



TREASURY WINE ESTATES

4 October 2024

ASX ANNOUNCEMENT

2024 Sustainability Report

Treasury Wine Estates Ltd (ASX:TWE) is pleased to present its Sustainability Report for the year ended 30 June 2024.

For the purposes of ASX Listing Rule 15.5, TWE confirms that this document has been authorised for release to the market by the Board.

Contacts:

Media

Ellie Hewitt

Tel: +61 3 8533 3493

Mob: +61 429 678 771

Investors

Bijan Taghian

Tel: +61 3 8533 3568

Mob: +61 433 173 664





Vineyard in Marlborough, New Zealand.

Important information

This report is in summary form and is not necessarily complete. It should be read together with the Company's other announcements lodged with the Australian Securities Exchange, including the 2024 Annual Report, which are available at www.asx.com.au.

This report contains information that is based on projected and/or estimated expectations, assumptions, or outcomes. Forward-looking statements are subject to a range of risk factors. The Company cautions against reliance on any forward-looking statements, particularly in light of the constantly evolving policy environment across our operating markets, shifting consumer preferences and priorities, uncertainty as to the rate of development and adoption of related technology, the outcomes of future innovation, and the inability to accurately predict the future climate and its impacts on our operations as well as stakeholder responses.

While the Company has prepared this information based on its current knowledge and understanding and in good faith, there are risks and uncertainties which could cause results to differ from projections. The Company will not be liable for the correctness and/or accuracy of the information, nor any differences between the information

provided and actual outcomes, and reserves the right to change its projections from time to time. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date of this report, subject to disclosure obligations under the applicable law and ASX listing rules.

This report is unaudited, however independent assurance has been obtained in relation to a limited set of performance metrics and disclosures. Refer to the 'About this report' section for further details. Information in the report is current as at 30 June 2024 unless otherwise stated. References to 'TWE', 'Company', 'we', 'us' and 'our' are to Treasury Wine Estates Limited and/or, except where the context otherwise requires, its subsidiaries. All currency referred to in the Report is in Australian dollars, unless otherwise stated.

Contents

About Treasury Wine Estates	
Message from the Chairman and CEO	6
F24 sustainability highlights	8
Our approach to sustainability	10
Our material topics and commitments	13
Our value chain	16
Stakeholder engagement	17
Corporate governance	19
Risk management	23
Tax transparency	24
Managing human rights	26
About this report	28
Key non-financial performance indicators	30
 Building a resilient business	
Water stewardship	34
Climate risk and GHG emissions	38
 Fostering healthy and inclusive communities	
Health, safety and wellbeing	50
Inclusion, equity and diversity	54
Consumer health and responsible drinking	57
Product quality and food safety	60
Community	61
 Producing sustainable wine	
Sustainable growing and production	66
Research and development	73
Pesticide use and management	74
Responsible supply chain	76
Sustainable packaging and circular economy	78
Waste management	81
 Appendix	
Preparing for mandatory climate reporting	83
Our F25 commitments	85

About Treasury Wine Estates

70+
Countries



Consumers in more than 70 countries enjoy our iconic wines, available in major retailers, premium wine outlets, restaurants, bars, and online channels.

2,600
Team members



Our world class team has a presence across Australia, New Zealand, Asia, the Americas, the United Kingdom, Europe, the Middle East, and Africa.

3
Brand portfolio divisions



Penfolds, Treasury Premium Brands, and Treasury Americas are supported by centralised business services, supply, and corporate functions.

10,000
Hectares



Our global multi-regional sourcing model is at the heart of our business. It includes vineyards and production assets in some of the world's best wine regions.

Message from the Chairman and CEO

Cultivating a brighter future

We are proud to present our 2024 Sustainability Report, outlining the progress we’ve made in delivering our strategy and commitments.



John Mullen, Chairman.



Tim Ford, Chief Executive Officer.

Since we launched our enhanced sustainability strategy three years ago, it’s been particularly pleasing to see sustainability become ingrained in the way we do business. Our teams across the globe are embracing initiatives that mitigate the impact we have on the natural environment and make a positive contribution to the communities we operate in. They’re working to adapt our operations so our business continues to thrive, creating long-term value for our stakeholders and shareholders.

