs and sustainability director at VSPT Wine Group, explains: *"For a Chilean wine producer focused on international markets, sustainability is essential to competitiveness. In strategic export markets, particularly in Europe, Scandinavia and Canada, consumers and retailers actively demand sustainable credentials. In this context, our certifications – the National Code of Sustainability and the rigorous process of achieving Gold member status with IWCA – serve as a trusted signal of our commitment."*

However, at a time when the wine industry is facing multiple commercial headwinds, isn't there a risk that sustainability is seen by producers as being simply too expensive? After all, sustainability projects of any scale require upfront capital investment – a difficult issue for wineries at a time of declining consumption and challenging macroeconomic trends.

"At Domaine Bousquet, we see sustainability not as a cost, but as an investment that creates long-term value," counters Anne Bousquet, CEO and co-owner, Domaine Bousquet. *"Sustainable practices increase operational efficiency, reduce energy and input costs, and strengthen our relationships with customers and stakeholders who increasingly demand transparency and responsibility. By building a reputation as a responsible winery, we have opened new export markets and secured long-term contracts with buyers who prioritize sustainable sourcing."*

At Viñas Familia Gil, CEO Miguel Gil Vera agrees, saying: *"Sustainability is not a cost, but an investment. Implementing sustainable practices reduces operating costs (such as energy consumption and waste management), improves efficiency and opens up new business opportunities. It also strengthens brand reputation, facilitating access to premium markets and more demanding consumers. In difficult times, being sustainable can be a competitive advantage that sets you apart and ensures business continuity."*

> Instead of bearing the massive capital expense of building our own solar plants, we forge alliances with expert energy partners.

COLLABORATIVE APPROACH: VSPT WINE GROUP

***"We challenge the idea that sustainability is 'too expensive' by fundamentally reframing the conversation,"* says Carolina Gotuzzo, corporate affairs & sustainability director, VSPT Wine Group.**

"The real question isn't about cost, but about how to create value together with other companies and suppliers. A standalone approach can indeed be expensive. However, collaboration changes the financial equation entirely because, by partnering with experts, you can both share investment risks and access specialized expertise."

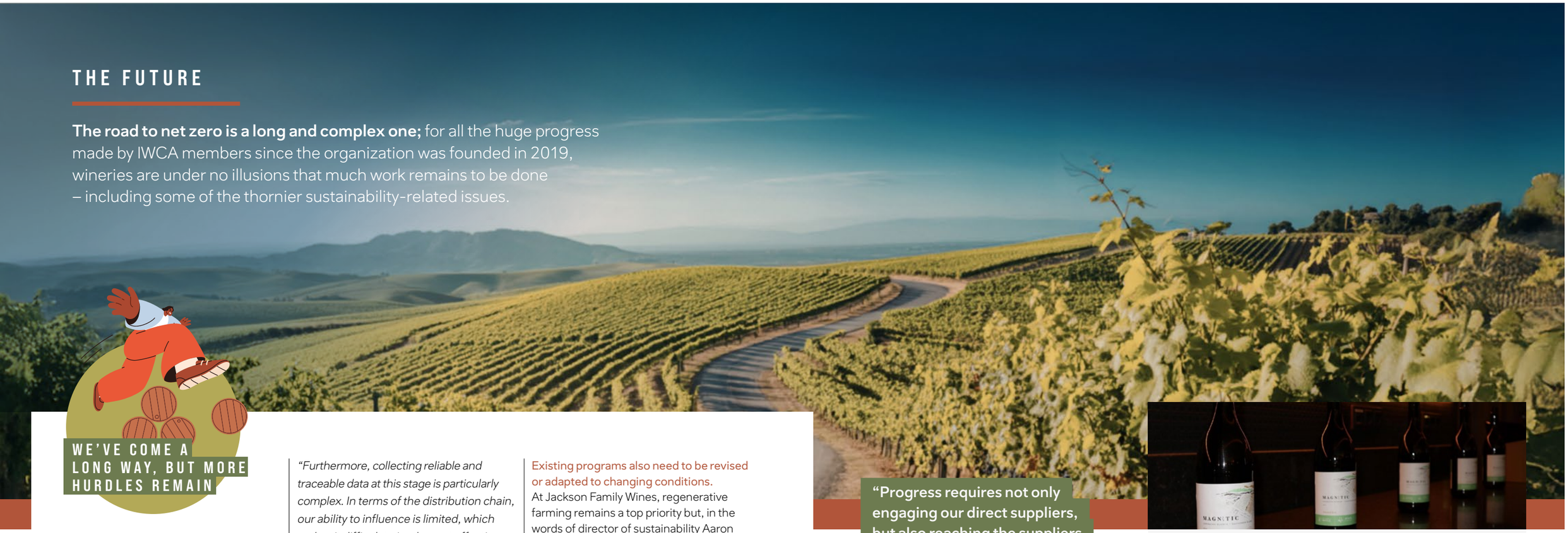
"Our renewable energy strategy is a perfect example. Instead of bearing the massive capital expense of building our own solar plants, we forge alliances with expert energy partners. They finance, build and operate the plants on our properties, and we agree to buy the power at a lower, stable rate."

"Another example: a few years ago, VSPT launched the world's first biogas plant to run on harvest waste, generating clean energy from our own production process. This, combined with our extensive solar panel installations, has allowed us to self-generate over 42% of our own electricity. This initiative drastically reduces our reliance on the volatile energy market and lowers operational costs."

Courtesy: VSPT Wine Group - Chile

THE FUTURE

The road to net zero is a long and complex one; for all the huge progress made by IWCA members since the organization was founded in 2019, wineries are under no illusions that much work remains to be done – including some of the thornier sustainability-related issues.



WE'VE COME A LONG WAY, BUT MORE HURDLES REMAIN

"We have tackled many of the 'low-hanging fruit' GHG reduction projects," says Louisa Rose, IWCA board member, and winemaker & head of sustainability at Hill-Smith Family Estates. *"A few that are still in progress include electrification of our forklift fleet and ongoing lightweighting of glass. We continue to look at electrification options, on the road, in the winery and vineyard, and we are keeping abreast of emerging technologies as active members of industry groups and participating in R&D collaborations."*

Ask IWCA members to name the toughest aspect of emissions reduction and the response is almost universal: Scope 3. "*Scope 3 represents one of the greatest challenges, as it requires close collaboration with suppliers who often lack the resources or technical capacity to measure or reduce their emissions,"* says Miguel Gil Vera, CEO of Viñas Familia Gil.

"Furthermore, collecting reliable and traceable data at this stage is particularly complex. In terms of the distribution chain, our ability to influence is limited, which makes it difficult to implement effective measures to reduce carbon footprint."

His views are echoed by Carolina Gotuzzo, corporate affairs & sustainability director at VSPT Wine Group. *"Without a doubt, the most challenging area for us is tackling our Scope 3 emissions, specifically those generated by our glass bottle suppliers,"* she says. *"While we've made significant progress on our side – primarily by reducing the weight of glass bottles across our portfolio – we are still dependent on the manufacturing processes of our suppliers."*

Progress on this front is also hampered by the intricate nature of modern supply chains, according to Rodrigo Berner, head of corporate sustainability at Viña Concha y Toro. *"Progress requires not only engaging our direct suppliers, but also reaching the suppliers of our suppliers,"* he explains. *"This is complex and demands a long-term, collaborative approach to create meaningful reductions."*

Existing programs also need to be revised or adapted to changing conditions. At Jackson Family Wines, regenerative farming remains a top priority but, in the words of director of sustainability Aaron Stainthorp, *"what improves soil health in Mendocino might not translate to Santa Barbara"*. The business is expanding multi-year trials across its vineyards to test compost, cover crops and reduced tillage.

Meanwhile, Domaine Bousquet CEO and co-owner Anne Bousquet has a lengthy to-do list for the year ahead, from strengthening supply chain oversight to reducing the winery's water footprint, and cutting Scope 2 emissions by installing solar panels. The company is also set to expand its regenerative farming practices and finalize its Race to Zero Climate Action Plan.

Still, there is considerable appreciation for what has already been achieved by IWCA members. Josep María Ribas, climate change director at Familia Torres, voices particular pride in the company's "home-made" carbon capture system – using its own fermentation CO_2 to avoid oxidation of wine and must in winery tanks, instead of buying fossil-based CO_2. He also highlights the company's reusable bottles initiatives (see facing page), regenerative viticulture and increased use of intermodal freight shipping.

"Progress requires not only engaging our direct suppliers, but also reaching the suppliers of our suppliers. This is complex and demands a long-term, collaborative approach to create meaningful reductions."

Perhaps the biggest remaining challenge is to convince a sceptical consumer base for whom sustainability may not – even today – be a top priority. *"This is particularly the case in times of high cost of living, and uncertain political messaging,"* says Louisa Rose.

"However, we are seeing some areas of hope – and collective messaging, such as Australia's national sustainability program Sustainable Winegrowing Australia (SWA) and IWCA, are powerful stories that resonate when they can be told, and can influence purchasing decisions. The stories just need to be told as often as we all can." ■

GAMECHANGER: FAMILIA TORRES' REUSABLE WINE BOTTLE

IWCA founder member Familia Torres has launched the first reusable wine bottle into the Dutch market, in a partnership with local importer Walraven Sax. The bottle, used for the company's new Magnetic red and white wines, is designed for multiple reuses and refills.

After production at the Familia Torres winery in Penedès, the wine is transported to a bottling facility near the Dutch border for filling and distribution to restaurants. The empty bottles are collected, cleaned and returned for reuse, completing a fully circular system.

The approach is expected to achieve a **50% reduction in CO_2 emissions, as well as using 70% less water and dramatically decreasing packaging waste,** according to a life cycle assessment carried out by Partners for Innovation. Familia Torres has also introduced Magnetic on keg, further minimizing packaging materials and amplifying the circular impact.

IWCA
EVENTS IN 2025

IWCA and its member wineries have been busier than ever during 2025, attending wine trade events all over the world, participating in debates and embarking upon a wide range of initiatives with partners inside the wine industry and beyond. We've welcomed new members, launched our new GHG Calculator for Latin America and held a number of Knowledge Exchange & Expert Sessions – all designed to reinforce our core aim of decarbonizing the global wine industry.

Barcelona Wine Week

Events & International Participation

FEBRUARY

BARCELONA WINE WEEK

Gathering of Spanish and Portuguese members, including a panel on carbon emissions reduction and a tasting featuring IWCA member wines (Familia Torres, Herència Altés, Viñas Familia Gil, Neleman, CVNE, Alma Carraovejas, Abadía Retuerta, among others).

MARCH

PROWEIN GERMANY

IWCA took part in two important panel discussions:

Meininger Conference: Trade out of the box – the art of selling wine: Best practices green marketing: the sales potential of sustainable wine practices; featuring Ryan Johnson, Marketing Director, Ridge Vineyards.

Business Forum Session Two: The alphabet soup of wine sustainability: featuring Rob Symington, International Wineries for Climate Action.

MAY

FIRST ANNUAL IWCA MEMBER MEETING

JULY

AWITC CONFERENCE, AUSTRALIA

In collaboration with Wine Australia, we presented the findings of our global research on carbon insetting and carbon capture in vineyards and wineries, with the participation of members such as Familia Torres and Cakebread Cellars.

OCTOBER

SUSTAINABILITY IN DRINKS, LONDON

IWCA facilitated the Carbon Management Zone: Getting started with carbon footprinting.

Speakers: *Miriam Mascarenhas, Quality & Sustainability Manager, Herdade dos Grous; George Wade, Co-founder, Zevero; Marcus Ihre, Sustainability Manager, Systembolaget*

The value of carbon: Using sequestration to mitigate emissions and enhance natural capital.

Speakers:
Charlotte Hey
Facilitator/Executive Director, IWCA
Doug Wanstall, Head of Projects
Beyond Zero & SID Founding Partner
Josep María Ribas
Climate Change Director, Familia Torres
Fran Estartus, Operation Coordinator, IWCA

NOVEMBER

VIRTUAL PRESS TASTING, GERMANY

Speakers:
Julien Brustis,Château Tour des Termes
Marcel von den Benken, Bötzinger
Ryan Johnson, Ridge Vineyards

SECOND ANNUAL IWCA MEMBER MEETING

Knowledge Exchange & Expert Sessions

JANUARY

NORTH STAR CARBON PART II

Advanced session on carbon accounting methodologies, supporting members in refining their emissions reduction strategies.

Speakers:
Josh Prigge – CEO, North Star Carbon
Fran Estartus – IWCA
Haley Duncan – Silver Oak Cellars

FEBRUARY

AUDITOR EXPERT SESSION

Practical training for more than 20 auditors worldwide on IWCA's requirements and processes, improving alignment and consistency across audits.

Speakers: *Josep María Ribas, Familia Torres*
Charlotte Hey and Fran Estartus, IWCA

APRIL

PIONEERING GHG REDUCTION IN WINE RETAIL

Focused on how Scandinavian monopolies are driving ambitious climate agendas in wine retail.

Speakers:
Linda Johansson –Systembolaget, Sweden
Senni Simola – Alko, Finland
Sigupáll Ingibergsson – ÁTVR, Iceland

MAY

REGIONAL MEMBER MEETINGS

EASTERN MEDITERRANEAN
(Lebanon, North Macedonia, Greece); Latin America (Chile & Argentina); and Australia & New Zealand.

JUNE

LAUNCH OF IWCA SOC COMPILATION

As part of IWCA's commitment to sustainability and climate action in the wine sector, we launched a project to gather and showcase soil organic carbon (SOC) sequestration initiatives from IWCA wineries and beyond.

EXPERT SESSION ON CARBON INSETTING

Sharing the latest global developments in carbon sequestration and insetting practices within the wine sector.