A cornerstone of our approach is engagement and collaboration. This year, we’ve continued to work with industry partners and associations, the government, our grower network, and the regional communities we operate in to share our insights and amplify the impact of our sustainability initiatives. In this decade – one where action to address the impact of a changing climate is critical – we acknowledge that true progress will continue to depend on the private and public sectors collaborating to protect our planet and people.

Our sustainability aspiration is to boldly cultivate a brighter future for everyone who touches our business and our products. In another demonstration of sustainability’s pivotal role across our business and its integration into our financial framework, our Sustainability Linked Loan continues to reward performance against agreed milestones.

With an over-arching goal to reach net zero (scope 1 and 2) by 2030, we’re on track to being powered 100% by renewable electricity by the end of the 2024 calendar year.

A large portion of our progress is from our planned multi-year, A\$29 million investment in onsite solar generation, with 80% of our electricity usage now coming from renewable sources. Switching to renewables alongside a range of energy efficiency measures have helped reduce our greenhouse gas emissions by 66% since F21 (scope 1 and 2). We’re very proud of this result and continue to share our insights and lessons with industry and peers to support efforts to decarbonise globally.

Complementing the rollout of our solar systems, detailed analysis from our climate risk assessments across our Australian and US sites have already resulted in a number of pilots, initiatives and trials to adapt to changes in growing conditions. Our iconic Koonunga Hill vineyard in South Australia’s Barossa Valley is home to one of our climate adaptation responses, with an enclosed vineyard canopy protecting the 14-hectare planting of luxury grapes. This adaptation of our viticulture practices to suit changing environmental conditions is designed to mitigate the predicted temperature increases and extreme weather events that are expected to create drier conditions in the Barossa Valley by the middle of this century.

We’ve made a concerted effort to bolster sustainability certification in recent years, with 99.2% of our owned and leased vineyards now holding regionally-relevant certification. The benefits of certification are two-fold: sustainable agricultural practices have a positive impact on biodiversity and soil health, and standardised certification increases traceability and transparency for consumers, informing their purchase decisions.

Certification levels of grower fruit and bulk wine purchases remain well above 90% in our main countries of origin: Australia and the US. Increasing certification levels across our growers and bulk wine sources remains a priority.

Since the release of our inaugural global water strategy in 2023, *Treasuring Water*, we’ve continued to focus on being responsible stewards for one of the most critical inputs to our vineyards and wineries. As well as making our growing regions warmer and drier in general, the changing climate also creates more variability within seasons, impacting operations in our vineyards. This year’s response has involved dedicated investment in improving our data by installing smart water meters, together with a series of projects to reduce water loss by lining and covering a selection of dams in high risk catchments. These investments help ensure we treasure every drop.

We’ve also made progress in the social aspects of our sustainability agenda. The safety of our people remains a key priority. The continuation of our global safety campaign, *Build safe together*, underpinned by a range of safety programs and more safety-related conversations between leaders and their teams, has led to fewer serious safety incidents and lost-time injuries. We remain determined to reach destination zero harm.

In the first full year since the release of our *Alcohol and Health Policy*, we launched our in-house R&D facility for experimentation in small batch no-alcohol and

low-alcohol products in the Barossa Valley. It allows our winemaking and innovation teams to conduct small-scale trials for wines that respond to the growing consumer demand in this segment, where we already have a wide range of no and low alcohol products across brands including Pepperjack, Wolf Blass, Squealing Pig, Lindeman’s and Matua. We’re rolling out dedicated health warnings and energy labelling on our products, increasing transparency and providing consumers with detailed information to make more informed choices about responsible consumption.

The hard work in establishing our ambitious sustainability agenda in recent years is making an impact, thanks to the enthusiasm of our people. In our interactions with our global teams and external stakeholders through the year, we’ve been particularly impressed by their interest in our progress in sustainability and willingness to contribute practical ideas to create meaningful impact in their local communities and build the resilience of our operations.

As the climate in many of our key growing regions continues to change, it’s a timely reminder that we remain an agricultural business at our core, and planning for a range of scenarios while minimising our impact on the environment is critical to ensuring our future commercial success as a global wine producer.

There remains much work to be done, and we remain steadfast in our commitment to keep delivering and boldly cultivating a brighter future in the years to come.

John Mullen
Chairman

Tim Ford
Chief Executive Officer

Sustainability highlights

↑ 100% ↑ 47.2% ↑ 94%

of primary risk assessments were completed for all of our contracted spend within our supply chain

women in senior leadership, an increase of 2.7ppt

of sites operating in high risk catchments have smart water meters installed, with a number of water preservation projects underway

↑ 12.8% ↓ 39% + 99.2%

increase in EBITs (earnings before interest, tax, material items and SGARA) to \$658.1 million

reduction in the 3-year rolling Serious Safety Incident Frequency Rate as a result of the ongoing focus and continued success of our Build Safe campaign

of sustainability certifications maintained across our owned and leased winery and vineyard sites globally, with more than 16 million litres of wine sustainably certified in Australia in F24

↓ 66% + 24 ↑ 80%

reduction in our greenhouse gas emissions (scope 1 and 2) since F21

solar projects across our global footprint were switched on over F24

of our usage over F24 was from certified renewable electricity sources

Our approach to sustainability

In the face of a changing world and challenging market conditions, we have continued to make good progress on our sustainability agenda. We continue to build a more resilient business, produce sustainable wine, and prioritise the wellbeing of our people, communities, and consumers to support our ambition of cultivating a brighter future.

Over F24, we continued to advance a range of initiatives across our operational footprint and made progress against our public commitments. We've embedded sustainability across our business operations to ensure future resilience, prosperity, and growth. Our strategy is grounded in the goal of producing sustainable wine and prioritising the wellbeing of our people, communities, and consumers.

Our overall approach remains consistent with previous years – sustainability is embedded in our Ambition and Game Plan, and is driven by our DNA. We're committed to innovation, meaningful partnerships, positive change, and taking a leadership role in sustainability across the wine and beverages sectors. Our progress and outcomes reflect the collective effort of our global team, partners, and the broader industry.

Our sustainability strategy reflects the areas where we can make the greatest impact. We have aligned our efforts with the United Nations Sustainable Development Goals (UN SDGs), and our work responds to global issues across a range of sustainability themes. Our eight material topics are captured in three focus areas, described on the next page.

While we've made solid progress, there is much to be done in value creation and innovation to build a resilient business over the long-term. We acknowledge the need to effectively manage risks and seize emerging opportunities, particularly as the climate and global operating environment change. As part of the wine industry and agricultural sector, we must play a part in cultivating a positive future for everyone who is connected to our business – from grape to glass – and continue to drive positive outcomes across the natural environment and society. We're committed to improving our data and transparency and continuing to cement our position of industry leadership, evident in our continued investment and ongoing evolution of our sustainability strategy.

Sustainability governance

A range of governance measures support the delivery of our sustainability strategy. Progress against strategic roadmaps for each of our public commitments, alongside key enablers such as communications, reporting, and data, was reported monthly to our executive sponsor, with regular reporting to the Executive Leadership Team (ELT). We have also established a range of internal steering committees across material areas, such as mandatory ESG reporting. The Wine Operations and Sustainability Committee (WOSC), a sub-committee of the Board, provides expert consideration and advice on a range of issues, including, sustainability. It also has oversight of the Company's sustainability report. For further details of our corporate governance practices, refer to page 19.



Our sustainability agenda has three focus areas:

Building a resilient business:
we want to ensure our business is resilient in the face of increasing uncertainty, complexity, and change.

Fostering healthy and inclusive communities:
we want to foster safe, sociable, and connected communities where our brands are promoted, and our wine is consumed safely and responsibly.

Producing sustainable wine:
we want every consumer to experience wine that is sustainably grown, made, and packaged.



Beringer Vineyard, Napa Valley.



Our material topics and commitments

Materiality is a stakeholder-led process that identifies the environmental, social and governance (ESG) issues and associated risks, opportunities, and impacts for an organisation.