Speakers: the working group members, including chair:
Aaron Fishleder, Cakebread Cellars
Josep María Ribas, Familia Torres
Anne Bousquet, Domaine Bousquet
Carolina Gotuzzo, VSPT Wine Group
Louisa Rose, Hill-Smith Family Estates
Fran Estartus, IWCA

JULY

TRANSITION PLANS SESSION

Guidance for members on building robust transition plans aligned with the Race to Zero framework.

Speakers: *Camila Fernández, Race to Zero Engagement and EPRG Manager*
Brianne Engles, Crimson Wine Group
Tihomir Kasapinov, Tikveš Winery
Fran Estartus, IWCA

NOVEMBER

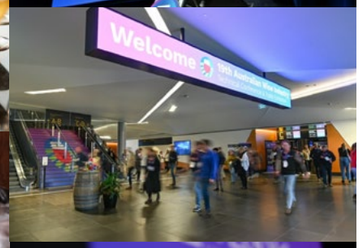
PACKAGING AND GLASS – IT'S NOT JUST ABOUT LIGHTWEIGHTING

(AUSTRALIA/NZ TIME ZONE):
Panel discussion of packaging within the context of Scope 3 and emissions reduction. Lightweighting glass bottles is important, but this session explores how crucial collaboration with glass suppliers is, as well as looking at distribution and why a holistic approach is crucial.

Speakers: *Tim Hackett, Henschke*
James Coleman, Felton Road
Dave Chaffin, Pure Strategies

Sustainability in Drinks

AWITC Conference



Courtesy: Bötzinger – Germany

New members & growth

JANUARY

Spanish winery
Bodegas Ramón Bilbao
joined as a Silver Member

MARCH

Australia-based
Hill-Smith Family Estates
upgraded to Gold Member

APRIL

We welcomed our first
German member,
Bötzinger

MAY

Another Australian winery,
Henschke, joined as
a Gold Member

JUNE

Frog's Leap Winery
from California joined
as a Silver Member

JULY

Bodega Sommos (Spain)
and Bodegas LAN (Spain)
became new members

Two wineries from South Africa –
Mullineux & Leeu Family Wines Pty
– joined IWCA

Symington Family Estates
(Portugal) upgraded
to Gold Member

SEPT

Château Tour des Termes
(France) joined
as a Silver Member

Viña Concha y Toro
(Chile) upgraded
to Gold Member

Opus One Winery
(USA) upgraded
to Gold Member

St. Supéry Estate Vineyards
& Winery (USA) upgraded
to Gold Member

OCT

Abadía Retuerta
(Spain) upgraded
to Gold Member

Herdade dos Grous
(Portugal) upgraded
to Gold Member

Bodegas LAN
(Spain) joined as
a Silver Member

CedarCreek Estate Winery
(Canada) joined as
a Silver Member

Château Ksara
(Lebanon) joined as
a Silver Member

Quinta Nova de Nossa Senhora
do Carmo (Portugal)
became a new member

Courtesy: VSPT Wine Group – Chile

Initiatives & key achievements

FEBRUARY

LAUNCH OF THE GHG CALCULATOR FOR LATIN AMERICA

The first tool of its kind developed specifically for wineries operating in the region, IWCA's Greenhouse Gas (GHG) emissions calculator for Latin America was built in collaboration with leading Argentinian and Chilean wineries Domaine Bousquet, Grupo Peñaflor, Miguel Torres Chile, Viña Undurraga and VSPT Wine Group.

Hailed as a major step forward in helping businesses in the major wine-producing nations of South America to calculate their GHG emissions, this free tool allows wineries to measure their carbon footprint across Scopes 1, 2 & 3, including direct emissions, indirect emissions due to energy consumption and emissions throughout a company's value chain.

The launch of the new calculator, which joins those already in place for wineries in the US, Australia and New Zealand, generated 30 press mentions across the UK, US, Chile, Argentina and Spain.

COLLABORATION WITH SYSTEMBOLAGET

Ongoing work to align with the Swedish monopoly's PCF protocol, reinforcing our leadership in standardized carbon footprint methodologies.

IWCA MEMBER SPOTLIGHTS

Over the past 12 months, IWCA members have worked tirelessly to take meaningful and practical steps to reduce their carbon emissions and to positively impact their surrounding environment,from harnessing renewable energy sources to embracing regenerative viticulture.

As IWCA has expanded in scope, experience and maturity, wineries have re-evaluated what efforts they can undertake to achieve net zero by 2050.

With this in mind, IWCA commissioned Pure Strategies to conduct an internal audit aimed at advancing the association, while addressing the emerging interests and needs of wineries, aligned with the current realities of the industry.

TWO AREAS FOR IMPROVEMENT STOOD OUT:

- IWCA required wineries to use auditors accredited by the standard (extensive experience in ISO 14064-3 or the GHG Protocol was not sufficient), increasing costs in some parts of the world.
- IWCA stipulated that achieving Gold status was contingent on the on-site generation of renewable energy.

Thanks to a collaborative effort between the wineries, the Board of Directors and the Inventory Review Committee, these rules have been relaxed without compromising the rigor of the inventory review, or the transparency of the processes.

The amended rules are laid out below.

These improvements not only incentivize wineries in the process of achieving net zero by 2050, but are also reflected in a near-100% increase in the number of Gold winery members over the past year.

Their unwavering efforts – and the genuine and palpable commitment displayed by all IWCA wineries – are illustrated by the data on the following pages, which covers members' emissions across Scopes 1, 2 and 3, comparing their most recent reporting period with their baseline year.

MEMBERSHIP REQUIREMENTS

IWCA has three progressive membership levels: **Applicant, Silver** and **Gold**.

APPLICANT MEMBERS MUST:

- Have completed a baseline GHG emissions inventory *(inclusive of at least Scopes 1 & 2)*, **and/or** have a verifiable plan to complete a baseline Scopes 1-2-3 inventory.
- Provide IWCA with a written commitment to complete and third-party audit a baseline Scopes 1-2-3 inventory within one year.

SILVER MEMBERS MUST:

- Complete a baseline, third-party verified GHG inventory across Scopes 1, 2 & 3. This inventory must:
  - Cover 90% of the organization's volume within the region where its main winery is located.
  - Follow the World Resources Institute Greenhouse Gas Protocol and the ISO-14064 process.
  - Be verified by an ISO-14064-3-accredited or CDP-accredited auditor **or** by an accredited audit firm with proven experience auditing GHG data, consistent with relevant national or sub-national assurance standards.
  - Follow IWCA's GHG Inventory Guidance Document.
- Commit to becoming Net Zero by no later than 2050 across Scopes 1, 2 & 3; and meet intermediate targets by 2030.

GOLD MEMBERS MUST:

- Meet all of the Silver Member requirements.

AND...

- Self-generate on-site renewable energy equivalent to at least 20% of all energy consumed by the winery, **or** purchase at least 50% of its energy consumption from renewable sources, certified by independent audit.
- Demonstrate a consistent reduction of emissions *(per liter of wine produced)* over time...
  - As compared to their baseline year inventory.
  - With a target emissions reduction percentage proportional to the winery's Net Zero target for 2050.

ABADIA RETUERTA

ABADÍA RETUERTA

Location: **Spain** | No. Wineries: **1** | Member since: **2023**

43% **reduction in emissions intensity since 2023**

27% **powered by on-site renewable energy**

RENEWABLE ENERGY

We have just incorporated a new 700kW photovoltaic plant, comprising 1,500 solar panels. Together with the 500-panel plant we already had at the winery, this will allow us to reach 45% of self-consumption across our business, including the winery and the hotel. In addition, **100% of the electrical energy that we consume has a Guarantee of Origin (GoO).**

AGRO-FORESTRY

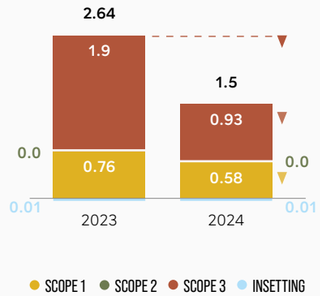
We have started creating the Monks' Forest, initially planting six hectares of fruit trees in February 2025. **Before the end of the year, we will plant another 50 hectares of pine and holm oak.**

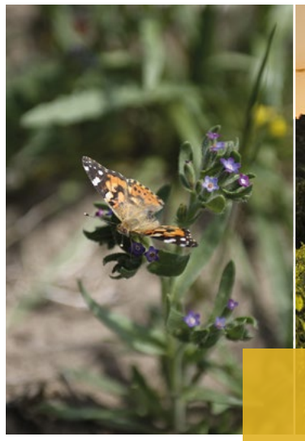
ENERGY EFFICIENCY

We have replaced the winery's vehicles with **100% electric vehicles, and 100% of the lights with LED technology.**

EMISSIONS INTENSITY

(kg of CO_2e per liter produced)





ALMA CARRAOVEJAS

Location: **Spain** | No. Wineries: **6** | Member since: **2020**

19% reduction in emissions intensity since 2019

23% powered by on-site renewable energy

► RENEWABLE ENERGY

In 2024, **67% of the energy consumed in our wineries came from renewable energy sources,** thanks to the purchase of electricity with Guarantees of Origin (34%); and the increase in use of energy generated in our own facilities from photovoltaic solar panels, biomass boilers and geothermal energy (from 23% in 2023, to 33% in 2024).

► WATER MANAGEMENT

We reduced our water consumption per liter of wine produced by 23% from 2023 to 2024 (from 0.074 m^3/liter to 0.057m^3/liter), through improved monitoring, irrigation optimization and targeted efficiency measures.

► PACKAGING

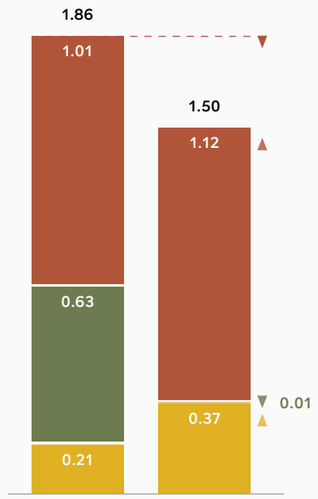
We reduced the average weight of our 75cl bottles to 516g and launched the VINEBOX project, transforming vine prunings into pulp for our wine boxes and labels, reducing emissions from packaging materials.

► VINEYARD MANAGEMENT

We are **leading R&D projects such as GO MYCOWINE (using mycorrhizal fungi to enhance vineyard resilience) and ROTEND (predictive systems for black rot disease)** – both aimed at reducing chemical inputs and improving vineyard sustainability.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



COMPAÑÍA VINÍCOLA DEL NORTE DE ESPAÑA (CVNE)

Location: **Spain** | No. Wineries: **6** | Member since: **2022**

14% reduction in emissions intensity since 2020

36% powered by on-site renewable energy

► VINEYARD MANAGEMENT

In 2024, our Contino vineyard was **the first in Spain to be certified as zero residues in pesticides.** This initiative reinforces the recovery of the surrounding ecosystem, along with other sustainable practices such as the installation of different systems to increase biodiversity in the area, weed management through grazing, etc.

► RENEWABLE ENERGY

All the electricity consumed in each of our wineries has a guarantee of renewable origin. This is the fourth year that we have achieved this status. **This year, 36% of the energy consumed has been self-generated,** thanks to photovoltaic panels installed in all of our wineries, together with a biomass boiler.

► PACKAGING

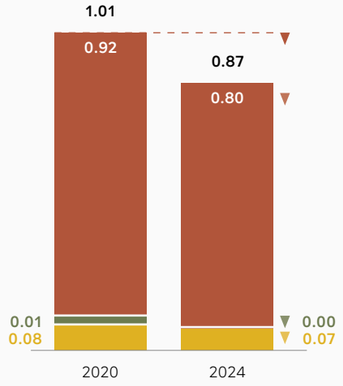
We continue to work on reducing emissions associated with wine packaging by using lighter bottles, recycled cardboard, returnable pallets, etc.

► ENERGY EFFICIENCY

We have built energy-efficient and sustainable facillities, such as our new wood-and-slate warehouse in Virgen del Galir in Valdeorras, and our logistics center in Laguardia.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



FAMILIA TORRES

Location: **Spain** | No. Wineries: **9** | Member since: **2019**

41% reduction in emissions intensity since 2008

44% powered by on-site renewable energy

► RENEWABLE ENERGY

We've launched a pilot agrivoltaic installation in our Mas Rabell vineyard in Penedès as part of the SOLARWINE project, aiming to promote climate-smart, sustainable viticulture. The 1,000m² facility features elevated solar panels to assess their impact on vineyard productivity, microclimate and energy efficiency. Equipped with a sensor network, the system will monitor agronomic and energy parameters. The generated energy will be used for self-consumption. SOLARWINE is supported by several partners and funded under the EU's Common Agricultural Policy.

► LOGISTICS

We reached a significant milestone by partnering with our distributors in the Netherlands and Germany to transition our wine shipments from truck-only to a more sustainable train-and-truck model, thereby **lowering our carbon footprint by up to 40%,** depending on the route.

► PACKAGING

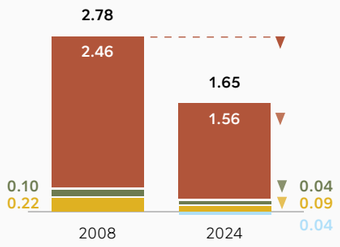
We made a pioneering move in the Dutch market by introducing one of our wine references in both reusable bottles and reusable kegs in the HORECA channel. **The expected carbon emissions reduction from this reusable packaging is higher than 50%.**

► AGRO-FORESTRY

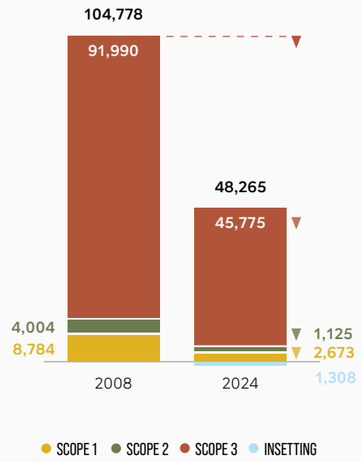
We have taken meaningful action to restore and preserve natural ecosystems by **planting 12.5 hectares of trees on our own land** in Curepto, Chile. With this latest reforestation effort, our total reforested area now amounts to 108 hectares.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



► ABSOLUTE EMISSIONS (MTE CO_2)



HENSCHKE

Location: **Australia** | No. Wineries: **1** | Member since: **2024**

37% reduction in emissions intensity since 2022/23

26% powered by on-site renewable energy

► AGROFORESTRY

In 2003, the uppermost part of the catchment area above the Hill of Grace vineyard, which is unsuitable for viticulture, was planted to 15 hectares of native forest as part of a permaculture project. Nearly 20 years later, this **planting has sequestered an estimated 2,000 tonnes of CO_2e.**

► PACKAGING

We locally source 90% of all packaging. In 2024, working with local glass bottle manufacturers, purchased bottles contained 50% recycled material, compared to 38% the previous year, allowing us to reduce Scope 3 emissions.

► RENEWABLE ENERGY

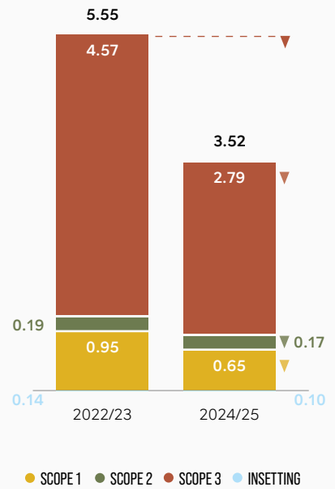
In 2013, we installed nearly 50kW of solar generation, and added another 50kW of solar in 2021, plus batteries for generated energy storage (144kW). This microgrid is complemented by procuring electricity from the South Australian power grid, where **more than 70% of generation derives from renewable sources.**

► CIRCULAR ECONOMY

We have a biochar project, which involves making biochar out of vine stumps and other timber from our property. This biochar, combined with compost, is put back into the vineyard, sequestering more CO_2 into the soils.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



HERDADE DOS GROUS

Location: **Portugal** | No. Wineries: **1** | Member since: **2022**

70% reduction in emissions intensity since 2022

60% powered by on-site renewable energy

GENERAL

Herdade dos Grous was the first winery and vineyard certified by the Wines of Alentejo Sustainable Program (WASP). The sustainable production strategy, in all its aspects, is one of the structural pillars of the whole agricultural activity management.

PACKAGING

We have achieved a reduction of 181 tonnes of CO_2e by reducing the weight of bottles on some of our lines. During 2024, we improved the quality of packaging to minimize its environmental impact: 100% recyclable cardboard, less ink used, 0% use of varnish.

RENEWABLE ENERGY

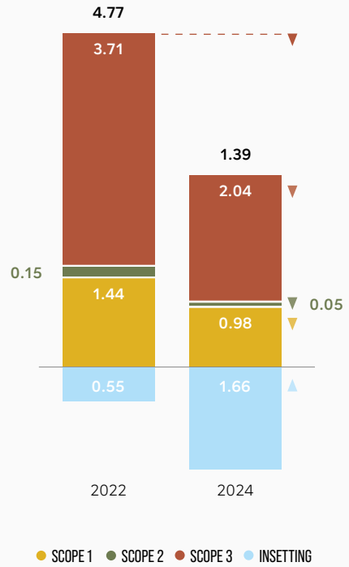
More than 60% of our energy needs are met via renewable sources. Installed solar panels allow us to avoid more than 41 tons of CO_2e, up 14% on our baseline year.

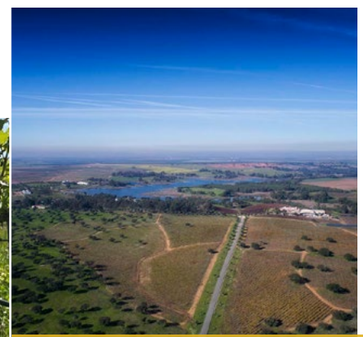
VINEYARD MANAGEMENT

We showcase a sustainable approach in 5.7 hectares of our vineyard by incorporating Keyline design principles and Nature-based Solutions. The management of **the vineyards at Herdade dos Grous has been moving towards regenerative viticulture practices** with the aim of minimizing the impacts of climate change and improving soil quality. These practices contribute to the sequestration of approximately 580 tonnes of CO_2e.

EMISSIONS INTENSITY

(kg of CO_2e per liter produced)





HILL-SMITH FAMILY ESTATES

Location: **Australia** | No. Wineries: **4** | Member since: **2021**

38% reduction in absolute emissions since 2011

21% powered by on-site renewable energy

RENEWABLE ENERGY

We installed a **new 150kW solar system** at our Yalumba winery in 2025, increasing on-site renewable energy generation. The system has been installed and, once fully commissioned, will offset up to 50 tonnes of CO_2e annually. The roof-mounted solar panels are also providing significant insulation for the building, lowering the amount of refrigeration required.

WINERY OPERATIONS

In partnership with the Australian Wine Research Institute, **we led an Australian industry-first trial to capture ferment CO_2.** Two pilot trials conducted in 2024-25 demonstrated the system's potential to offset up to 70 tonnes of CO_2e per year.

PACKAGING

We transitioned a number of our key export wines to lightweight glass bottles. This packaging change is **now saving more than 255 tonnes of CO_2e annually,** while maintaining product integrity and shelf appeal.

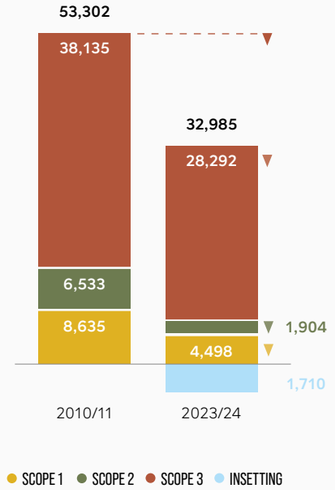
CARBON SEQUESTRATION

In 2024, we conducted our first quantification of carbon absorbed by our native vegetation areas. This provides a verified baseline for measuring on-site carbon sequestration, strengthening our emissions reporting and reduction strategy.

ENERGY EFFICIENCY

We upgraded our corporate vehicle fleet to hybrid models. This transition, completed in early 2025, has reduced fossil fuel-related emissions across our operational fleet by approximately 40%.

ABSOLUTE EMISSIONS (MTE CO_2)



JACKSON FAMILY WINES

Location: **USA** | No. Wineries: **40** | Member since: **2019**

27% reduction in emissions intensity since 2015

15% powered by on-site renewable energy

► RENEWABLE ENERGY

We added 3.3m kWh of new solar capacity across our wineries and offices, bringing our total solar portfolio annual generation to ~14m kWh – **enough clean electricity to power 1,269 homes a year.** This builds on our renewable energy investments that have made solar central to our operations.

► PACKAGING

Our bottle lightweighting efforts continued with a 2.3% reduction in portfolio average weight from 2023, increasing our total reduction to 12.9% since 2015. While incremental, these improvements add up across our production scale and demonstrate our commitment to reducing packaging impact wherever possible.

► ENERGY EFFICIENCY

We sourced renewable diesel for 43% of our agricultural operations, reducing emissions by 2,300 metric tons. We're taking this practical approach while electric tractor technology develops to meet our vineyard terrain demands.

► CIRCULAR ECONOMY

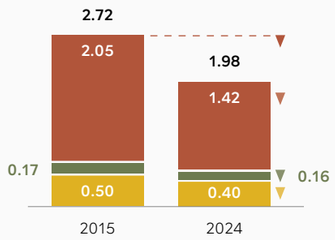
We expanded our **composting program to produce 4,400 tons** of finished compost using grape pomace from our North Coast wineries. It's satisfying to turn former waste into something that enriches our soil.

► GENERAL

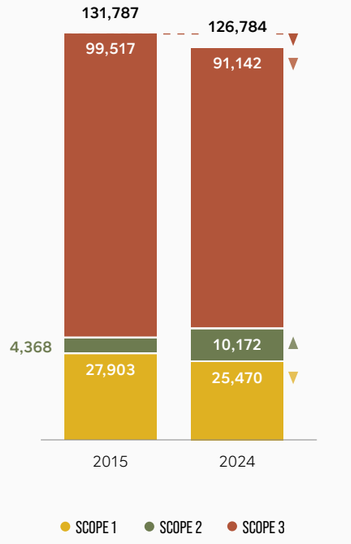
These initiatives reflect **our belief that meaningful climate action happens through consistent progress on multiple fronts.** We lead through learning – continuously innovating, adapting, measuring – and sharing those insights with IWCA partners because industry transformation requires all of us working together.

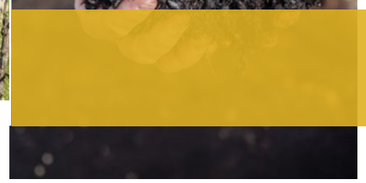
► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



► ABSOLUTE EMISSIONS ($MTE CO_2$)





MIGUEL TORRES CHILE

Location: **Chile** | No. Wineries: **1** | Member since: **2022**

18% reduction in emissions intensity since 2018

69% powered by on-site renewable energy

► VINEYARD MANAGEMENT

At the field level, the incorporation and subsequent **certification of regenerative agriculture practices has been vital in reducing agrochemicals** which, although organic, still generate GHGs.

► RENEWABLE ENERGY

Electricity consumption has fallen sharply since 2018 (base year) due to the incorporation of a 175kWp photovoltaic park and the purchase of 100% of the remaining energy from renewable photovoltaic sources.

► WINERY OPERATIONS

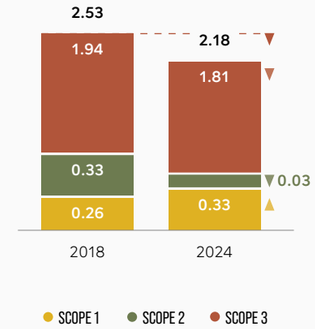
Strict control of the use of refrigerants and a switch to those with a lower environmental footprint.

► PACKAGING

Significant reduction in the weight of packaging, especially in the weight of bottles, which account for 30% of the GHG inventory, but also in the switch to recycled cardboard boxes and the reduction in the use of cases. All this has an impact not only on packaging, but also on transport.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



OPUS ONE WINERY

Location: **USA** | No. Wineries: **1** | Member since: **2023**

24% reduction in emissions intensity since 2022

65% powered by on-site renewable energy

► VINEYARD MANAGEMENT

As of 2025, we have converted 59% of our estate vineyards to be farmed regeneratively, including the utilization of permanent cover crop, grazing, no-till and precision irrigation strategy. Due to these changes in vineyard management, we have reduced the need for fertilizer applications, which has reduced fugitive emissions by 57% since 2022.

► REDUCTION IN DOWNSTREAM SHIPMENTS

We reorganized our pallet stacking procedures to **minimize the number of vessels needed to transport** wine internationally.

► ENERGY EFFICIENCY

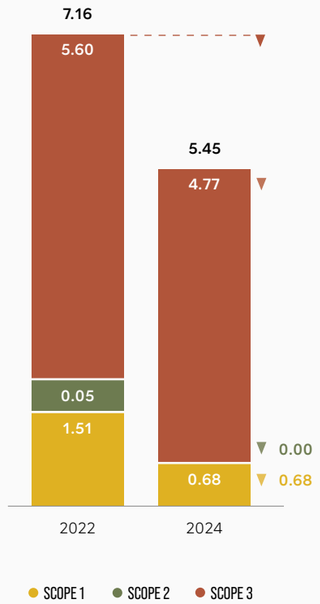
We have incentivized the purchase of EV and hybrid vehicles by installing 20 charging stations at the winery. In addition, we have incentivized flexible work schedules to allow many employees to have hybrid schedules. These incentives **have resulted in a 58% decrease in emissions from employee commuting since 2022.**

► WASTE MANAGEMENT

Through employee education campaigns, **we have reduced landfilled waste by 15%, increased recycled waste by 40%, and increased composted waste by 15% since 2022.**

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



SPOTTSWOODE ESTATE VINEYARD & WINERY

Location: **USA** | No. Wineries: **1** | Member since: **2019**

16% reduction in absolute emissions since 2019

75% powered by on-site renewable energy

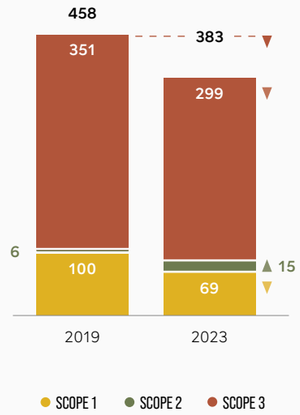
► PACKAGING

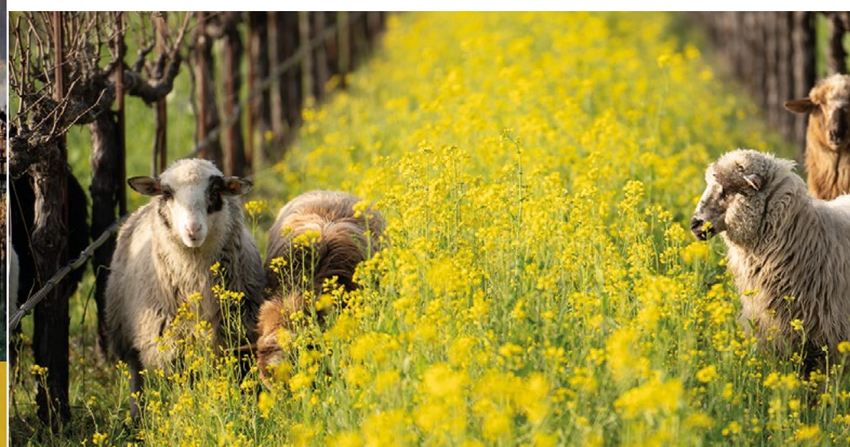
In 2024, we bottled our 2022 Estate Cabernet Sauvignon and Lyndenhurst Cabernet Sauvignon in glass that weighs 495g. This is a 300g reduction per bottle over the course of three vintages.