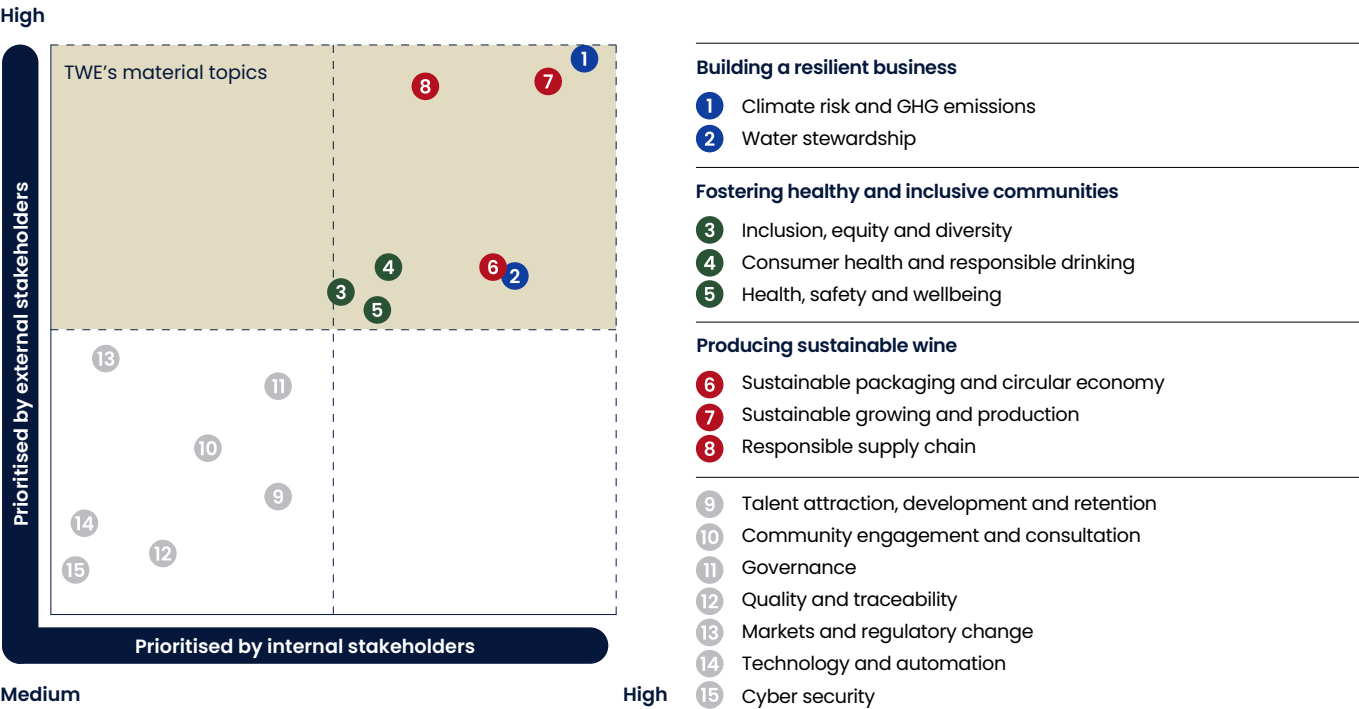
Last year, we updated our materiality assessment to reflect emerging issues, megatrends and various changes that occurred within TWE's operating environment. The assessment included a range of areas such as the global action to protect nature, the elevated need for transparency in reporting and disclosures, the deteriorating global economic conditions (notably inflation and cost of living pressures), an attitudinal shift towards alcohol, and changing labour markets and global supply chain disruption.

Desktop information, reporting guidelines and stakeholder feedback have been used to define our material sustainability topics. Our approach has been guided by the Global Reporting Initiative (GRI) Standard and the AA1000 Accountability Principles, with reference to the Taskforce on Climate-related Financial Disclosure (TCFD), Sustainability Accounting and Standards Board (SASB), the International Sustainability Standards Board (ISSB), and the Australian Accounting Standards Board (AASB). The assessment process involved a desktop review of key documents such as consumer research, investor insights, global megatrends, industry analysis

and sustainability reporting practices, in addition to broader stakeholder engagement (such as TWE's ELT, investors, industry representatives and customers). The issues and topics have been prioritised by considering the actual or potential positive or negative impact on TWE's business performance and external stakeholders, including society and the environment.

There are eight high-priority and seven medium-priority topics which are detailed on the materiality matrix below. The high-priority topics are reflected in our sustainability strategy as the most material topics. Further information on each of these topics, their relevance, and our performance is referenced throughout this report.

F24 materiality matrix



Our material topics and commitments

F24 commitments
To hold ourselves accountable and ensure we focus our efforts on where we can make the most impact, we have set a range of commitments aligned to each of our material topics. These commitments are also aligned with the UN SDGs and support our ambitious path of delivering deeper value creation across the value chain.