► VINEYARD MANAGEMENT

In 2025, we reached 75% of our vineyard being grazed by our herd of Navajo Churro sheep, with no mowing. In line with our Regenerative Organic Certification, we have adopted a full no-till system in our estate vineyard, maximizing biodiversity and carbon sequestration rates while we continue to grow our herd of sheep.

► ABSOLUTE EMISSIONS (MTE CO_2)





ST. SUPÉRY ESTATE VINEYARDS & WINERY

Location: **USA** | No. Wineries: **1** | Member since: **2022**

48% reduction in emissions intensity since 2021

37% powered by on-site renewable energy

► PACKAGING

Glass purchases are sourced in North America and include recycled glass. Napa Valley Estate Cabernet Sauvignon, the winery's second-largest wine produced, moved to 12% lighter glass (from 530g/bottle to 467g/bottle). **We have also removed foil capsules from our Napa Valley Estate wines (2023 vintage Sauvignon Blanc & Rosé, 2022 Cabernet Sauvignon), saving over 600,000 foil capsules and eliminating 2.95 tonnes of CO_2.** Paper products average a minimum of 50% recycled materials.

► WASTE DIVERSION

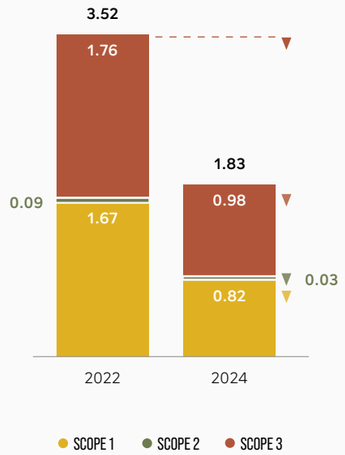
We are a founding member of North Bay Zero Waste Collective (formerly Napa Zero Waste Collective), established in June 2023. St. Supéry acts as the collection hub for neighboring wineries and businesses for plastic label release liner and stretch film.

► WASTE MANAGEMENT

By recycling PET label release liner through Rafcycle, 12,200lbs was collected in 2024 for repurposing in insulation, etc. Together with the North Bay Zero Waste Collective, over 32,000lbs of stretch film was recycled by TREX in 2024 to be reused for outside decking and furniture. Finally, tin capsules were recycled through the Teacher Resource Program (money raised helps local teachers purchase supplies for their classes).

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



SYMINGTON FAMILY ESTATES

Location: **Portugal** | No. Wineries: **9** | Member since: **2019**

21% reduction in emissions intensity since 2018

51% powered by on-site renewable energy

► PACKAGING

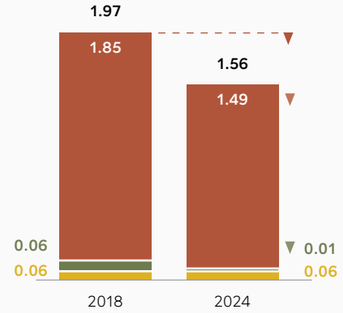
Bottles remain central to our decarbonization roadmap. In 2024, they accounted for 24% of total emissions, down from 30% in previous years. This was driven by reducing the weight of key bottle references and by using primary data from our glass suppliers, who are also advancing their decarbonization efforts. **Eleven bottle references were reduced in weight, with an average reduction of 100g per unit, avoiding about 900 tonnes of CO_2 in 2024.**

► RENEWABLE ENERGY

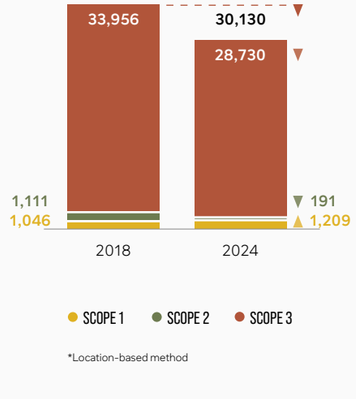
We advanced our Scope 2 decarbonization strategy through three actions: **88% of the electricity we purchased came with certificates of origin, while Portugal's grid achieved a record 71% renewable share; installed capacity of photovoltaic panels reached about 900kWp, covering 15% of our electricity consumption in 2024;** the Symington Energy Community partnership, established in December 2024, enables power sharing between sites in Vila Nova de Gaia. By the end of 2024, over 50% of our total energy consumption came from renewable sources, marking a key milestone in our sustainability journey.

► EMISSIONS INTENSITY*

(kg of CO_2e per liter produced)



► ABSOLUTE EMISSIONS* (MTE CO_2)



*Location-based method

VIÑA CONCHA Y TORO

Location: **Chile** | No. Wineries: **4** | Member since: **2023**

6% reduction in emissions intensity since 2020

4.5% powered by on-site renewable energy

RENEWABLE ENERGY

We expanded self-generation to 32 solar plants across Chile, Argentina and the US, reaching 7mW installed in 2024. In the US, we launched a hybrid project at Bonterra (ground-mount and floating) of 1.5mWAC with 400kWAC battery storage to improve demand management and resilience.

LOGISTICS

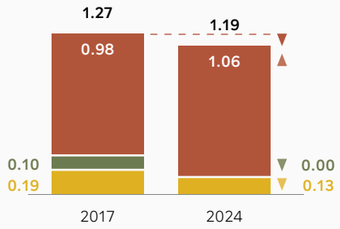
We strengthened rail from wineries to ports, **moving more than 660 containers by train in 2024. Rail typically emits several times less CO_2 per tonne/km than trucking,** helping to cut transport emissions while maintaining reliability at scale.

PACKAGING

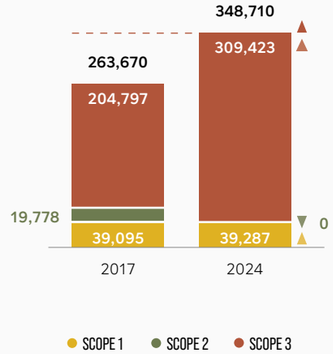
We began implementing **wrap-around cases in Chile, removing internal dividers and saving about 40g of cardboard per case** (with a saving potential of more than 1,000 tons per year if fully scaled). We also advanced bottle lightweighting – for instance, reducing the bottle weight for Casillero del Diablo from 475g to 420g.

EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



ABSOLUTE EMISSIONS (MTE CO_2)



VIÑA UNDURRAGA

Location: **Chile** | No. Wineries: **6** | Member since: **2021**

17% reduction in emissions intensity since 2022

51% powered by on-site renewable energy

WASTE MANAGEMENT/PACKAGING

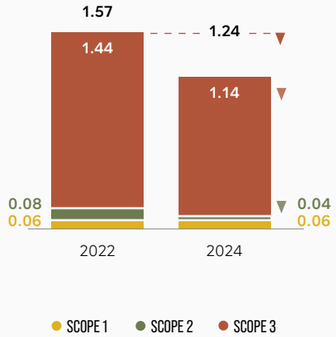
We implemented an optimization strategy in promotional materials that resulted in a 33% decrease in items such as scarves, neckerchiefs and bottle ornaments. This measure focused especially on high-volume lines, prioritizing efficiency and sustainability. **In addition, during the 2024 campaigns, we eliminated the use of promotional collars, which helped to reduce waste and improve packaging efficiency.**

RENEWABLE ENERGY

The percentage of **our energy consumption derived from renewable sources has risen from 15% in 2022 to 24% in 2023 and then 51% in 2024**. These results reflect a sustained increase in the use of non-conventional renewable energy (NCRE). This change demonstrates our commitment to sustainability, reducing carbon emissions and aligning with international decarbonization goals.

EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



VIÑAS FAMILIA GIL

Location: **Spain** | No. Wineries: **1** | Member since: **2022**

44% reduction in emissions intensity since 2018

71% powered by on-site renewable energy

► RENEWABLE ENERGY

We have significantly **increased our share of self-produced green energy through the installation of solar panels and battery energy storage systems** in several of our wineries, reducing our dependence on grid electricity. In parallel, we have optimized fossil fuel consumption in both fixed and agricultural machinery, contributing to Scope 1 emission reductions.

► PACKAGING

Our collaboration with suppliers has led to tangible improvements in Scope 3 emissions, including the **reduction of bottle weight and the use of recycled materials in packaging.** These efforts not only lower our carbon footprint, but also enhance our positioning in environmentally conscious markets.

► VINEYARD MANAGEMENT

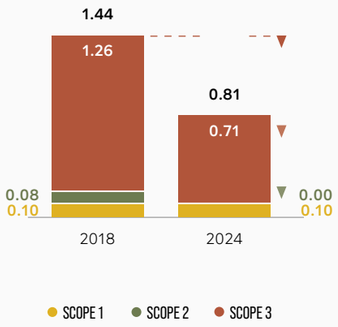
We are especially proud of the **organic certification of our vineyards and wineries, which reflects our genuine commitment to environmental responsibility** and positions us as a sustainability leader in the Spanish wine sector.

► GENERAL

Looking ahead, **our priorities include expanding internal sustainability training** across all teams and deepening collaboration with suppliers to further reduce the impact of glass and packaging on our overall footprint.

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



VSPT WINE GROUP

Location: **Chile** | No. Wineries: **6** | Member since: **2019**

47% reduction in emissions intensity since 2019

42% powered by on-site renewable energy

► VINEYARD MANAGEMENT

In 2024, production from our own vineyards increased significantly, driven by **VSPT's long-term vineyard renewal strategy focused on maximizing field efficiency and productivity. This approach reduced reliance on external grape purchases and minimized fruit transport requirements, contributing to lower emissions.** Moreover, 96% of our vineyard area – covering more than 4,000 hectares in Chile – is now under drip irrigation, as we advance toward 100% implementation.

► RENEWABLE ENERGY

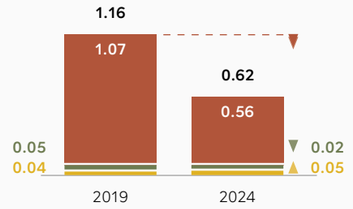
In 2024, **42% of our electricity consumption was self-generated thanks to our solar panels and our biogas plant,** which processes organic harvest waste. In 2025, we strengthened this commitment by incorporating an additional solar plant into our operations, expanding to 14 solar plants in total.

► CIRCULAR ECONOMY

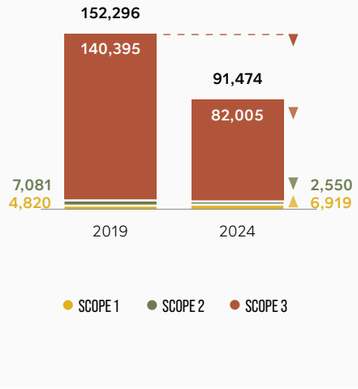
Organic waste, one of the main by-products of winemaking, achieved 100% recovery, serving as a key example of circular economy. Through our biogas plant in Molina and composting sites in Isla de Maipo, residues are converted into renewable energy and nutrients returned to the vineyards.

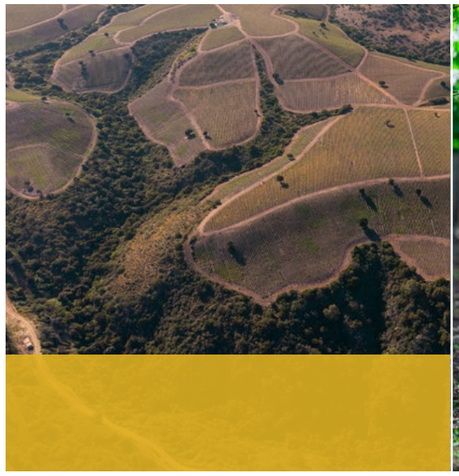
► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



► ABSOLUTE EMISSIONS (MTE CO_2)





YEALANDS WINE GROUP

Location: **New Zealand** | No. Wineries: **1** | Member since: **2020**

14% reduction in emissions intensity since 2020

14% powered by on-site renewable energy

► RENEWABLE ENERGY

In 2024, a 4mW solar array was installed across the road from the winery. As this solar array is not hard-wired into the winery, **Renewable Energy Certificates will be used to certify 2025 vineyard and winery electricity as 100% renewable.**

► PACKAGING

We continue to transition to lighter-weight glass bottles, with the average weight now 398g over our entire product range. We are currently trialing a 300g glass bottle on wine bottled in the UK. We have removed carton dividers and **increased the average recycled content to 76%.**

► BIODIVERSITY

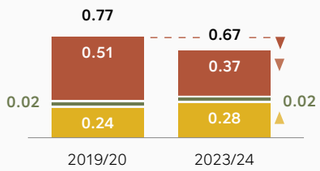
With our commitment to create a healthy and resilient ecosystem, we have **planted 15,000 native plants** along the waterways, and cover crops between the vineyard rows.

► VINEYARD MANAGEMENT

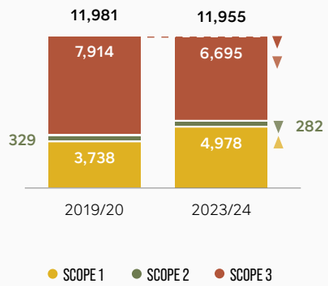
Using lean manufacturing principles, we have improved the planning and task management in the vineyard. By better planning of vineyard tasks, we have been able to reduce vehicle travel time and distance. This has helped us with the goal of **reducing diesel emissions by 5% each year.**

► EMISSIONS INTENSITY

(kg of CO_2e per liter produced)



► ABSOLUTE EMISSIONS (MTE CO_2)



GOLD MEMBER HIGHLIGHTS

IWCA has almost doubled its number of Gold members in 2025 – a clear sign that renewable energy and self-sufficiency are top priorities for leading wine producers. Here our Gold members detail some of their highlights from the past year.

Electricity consumption has fallen sharply since 2018 (base year) due to the incorporation of a 175kWp photovoltaic park and the purchase of 100% of the remaining energy from renewable photovoltaic sources.

MIGUEL TORRES CHILE

We have started creating the Monks' Forest, initially planting six hectares of fruit trees in February 2025. Before the end of the year, we will plant another 50 hectares of pine and holm oak.

ABADÍA RETUERTA

We have a biochar project, which involves making biochar out of vine stumps and other timber from our property. This biochar, combined with compost, is put back into the vineyard, sequestering more CO_2 into the soils.

HENSCHKE

We increased the share of renewable energy in our wineries from 67% in 2023 to 74% in 2024, through a combination of on-site generation (solar panels, biomass boilers, geothermal) and the purchase of certified green electricity.

ALMA CARRAOVEJAS

More than 60% of our energy needs are met via renewable sources. Installed solar panels allow us to avoid more than 41 tons of CO_2e, up 14% on our baseline year.

HERDADE DOS GROUS

In 2024, our Contino vineyard was the first in Spain to be certified as zero residues in pesticides. This initiative reinforces the recovery of the surrounding ecosystem.

COMPAÑÍA VINÍCOLA DEL NORTE DE ESPAÑA (CVNE)

We transitioned a number of our key export wines to lightweight glass bottles. This packaging change is now saving more than 255 tonnes of CO_2e annually, while maintaining product integrity and shelf appeal.

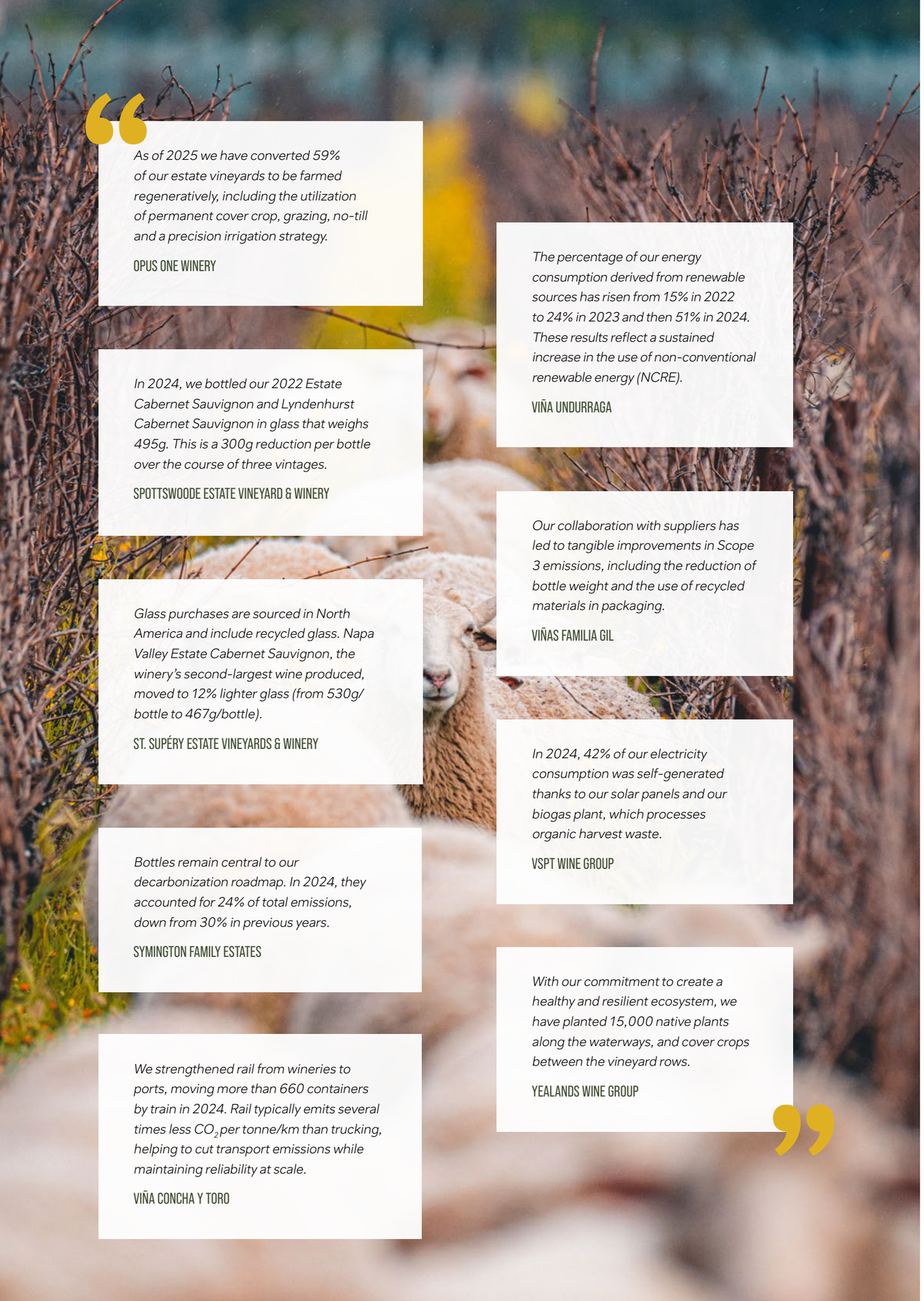
HILL-SMITH FAMILY ESTATES

We've launched a pilot agrivoltaic installation in our Mas Rabell vineyard in Penedès as part of the SOLARWINE project, aiming to promote climate-smart, sustainable viticulture.

FAMILIA TORRES

We sourced renewable diesel for 43% of our agricultural operations, reducing emissions by 2,300 metric tons. We're taking this practical approach while electric tractor technology develops to meet our vineyard terrain demands.

JACKSON FAMILY WINES



As of 2025 we have converted 59% of our estate vineyards to be farmed regeneratively, including the utilization of permanent cover crop, grazing, no-till and a precision irrigation strategy.

OPUS ONE WINERY

In 2024, we bottled our 2022 Estate Cabernet Sauvignon and Lyndenhurst Cabernet Sauvignon in glass that weighs 495g. This is a 300g reduction per bottle over the course of three vintages.

SPOTTSWOODE ESTATE VINEYARD & WINERY

Glass purchases are sourced in North America and include recycled glass. Napa Valley Estate Cabernet Sauvignon, the winery's second-largest wine produced, moved to 12% lighter glass (from 530g/ bottle to 467g/bottle).

ST. SUPÉRY ESTATE VINEYARDS & WINERY

Bottles remain central to our decarbonization roadmap. In 2024, they accounted for 24% of total emissions, down from 30% in previous years.

SYMINGTON FAMILY ESTATES

We strengthened rail from wineries to ports, moving more than 660 containers by train in 2024. Rail typically emits several times less CO_2 per tonne/km than trucking, helping to cut transport emissions while maintaining reliability at scale.

VIÑA CONCHA Y TORO

The percentage of our energy consumption derived from renewable sources has risen from 15% in 2022 to 24% in 2023 and then 51% in 2024. These results reflect a sustained increase in the use of non-conventional renewable energy (NCRE).

VIÑA UNDURRAGA

Our collaboration with suppliers has led to tangible improvements in Scope 3 emissions, including the reduction of bottle weight and the use of recycled materials in packaging.

VIÑAS FAMILIA GIL

In 2024, 42% of our electricity consumption was self-generated thanks to our solar panels and our biogas plant, which processes organic harvest waste.

VSPT WINE GROUP

With our commitment to create a healthy and resilient ecosystem, we have planted 15,000 native plants along the waterways, and cover crops between the vineyard rows.

YEALANDS WINE GROUP

A TO Z WINEWORKS

Location: **USA** | No. Wineries: **1** | Member since: **2021**

CARBON SEQUESTRATION

With support from New Seasons Market and Zero Foodprint, we began implementing carbon-sequestering practices in our estate vineyards. By applying compost and reducing tilling, we're improving soil health and storing approximately 1.47 tons CO_2e per acre.

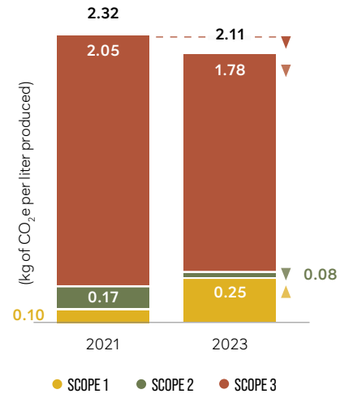
LOGISTICS

We've taken a closer look at our wholesale logistics and made a significant shift – consolidating shipments from Oregon to eliminate roughly 600 transport loads annually. This change is estimated to save approximately 400MTCO_2e, helping us cut emissions while streamlining operations.

PACKAGING

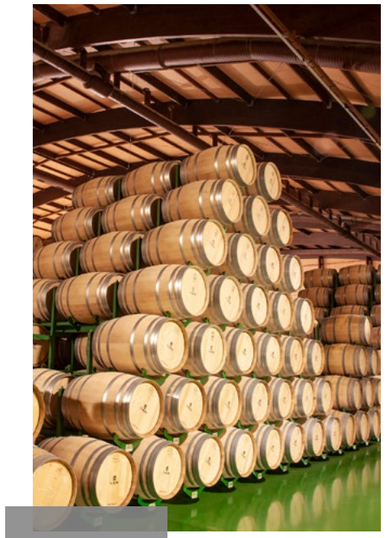
Last year, REX HILL removed foil from bottles to reduce waste. This year, we're encouraged to see that the change has been well received across the board – from direct customers to distributors and end consumers. The absence of commercial resistance reinforces our belief that thoughtful sustainability choices can align with market expectations.

EMISSIONS INTENSITY



BODEGAS LAN

Location: **Spain** | No. Wineries: **1** | Member since: **2025**



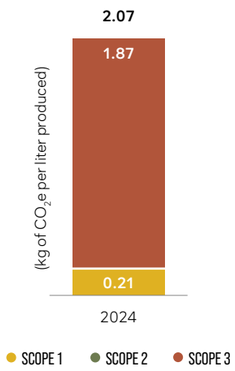
RENEWABLE ENERGY

We have opted for renewable energies through the upcoming implementation of solar panels, as well as improving energy efficiency in our processes, with 100% of electricity coming from renewable sources.

PACKAGING

Lightweight bottles have been implemented across the entire traditional wine range, with the aim of reducing the weight of the goods and the carbon footprint associated with packaging. Work has also been done to optimize packaging materials, achieving a reduction in the use of plastic of approximately 40% in pallet packaging systems.

EMISSIONS INTENSITY



BODEGAS RAMÓN BILBAO

Location: **Spain** | No. Wineries: **1** | Member since: **2023**

RENEWABLE ENERGY

Since 2022-23, we have completed our solar panel project in order to self-generate electricity on-site. We have generated more than 94mWh during this period.

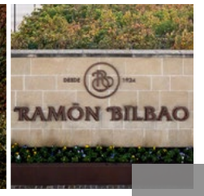
PACKAGING

Over the 2022-25 period, we have achieved a 6% reduction in bottle weight for our major brands.

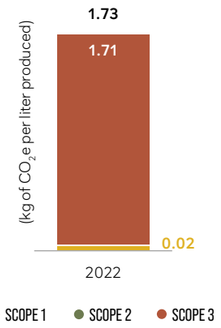
GENERAL

We have initiated self-generation of nitrogen (N_2).





EMISSIONS INTENSITY



CAKEBREAD CELLARS

Location: **USA** | No. Wineries: **1** | Member since: **2021**

VINEYARD MANAGEMENT

We are boosting soil health in our vineyards by incorporating in-house made compost. Over 375 tons of compost was applied in the fall of 2024 and spring of 2025 to boost soil health and improve nutrient uptake. We also applied over 250 gallons of compost tea made in-house. Our vineyards remain free of herbicides as we control weeds with mechanical implements and a no-till approach to our farming has been implemented, avoiding soil disruption, supporting the development of robust soil microbiomes and healthier root structures. Sheep have also been added to the team as we began a rotational grazing scheme in a large portion of our vineyards last year.

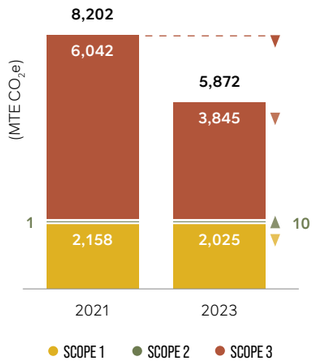
WASTE REDUCTION

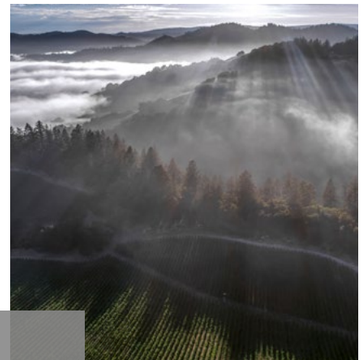
By eliminating printed Wine Club sign-up forms, receipt paper, and packing slips through the implementation of a lean storefront system, we are saving approximately 4,000 sheets of paper annually.