Topic	Commitment	Status	Progress	SDG	Reference in this report
Building a resilient business					
 WATER STEWARDSHIP	Install smart meters at 100% of high and medium risk sites by end of F25 ¹	●	We've made good progress, with smart water meters installed in 94% of our sites in high risk catchments, and rollout started in medium risk sites. Over 300 water meters were rolled out in F24.	6	See pages 34 – 37
	100% renewable electricity by 2024 ¹	●	We've achieved a renewable electricity usage of 80%, with 24 solar installations to date (expected to generate ~6,500 MWh).	7, 13	See pages 38 – 47
 CLIMATE RISK AND GHG EMISSIONS	Net Zero by 2030 (scope 1 and 2)	●	We've implemented our net zero roadmap, focusing on metering, LED installations and electric vehicle pilots over F24.	13	See pages 38 – 47
Fostering healthy and inclusive communities					
 HEALTH, SAFETY AND WELLBEING	Reduce our Serious Safety Incident Frequency Rate (SSIFR) 3 year rolling average by 20% (0.72) with a focus on active participation in our safety culture programs	●	We achieved a 39% reduction in the 3-year rolling SSIFR, well ahead of the 20% target due to the ongoing focus across all our teams on managing hazards that can cause serious harm and the continued success of our Build Safe campaign.	3	See pages 50 – 53
 CONSUMER HEALTH AND RESPONSIBLE DRINKING	100% of TWE brand product labelled from 2025 will include energy information (excluding products below 375ml) ²	●	40% of our products now include energy information on pack. With foreshadowed regulatory reform in Australia and New Zealand, energy labelling in those markets is scheduled to be completed in the 2025 calendar year. To ensure consumers in ANZ have access to energy information until the labelling changes take effect, links to online energy information at tweglobal.com calories are available on labels. DAOU labelling changes are expected to be complete by July 2026. It is anticipated that 100% of TWE branded products will include energy information by July 2026.	12, 17	See pages 57 – 59
	100% of TWE brand product labelled from 2025 will include a general health warning ²	●	We continued to make good progress over F24, and we are on track to include a general health warning on products from 1 January 2025, with DAOU products expected to include a general health warning by July 2026.	12, 17	See pages 57 – 59
	50% women in senior leadership by 2025 ¹	●	As at 30 June 2024 females comprise: 47.2% of senior leadership roles (+2.7pp) 43.7% of employees (+1.0pp) 42.9% of Board members (+5.4pp).	5	See pages 54 – 56
 INCLUSION, EQUITY AND DIVERSITY	42% female representation overall by 2025 ¹	●			
	30% female representation on Board	●			

1 This figure includes DAOU.
2 DAOU was acquired post announcement of this committment. We are aiming to have DAOU products included from July 2026.