PACKAGING

We have removed capsules from our Rosé and White Pinot Noir offerings. This change reduces packaging waste and enhances recyclability.

ABSOLUTE GHG EMISSIONS

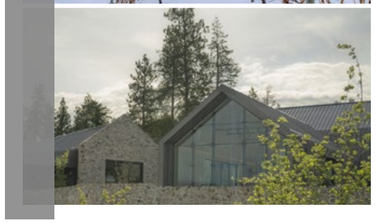




CEDARCREEK ESTATE WINERY

Location: **Canada** | No. Wineries: **1** | Member since: **2023**





WATER MANAGEMENT

Implemented advanced metering infrastructure and a formal wastewater testing policy to replace estimated volumes with direct measurement. This enables real-time tracking of system performance and accurate accounting of treated wastewater.

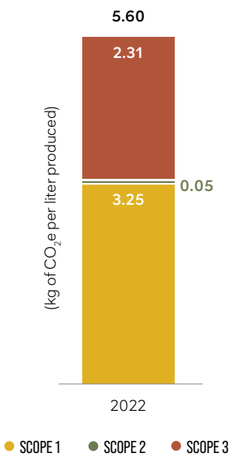
ENERGY EFFICIENCY

Deployed advanced sub-metering to isolate high-energy processes within winemaking operations. Insights from this initiative led to key equipment repairs and process optimizations.

GENERAL

Developing an Environmental Management System (EMS) to centralize and automate environmental data tracking, including GHG emissions. This platform will provide real-time visibility across teams.

EMISSIONS INTENSITY



CHÂTEAU KSARA

Location: **Lebanon** | No. Wineries: **1** | Member since: **2024**

WATER MANAGEMENT

We installed a tertiary filtration system in September 2024 to address regional water scarcity, enabling recycling during dry months. By September 2025, we had recycled and reused about 3,000m³ of water, and we aim to recycle an additional 1,000m³ by year-end.

RENEWABLE ENERGY

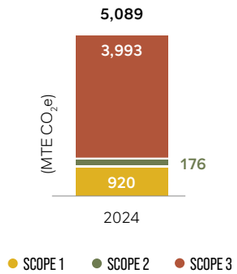
In September 2024, we added 103 solar panels, raising our capacity to 346.93kWp. In 2024, solar covered 51% of our energy needs, and we expect to surpass 57% in 2025.

VINEYARD MANAGEMENT

We are embracing regenerative agriculture by pursuing CCPB organic certification for 14 hectares in Aana, enriching biodiversity through indigenous tree planting, and fostering pollinators with permanent beehives.



ABSOLUTE GHG EMISSIONS



CHÂTEAU TOUR DES TERMES

Location: **France** | No. Wineries: **1** | Member since: **2024**

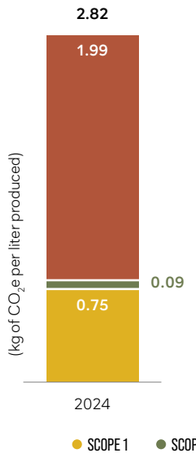
PACKAGING
In 2025, we have launched our new range of wines with recycled bottles.

WINERY OPERATIONS
We have completed the design phase of our new, self-sufficient cellar project, ready for construction to start in 2026.

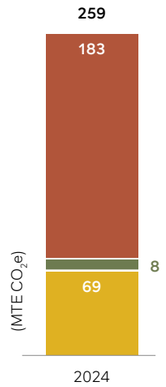
VINEYARD MANAGEMENT
We have implemented an increase of 50% in cover crops on 35 hectares of vineyard.

GENERAL
We have completed all of the IWCA assessment to complete membership and to build an action plan for 2026.

EMISSIONS INTENSITY



ABSOLUTE GHG EMISSIONS



SCOPE 1 SCOPE 2 SCOPE 3

CHÂTEAU TROPLONG MONDOT

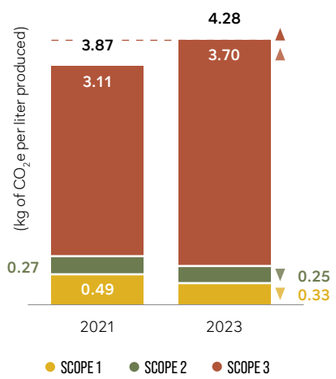
Location: **France** | No. Wineries: **1** | Member since: **2021**

WASTE MANAGEMENT
Vine shoots from our vineyard plots are recycled into firewood, which is then used in our biomass boiler. This heats the buildings and provides domestic hot water. Renewable energy represents more than 30% of our energy mix.

VINEYARD MANAGEMENT
We do not use any chemicals to control insects or weeds. The management of our vineyard, combining animal traction and sexual confusion, allows us to avoid nearly 18 tractor passes. This represents a reduction of almost 7 tons of CO_2 due to the consumption of non-road diesel.

PACKAGING
We replaced the tin capsule with wax on all bottles of Château Troplong Mondot in 2024. This change reduces our carbon footprint by 14 tons.

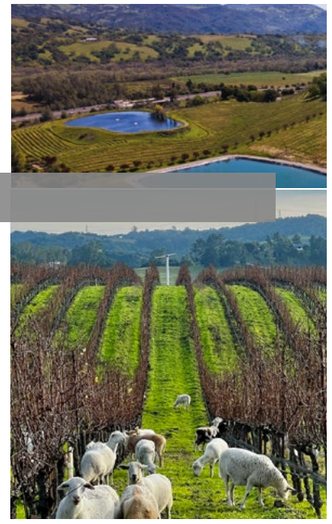
EMISSIONS INTENSITY



SCOPE 1 SCOPE 2 SCOPE 3

CRIMSON WINE GROUP

Location: **USA** | No. Wineries: **6** | Member since: **2021**

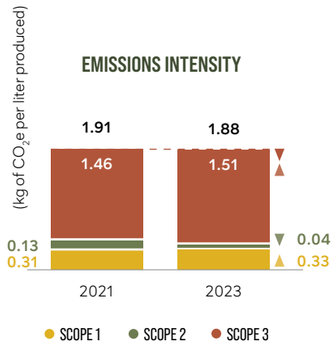


TRANSPORTATION
We have centralized our bottling operations, resulting in reduced transportation-related emissions.

PACKAGING
We have continued to reduce bottle weights, reaching an average weight of 438g per bottle, down from 450g per bottle last year, saving 71 tons of glass. Since 2018, we have reduced glass weight by 24%, and our goal is to reach an average weight of 400g per bottle by 2028.

RENEWABLE ENERGY
Solar panels installed at Pine Ridge Vineyards in Napa Valley, California, now supply up to 35% of energy requirements.

EMISSIONS INTENSITY



SCOPE 1 SCOPE 2 SCOPE 3

DOMAINE BOUSQUET

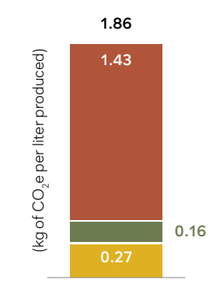
Location: **Argentina** | No. Wineries: **1** | Member since: **2023**

CIRCULAR ECONOMY
We have expanded our regenerative agriculture and circular economy practices by quadrupling our on-site compost production from 200 tons in 2023 to 824 tons in 2024. This program converts our organic waste into valuable compost, which enriches our soil and sequesters carbon.

PACKAGING
Over the past year, we've increased the use of lightweight bottles (420g or less) for our still wines from 74% of production in 2023 to over 94.4% in 2024. This change has successfully lowered the average weight of all our bottles (including sparkling wines) to just 408g. This directly reduces emissions from both the energy-intensive glass manufacturing process and the fuel needed for transportation.

WASTE REDUCTION
We have significantly reduced emissions from our off-site waste streams. By improving our management of waste sent to landfill, materials for recycling and wastewater treatment, we have cut associated emissions by 21.2TCO$_2$e, representing a 28% reduction compared to our 2023 baseline.

EMISSIONS INTENSITY



SCOPE 1 SCOPE 2 SCOPE 3

DOMAINE LAFAGE

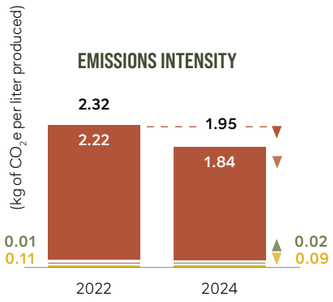
Location: **France** | No. Wineries: **1** | Member since: **2022**

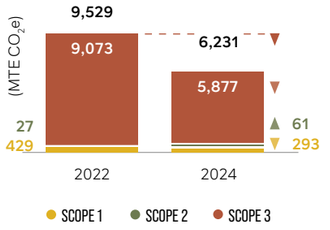
PACKAGING

The main and most significant action undertaken by Domaine Lafage over the past year remains the reduction of bottle weight. In 2025, Domaine Lafage continued to lighten its bottles by switching two additional references to lightweight bottles from 650g to 410g for one, and from 650g to 500g for the other).
This represents 13% of the total bottles produced by the company.

VINEYARD MANAGEMENT

We have been implementing regenerative viticulture as a solution to the extreme drought that has been impacting Roussillon for several years. Soil rest, integration of compost and biochars, plant cover, terraces, eco-grazing... Giving life to our soils and continually adapting to climate change by "cultivating water" allows us to sustain the vineyard and reveal micro-terroirs, giving even more energy and freshness to the wines.





BODEGAS EMINA

Location: **Spain** | No. Wineries: **2** | Member since: **2020**

ENERGY EFFICIENCY

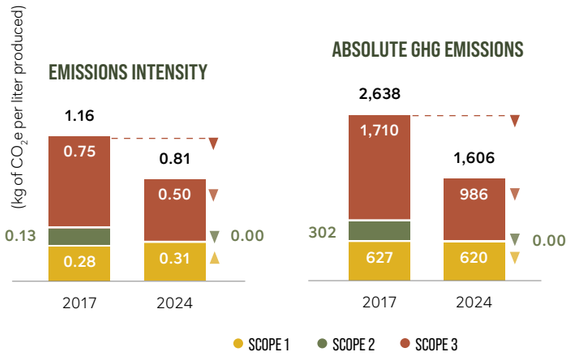
We have already replaced 30% of our vehicle fleet with 100% electric vehicles. This will significantly reduce emissions from the purchase of fuel for company vehicles, which we include in Scope 1 of our carbon footprint calculation. We have also installed charging stations to promote electric mobility.

RENEWABLE ENERGY

We have expanded our photovoltaic solar energy system, installed on the roofs of our wineries. We expect to be self-sufficient for 25-30% of the winery's total electricity consumption.

PACKAGING

For the white wines produced at our Medina del Campo winery, we use sugarcane-based corks with a negative carbon footprint, allowing us to offset some of our carbon emissions. Some of the natural corks we use to seal the red wines produced at our Valbuena de Duero winery contribute to the protection of cork oak forests, thereby promoting biodiversity. The labels we use are made of FSC-certified recycled paper.



FELTON ROAD WINES

Location: **New Zealand** | No. Wineries: **1** | Member since: **2022**

VINEYARD MANAGEMENT

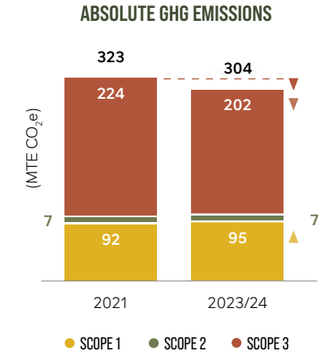
We deployed an electric drone for the application of crop protectants, replacing a diesel-fueled tractor. Used in our steepest blocks, where fuel consumption is most intense, this new technology saved one tonne CO_2e, with the potential to save up to six tonnes as the trial expands.

PACKAGING

Furthering our bottle lightweighting efforts, we adopted a super-lightweight 390g bottle. This change saved 1.5 tonnes CO_2e.

EMISSIONS REDUCTION

By rationalizing business travel, we saved nine tonnes CO_2e in aviation emissions. This was augmented thanks to the adoption of ride-sharing and bicycle use for employee commutes, which saved an additional two tonnes CO_2e.



FROG'S LEAP WINERY

Location: **USA** | No. Wineries: **1** | Member since: **2023**

WASTE REDUCTION

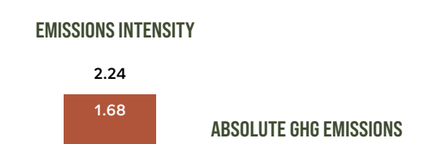
In Fall 2025, Frog's Leap earned TRUE Zero Waste Silver Certification and dramatically stepped up recycling for everything from pallets to PET labelbacks, driving serious reductions in landfill waste throughout operations.

RENEWABLE ENERGY

The winery is set to complete a solar array providing 100% of facility power, enabling 10 EV charging stations and positioning renewables at the center of its energy transition, in line with Race to Zero goals.

VINEYARD MANAGEMENT

No-till field trials now encompass 30 acres, cutting diesel use and direct CO_2 emissions from fewer tractor passes, while increasing on-site carbon storage and improving soil health for longer-term resilience.



HERÈNCIA ALTÉS

Location: **Spain** | No. Wineries: **1** | Member since: **2021**

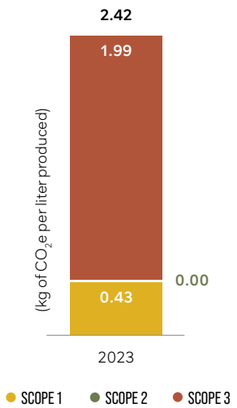
RENEWABLE ENERGY

We have expanded our on-site battery storage from 100kWh to 145kWh – as we operate entirely "off the grid", generating no Scope 2 emissions, we face the challenge of producing all our own electricity. Our primary goal is to store enough solar energy for use during night-time hours, which necessitates expanding battery capacity. This upgrade should significantly reduce reliance on our diesel generator.

VINEYARD MANAGEMENT

Our regenerative soil trials are beginning to yield promising results, demonstrating increased microbiological activity in the vineyard closest to the winery. Cover crop trials in particular have led to a notable rise in both bacterial and fungal populations, enhancing soil biodiversity and health. This enhanced microbial life supports improved soil structure and vine resilience, contributing to the overall sustainability of our vineyard ecosystem.

EMISSIONS INTENSITY



KIR-YIANNI

Location: **Greece** | No. Wineries: **2** | Member since: **2024**

RENEWABLE ENERGY

In 2023, we succeeded in almost tripling our self-generated electricity production thanks to the increase in our on-site rooftop solar panels at both our estates in Naoussa and Amyndeon. Our 2024/25 investment in photovoltaic cells will drive a further offset of our total energy production.

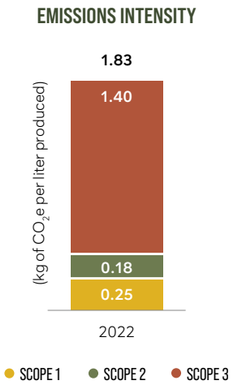
PACKAGING

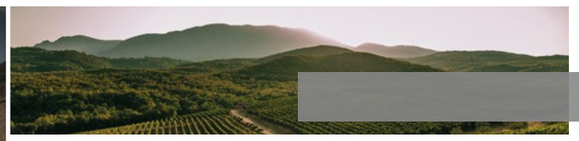
Our commitment to a lighter bottle transition embodying at least 60% recycled glass has resulted in saving 53 tons of glass, equivalent to 17 tons of CO_2.

VINEYARD MANAGEMENT

At the end of 2023, we started working on a pilot endeavor in regenerative viticulture, the first one in Greece. The first 18-month phase is to focus on soil health in two vineyard parcels of 0.1 hectares: a Xinomavro block in our vineyard in Naoussa and a Gewürztraminer block in Amyndeon.

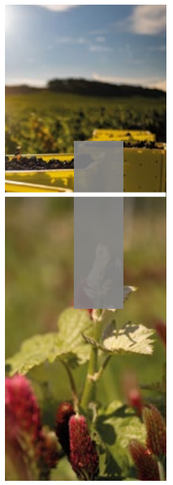
EMISSIONS INTENSITY





PIPER-HEIDSIECK, CHARLES HEIDSIECK & RARE CHAMPAGNE

Location: **France** | No. Wineries: **1** | Member since: **2022**



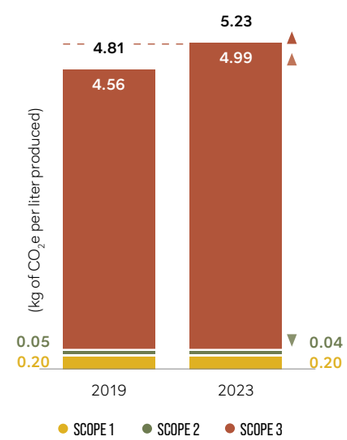
GENERAL

We completed a comprehensive energy restructuring of our site in 2024, modernizing our facilities while significantly reducing our environmental impact. Our former cooling systems, which used high global warming potential (GWP) refrigerants, were replaced with equipment operating with zero-GWP refrigerants.

This allowed us to eliminate emissions related to refrigerant leaks, which represented 390 tonnes of CO_2e in 2023, and to anticipate upcoming regulations on HFCs by adopting a long-term, sustainable solution. Thanks to optimized cooling equipment and improved overall energy performance, we achieved a reduction of over 35% in electricity consumption in 2024 compared to 2019.

The installation also enables us to recover waste heat generated by the cooling systems. This recovered energy is now used to heat our facilities, helping to drastically reduce our reliance on natural gas boilers, a fossil fuel source.

EMISSIONS INTENSITY



RIDGE VINEYARDS

Location: **USA** | No. Wineries: **2** | Member since: **2021**

PACKAGING

Ridge has converted entirely to lighter bottles weighing 465g, a reduction of almost 20%. We are also now sourcing our bottles locally from within California.

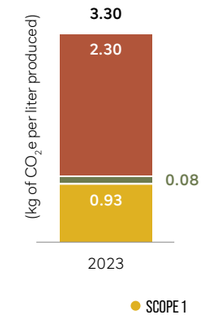
RENEWABLE ENERGY

In 2024, all purchased electricity at Ridge facilities was zero-carbon and renewable, and our 2026 audit (from 2025 data) is expected to show zero Scope 2 emissions.

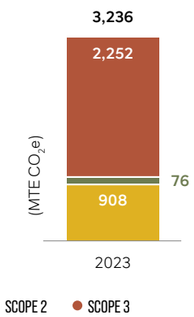
GENERAL

We're proud to introduce Ridge's first Sustainability Report, showcasing our dedication to zero carbon emissions and environmental stewardship, responsible winemaking and the well-being of our employees and communities.

EMISSIONS INTENSITY



ABSOLUTE GHG EMISSIONS



SCOPE 1 SCOPE 2 SCOPE 3

SILVER OAK CELLARS

Location: **USA** | No. Wineries: **7** | Member since: **2020**

RENEWABLE ENERGY

We have installed 31 solar panels across two vineyard sites, reducing grid use by 75% at one site and by nearly 50% at the other.

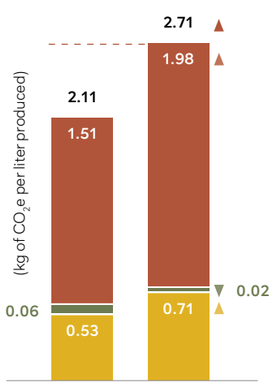
PACKAGING

We were able to source most of our glass locally, leading to a 29% decrease in glass bottle emissions from the prior year.

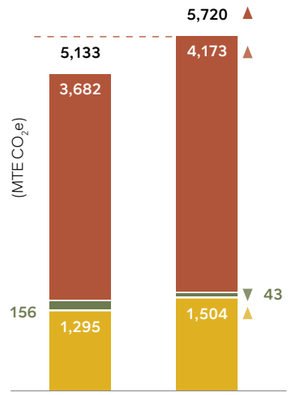
EMISSIONS REDUCTION

By purchasing more green power, we reduced our Scope 2 emissions by 8MTCO$_2$e from 2022 to 2024.

EMISSIONS INTENSITY



ABSOLUTE GHG EMISSIONS



SOGRAPE

Location: **Portugal** | No. Wineries: **25** | Member since: **2022**

TRANSPORTATION

We made a commitment to electrify our fleet. Increasing the ratio of hybrid and electric vehicles (20% in 2023 and 26% in 2024) allowed us to cut our mobile combustion emissions by 3.8%.

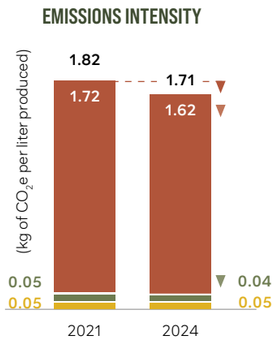
REFRIGERANT EMISSIONS

Energy-efficient refrigeration equipment has cut HFC leaks and emissions. Continuous monitoring and equipment upgrades are integral in lowering Scope 1 GHG emissions, reinforcing efforts to meet a 50% reduction target by 2027.

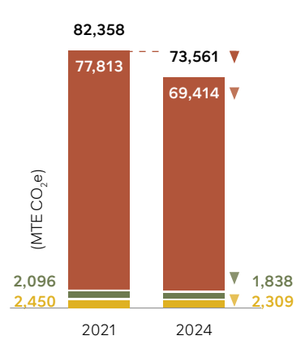
OPERATIONAL EFFICIENCY

Solar energy use is expanding across sites in Portugal, Spain, Chile and the UK, avoiding over 880 tons of CO_2 emissions. LED lighting, energy audits and monthly consumption tracking help optimize energy use.

EMISSIONS INTENSITY

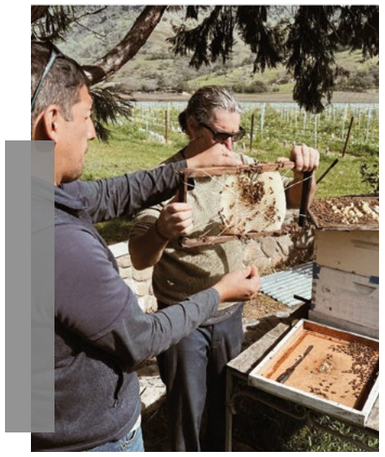


ABSOLUTE GHG EMISSIONS



STE. MICHELLE WINE ESTATES

Location: **USA** | No. Wineries: **5** | Member since: **2023**



VINEYARD MANAGEMENT

All 2,400 acres of our estate vineyards are farmed and certified as sustainable.

WATER MANAGEMENT

We have streamlined our production process, resulting in 6m gallons of water saved at our wineries in Washington state.

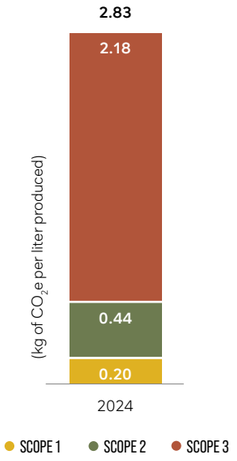
RECYCLING

We have improved our recycling practices on-site and for our on-site concert series.

ENERGY EFFICIENCY

We have installed EV charging hook-ups at select wineries for both winery staff and guests to use.

EMISSIONS INTENSITY



TIKVEŠ

Location: **North Macedonia** | No. Wineries: **1** | Member since: **2023**

RENEWABLE ENERGY

In 2024, we had a total installed capacity for renewable energy from the photovoltaic plant of 2.2mWp. Our plans for 2025 include installing an additional 0.3mWp, and our ultimate strategic goal is to achieve a capacity of 100% energy from clean sources.

LOGISTICS

Strategic planning and eco-friendly transportation methods are prioritized with the purpose of optimizing delivery routes, reducing fuel consumption and minimizing CO_2 emissions.

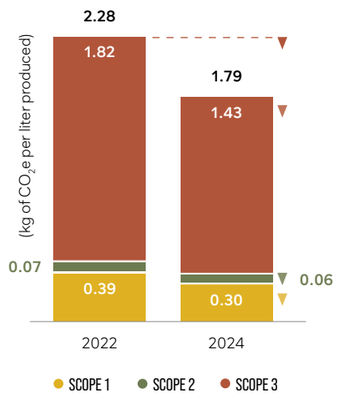
PACKAGING

By adopting lighter bottles, recycled materials and packaging innovation, Tikveš continues to lead in sustainable wine packaging, aligning its environmental goals with the highest regulatory standards.

VINEYARD MANAGEMENT

The 4Grapes software application plays a key role in improving vineyard quality, early disease detection, assessing climate change-related events and enabling swift responses. We share all these insights with our partners – the grape growers and other interested companies.

EMISSIONS INTENSITY



VOYAGER ESTATE

Location: **Australia** | No. Wineries: **1** | Member since: **2021**

► VINEYARD MANAGEMENT

Following a successful trial in early 2025, we recently replaced our tillage-based under-vine weeder with a trimmer-line weeder to avoid tillage. This will further diminish tractor passes by reduced mowing in the mid-row.

► FOOD MILES

In 2024, the Voyager Team expanded our farm-to-table sourcing for the Restaurant with custom growing at our nearby farm, complementing our local sourcing for the menu.

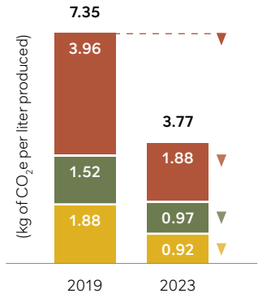
► EMISSIONS REDUCTION

We created an incentive-based employee car-pooling initiative, and in the last 12 months nearly 800 sessions have been logged by employees car-pooling, cycling or catching public transport to work. This is conservatively estimated to save close to nine tonnes CO_2e per year.

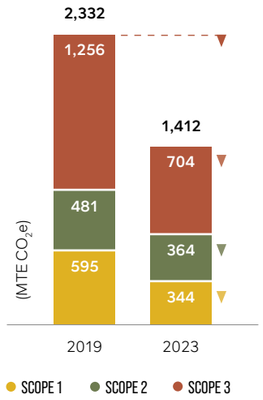
► RENEWABLE ENERGY

In 2024, Voyager expanded solar capacity in the vineyard and in the 2025 financial year 22% of our electricity was sourced from on-site solar, saving a net total of 80 tonnes CO_2e compared to grid electricity.

EMISSIONS INTENSITY



ABSOLUTE GHG EMISSIONS



NOTES ON INVENTORY DATA

According to Race to Zero requirements, members may choose whether to report absolute emissions or emissions intensity, although all members hold to the Race to Zero commitment to achieve absolute Net Zero carbon emissions by 2050 at the latest.

The emissions data presented here are drawn from members' GHG emissions inventories, which must follow the IWCA GHG Inventory Scopes Guidance Document.

Among other IWCA requirements, the inventory must be verified by an external auditing firm of the winery's choosing that has been ISO-14064- or CDP-accredited. We share here the most recent year of audited data provided by members to IWCA, along with their baseline year data.
For many, their first year of data is their first year as an IWCA member; for other wineries that had previously conducted inventories, they have an earlier baseline year.

According to IWCA's policy, emissions reduction targets must be met based on a winery's own efforts to decarbonize, rather than through any purchased offsets. We do, however, encourage sequestration strategies carried out directly by members (such as reforestation on owned or long-term leased land). We invite member wineries to submit biogenic emissions data, but due to the lack of definitive research and scientific consensus on vineyard sequestration (eg short-cycle emissions from vineyard photosynthesis or from wine fermentation), we do not presently count sequestration efforts towards meeting IWCA requirements.