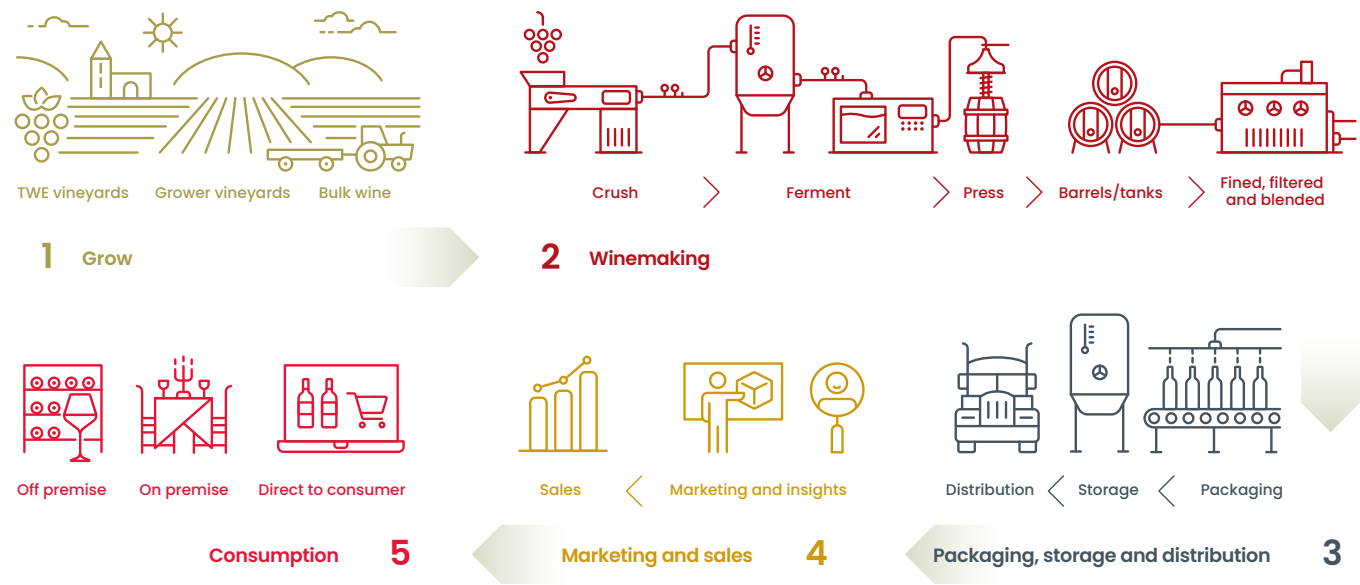
Producing sustainable wine					
 SUSTAINABLE GROWING AND PRODUCTION	Continue to implement our plan to increase the sustainability certification of our brands	●	We've maintained sustainability certification across 99.2% of our owned and leased winery and vineyard sites globally. We have also continued to collaborate with our growers and bulk wine providers to pursue certification and increase the display of certification of our brands.	17	See pages 66 – 72
	Complete supplier risk assessments for 100% of contracted spend by F24	●	We successfully completed supplier risk assessments for 100% of all contracted suppliers. This involved the completion of Primary Risk Assessments for 958 contracted suppliers. In F25 and F26 we plan to conduct Secondary Risk Assessments on all suppliers identified as High Risk in the Primary Risk Assessments.	12, 13	See pages 76 – 77
 SUSTAINABLE PACKAGING AND CIRCULAR ECONOMY	Develop solutions to known challenges to further progress our ambition of 100% recyclable, reusable or compostable packaging by end of FY2025	●	We have made good progress in developing a baseline understanding of the recycled content of current packaging materials. Over the year this involved working with suppliers to collect a range of packaging data attributes related to sustainability. We will continue to focus on data and working with our suppliers to improve accuracy and visibility.	12, 13	See pages 78 – 81
	100% of product packaging to comprise 50% average recycled content by end of CY2025	●	Overall, we have made good progress in improving the recyclability of our packaging but remain challenged by several materials that represent industry-wide problems. Pleasingly, one of these, cork, is the focus of a pilot program in Australia. We continue to increase recycled content where we can.	12, 13	

Our value chain

Our business connects with people, communities, ecosystems, and businesses from around the world. This means our economic, social, and environmental impacts extend beyond our operations and direct control.

We’re focused on cultivating meaningful, long-term partnerships and networks that make the most of our size and scale to create positive change across our material areas and broader stakeholder groups. This means making connections across our value chain, from producers and manufacturers that supply our raw materials, to our customers and consumers. Collaborative action is critical when considering the complexity of scope 3 emissions, with our latest analysis showing that more than 95% of emissions occur in our value chain.

The graphic below shows the components of our value chain. To learn more about the material topics and relevant UN SDGs for each stage, visit tweglobal.com/sustainability/value-chain.



Considering climate risk and opportunity in our value chain

In F24, we built on our existing climate risk assessments and strategies to identify and assess risks and opportunities for each stage in our value chain. Physical and transition risks and opportunities were identified under a worst-case scenario¹, utilising the expertise of internal stakeholders across risk, strategy, procurement, packaging, finance, legal, supply, investor relations, and sustainability.

Key takeaways from this assessment suggest that yield, quality, and vintage timing changes from physical risk factors will have broader impacts on the growing and winemaking processes, consequently affecting a range of supply chain inputs. Regulatory changes and stakeholder pressures (including those from investors, local communities where we operate, and consumers) could impact each stage of our value chain relating to areas such as water security, carbon pricing mechanisms, lightweight packaging, and land use changes.

The next steps planned for F25 involve undertaking in-depth risk and opportunity assessments for each stage, adopting a worst-case scenario and Paris-aligned scenario², developing a risk and opportunity register, and begin to understand the possible financial implications of the risks and opportunities we’ve identified.

1 A worst case scenario refers to ‘Representative Concentration Pathway’ (RCP) 8.5, which is representative of a possible high concentration scenario.
2 A Paris-aligned scenario refers to RCP2.6.