As part of the aim to be the industry-leading organization on climate action, we have taken steps to ensure rigor and consistency in our wineries' GHG inventory and audit processes, and greater transparency in emissions reporting, while simultaneously working to protect the security of our wineries' data. Implementing these new procedures has involved transitioning some of our existing members to a new inventory and audit process. For these wineries, we have worked to ensure alignment with the new procedures.

RACE TO ZERO

APPLICANT MEMBERS

The newest members of the IWCA community – our Applicant Members are working to complete a baseline, audited GHG emissions inventory on their path to achieving IWCA Silver or Gold membership.

BODEGA SOMMOS

Location: **Spain**

"We have installed 896 solar panels in the past two years, at 460W each, so the total extension is 1,800sq m and the reduction of our annual energy consumption is around 30%. We have reduced the weight of our bottles, **saving 48 tons of glass** and one ton of paper. We have changed our air conditioning/heating system, including compressors, to be more efficient, **saving up to 22% of energy every year."**

BÖTZINGER

Location: **Germany**

"Last year **we installed 120 new photovoltaic panels** with a size of 440sq m and a capacity of 96kWp each. In the first year, **we have saved 148.161kW/h – nearly a quarter of our total energy consumption.** By changing from regular diesel fuel to rapeseed oil for **our tractors we are almost down to zero emissions."**

ESPORÃO

Location: **Portugal**

"In 2024, we **adjusted Esporão Colheita's wine labels and packaging to reduce our environmental impact.** The new label design celebrates nature by featuring plant and animal species that inhabit Herdade do Esporão. By **removing capsules from the bottles, we saved 5 tons of aluminium,** corresponding to a **reduction of 2,300kg in CO_2 emissions.** We also eliminated varnishes and metallic finishes on the labels."

MULLINEUX & LEEU FAMILY WINES

Location: **South Africa**

"Our sustainability highlights for 2025 are that **we have proudly received our organic farming certification for Roundstone, both EU and NOP**. We also successfully completed our first Fair for Life, Fairtrade audit. These two certifications enabled us to **complete our first Regenerative Organic Certification** (ROC) audit on 20 August, on our Roundstone farm."

NELEMAN

Location: **Spain**

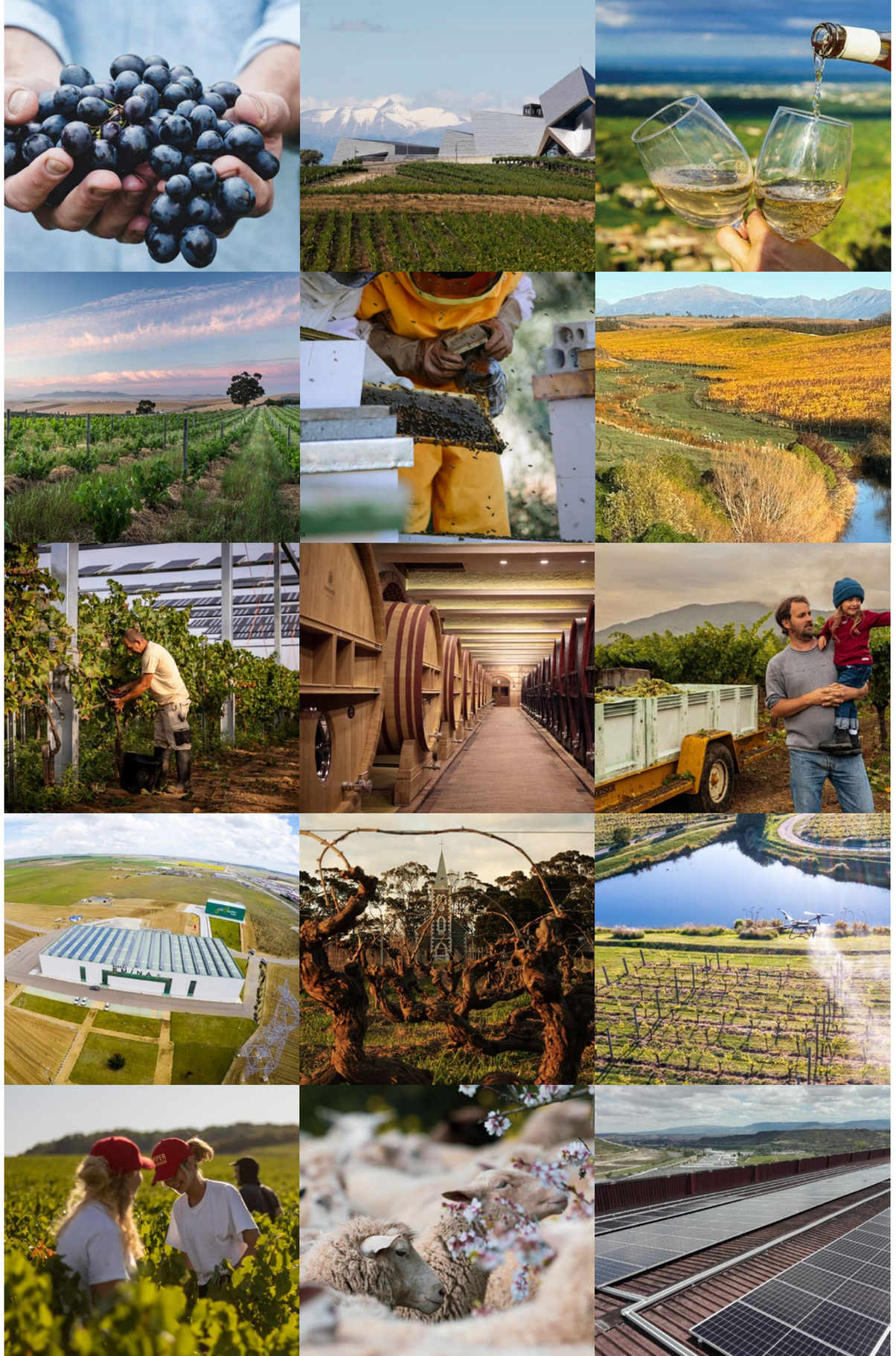
"We have started **switching to a lighter bottle across our core wine range, moving from a 395g bottle to a 360g one.** We have also made changes in our logistics processes to minimize emissions related to transportation. By increasing the number of full truckloads and reducing small or partial shipments, **we are lowering the fuel consumption per bottle delivered."**

QUINTA NOVA

Location: **Portugal**

"Quinta Nova de Nossa Senhora do Carmo has implemented several initiatives to reduce emissions and enhance sustainability. **This year, we installed 112 solar panels at our winery facilities, expected to generate around 20% of our total energy needs. Last year, we implemented six humidity control sensors and a weather monitoring station.** These technologies provide real-time data, enabling us to adjust irrigation schedules dynamically, reduce water waste and optimize energy use across the vineyard."

Images right, courtesy: Château Ksara, CVNE, Bodegas Emina, Familia Torres, Felton Road Wines, Frog's Leap Winery, Henschke, Mullineux & Leeuw Family Wines, Opus One Winery, Piper-Heidsieck, Bodega Sommos, Tikveš, Yealands Wine Group



HOW TO BECOME

AN IWCA WINERY MEMBER

Interested in joining IWCA's quest to create a zero-carbon wine industry? Here's the process summarized in five steps...

GET IN TOUCH

1

Contact IWCA and express your interest in joining.

We will send you the IWCA Standing Rules and Non-Disclosure Agreement to review. We will also ask you to supply the necessary documentation to prove that you meet the IWCA entry requirements.

These are the minimum requirements to join as an Applicant Member. You should:

- **Be involved in the production process, from grape-growing to bottling**

AND...

- **Have completed a baseline GHG emissions inventory (inclusive of at least Scopes 1 and 2) and/or a verifiable plan to complete a baseline Scopes 1-2-3 inventory**

AND...

- **Provide IWCA with a written commitment to complete and third-party audit a baseline Scopes 1-2-3 inventory within one year.**

SIGNATURE AND APPROVAL

2

We will help you set up a scoping meeting with the IWCA Executive Director and/or an IWCA Founding Board Member. This is an opportunity for you to ask questions and for us to learn more about your winery's climate action journey.

- **YOU SIGN BOTH THE IWCA STANDING RULES AND NON-DISCLOSURE AGREEMENT**
- **IWCA INVENTORY REVIEW COMMITTEE APPROVES YOUR CANDIDATURE**
- **WE SEND YOU THE COUNTERSIGNED DOCUMENTATION**
- **WE COORDINATE ON A PUBLIC ANNOUNCEMENT OF YOUR WINERY JOINING THE IWCA FAMILY**

MEASURE YOUR GHG FOOTPRINT

3

Within one year of joining IWCA, wineries must complete and audit a baseline Scopes 1-2-3 GHG emissions inventory.

- **REQUIRED COMPONENTS**
  Your winery's GHG inventory must follow IWCA's GHG Emissions Inventory Guidance Document.
- **EXTERNAL HELP**
  You may need to ask for help with compiling your inventory. We can provide a list of GHG consultants familiar with IWCA, if that would be helpful.
- **IWCA TOOLS**
  Wineries in Australia, New Zealand, the USA and South America can make use of IWCA's free GHG emissions calculators.

AUDIT YOUR GHG INVENTORY

4

Contact your preferred audit firm (which must be ISO-14064-3- or CDP-accredited or certified) and engage them to verify your inventory.

You may consult our (non-exhaustive) list of accredited auditors.

- **IMPORTANT ITEMS TO KEEP IN MIND:**

If your preferred audit firm is not included in our list of accredited auditors, verify that the firm has demonstrable experience with ISO-14064-3 in the management of CDP's Greenhouse Gas Emissions Inventory services.

Send your auditor the Process for Audit Companies to Evaluate IWCA Membership Requirements document. This document outlines the paperwork your auditor must complete for you to achieve IWCA Member status.

- **WHEN FINALIZING YOUR AUDIT SERVICE CONTRACT:**
  Confirm that your auditor will verify your GHG emissions inventory to the ISO-14064-1 standard, consistent with the WRI GHG Protocol

  Confirm that your auditor understands and agrees to complete the required IWCA paperwork, as outlined in the Process document

  Ask your auditor to contact IWCA so that we can send them the most up-to-date IWCA paperwork to complete

APPROVAL FROM IWCA

Once your audit is complete, your auditor submits to IWCA the required audit paperwork. You and your auditor should proactively contact IWCA if there are any questions, delays or concerns as the audit gets under way.

- **IWCA will review and audit paperwork for completeness. We will contact you and your auditor to resolve any issues.**
- **If all requirements are met, the Board will approve your upgrade to IWCA Member status (Silver or Gold, as relevant).**

FRIENDS OF IWCA

IWCA supporters and friends include a number of international partners, and we are working hard to engage further with retailers, press and service industries to work collaboratively to advocate for GHG emission reduction in the wine sector.

NORTH STAR CARBON MANAGEMENT

We are delighted to be working with North Star Carbon Management to promote the effective management and advocacy of carbon accounting in the wine sector.

North Star Carbon's team are purpose-driven carbon management experts and corporate leaders, forging innovative cloud-based solutions to streamline and simplify enterprise carbon accounting, management and reporting.

View website →

the PORTO PROTOCOL

IWCA and The Porto Protocol are proud to continue their strategic partnership to advance the wine industry's efforts to mitigate climate change and promote sustainability. This collaboration, established in 2024, represents a significant step in bringing the wine sector together around shared goals of decarbonization and sustainable practices.

By collaborating, IWCA and the Porto Protocol are committed to leveraging their collective expertise and resources to drive decarbonization and meaningful action against climate change across the wine sector.

View website →

Association Viticultura Regenerativa

IWCA continues its collaboration with the Association of Regenerative Viticulture (ARV), which began in 2023. The ARV brings about a paradigm shift in the way vineyards are managed around the globe.

At the core of this shift is the carbon cycle and how it can be used to regenerate soils, prevent erosion, encourage biodiversity and combat climate change.

View website →

THE REGENERATIVE VITICULTURE FOUNDATION

The RVF works to inspire the transition towards regenerative viticulture through science, communication and support for growers. It brings together practitioners, researchers and leaders in regenerative agriculture and viticulture, working with experts in the fields of science, farming and communications to scientifically prove and practically demonstrate or document the environmental, qualitative and economic benefits of biodiversity in viticulture.

View website →

Sustainable Wine Roundtable

The Sustainable Wine Roundtable (SWR) is an independent global platform dedicated to advancing sustainability in the wine industry.

Our initiatives, such as the Bottle Weight Accord and the Global Reference Framework, drive real progress and innovation with measurable impacts.

View website →

INTERNATIONAL WINERIES FOR CLIMATE ACTION

BECOME A MEMBER AND JOIN US

IN THE RACE TO ZERO

IWCA is a collaborative working group of environmentally committed wineries taking a science-based approach to reducing carbon emissions across the wine industry. Our goal is to share best practices that mitigate climate change impacts in vineyard and winery operations so that we can act collectively to decarbonize the global wine industry – applying direct solutions that avoid purchasing carbon offset credits.

GLOBAL LEADERSHIP

We raise awareness in the viticulture community of the urgent need to take climate action

TOOLS & EXPERTISE

We have developed rigorous carbon accounting methodologies for the wine sector

KNOWLEDGE EXCHANGE

We share strategies and best practices to help wineries reduce their GHG emissions

Get in touch →

INTERNATIONAL
WINERIES FOR
CLIMATE ACTION

Collective action is the only way
to transform the wine sector.

We're doing it for the future of our
businesses, our industry and our planet.

Will you join us?

iwcawine.org