Stakeholder engagement

We consider our stakeholders to be any group or individual who influences or is impacted by our business. We aim to build stakeholder trust by being transparent, responsive, and accountable. We engage with our stakeholders in a variety of ways: face-to-face, through surveys and market research, or by participating in industry groups, forums and interacting with the broader business community.

Progress
The following table includes a list of our key stakeholder groups and the key issues we engaged in during F24.

Our stakeholders

Stakeholder	Key topics over F24
Consumers We have millions of consumers around the globe and want them to enjoy our brands responsibly.	- Responsible drinking, including shifting consumer preferences towards moderation (including low or no alcohol) - Sustainability performance and credentials - Demand for sustainably produced wine.
Customers We market, sell, and distribute our branded wine to a range of customers in more than 70 countries.	- Sustainability performance and credentials – especially packaging and greenhouse gas emissions - Responsible drinking, including shifting consumer preferences towards low or no alcohol.
Employees As a global business we have a diverse and talented workforce with 2,600 employees.	- Health, safety, and wellbeing - Inclusion, equity, and diversity - Employee value proposition, including development, capability, and benefits - Sustainability strategy and associated performance.
Communities We actively engage with communities – including non-profit organisations, community groups and individuals – in all operating locations.	- Community health and wellbeing, with a focus on responsible drinking - Tackling local industry, community, and regional development issues collaboratively - Our sustainability performance and issues, as well as opportunities to support organisations through partnerships, donations, volunteering, and in-kind support.
Governments We routinely engage with Ministers and staff from all levels of government.	Engagement with relevant Ministers, advisers, local members of parliament and their departments on regulatory reviews, the development and passing of legislation and application for regional grants.
Regulators We work with regulators across our markets about legal issues and safe consumption of our products.	- Engaging with alcohol industry associations on advertising guidelines, such as the Wine Institute’s Code of Advertising Standards (US), Alcohol Beverages Advertising (AUS), the Alcohol Beverages Advertising Code (AUS), the Liquor Advertising and Promotion Pre-Vetting Scheme (NZ) and Portman Group (UK), to ensure our products are compliant with the relevant marketing codes and guidelines - Ensuring our products are produced, marketed and sold in compliance with relevant laws and regulations - Supporting regulatory investigations as they arise - Supporting comprehensive community education initiatives on responsible alcohol consumption.
Investment community Our investor community comprises institutional investors, analysts, proxy advisors and around 88,000 domestic shareholders in Australia.	- The Treasury Americas DAOU Vineyards acquisition and transformation of TWE’s operating models to align with our luxury-focused premiumisation strategy - Removal of tariffs on Australian wine imports into China and executing TWE’s plans to re-establish the Australian COO portfolio in China - Supply chain and incremental luxury sourcing - Short term consumer trends amidst challenging macroeconomic environment globally - Sustainability strategy and associated performance.
Industry bodies We are members of many industry associations and play a leadership role through regular engagement in our key operating regions. We review our industry association memberships annually to ensure alignment with our strategy.	- Leadership and support to provide government and industry participants with informed and data led positions - Developing new trade opportunities, removing barriers for Australian wine exports, and advocating for favourable outcomes through trade negotiations - Tax and excise duty reform - Sustainability strategy and associated performance - Continued engagement with industry bodies to advocate on behalf of the Australian and American wine industries.
Suppliers Over F24 we engaged with more than 5,000 suppliers ¹ from 50 countries.	- Supply chain and logistics disruptions, costs, and delays - Ongoing integration of sustainability practices and improvement targets into sourcing process and refined supplier onboarding and risk assessment process.

1 Third party suppliers engaged who had any spend against them over F24.

Stakeholder engagement



Treasury Wine Estates is a signatory to, a participant in, or supportive of the following voluntary sustainability initiatives:

- Australian Packaging Covenant
- Porto Protocol
- Swedish Beverage Industry's Climate Initiative
- CDP
- RE100
- United Nations Global Compact (UNGC)
- United Nations Sustainable Development Goals (UN SDGs)
- Task Force on Climate-related Financial Disclosures (TCFD)
- Task Force on Nature-related Financial Disclosures (TNFD)
- Global Reporting Initiative (GRI)
- Sustainability Accounting Standards Board (SASB)
- International Sustainability Standards Board (ISSB), including International Financial Reporting Standards (IFRS S1 and IFRS S2)
- Australian Accounting Standards Board (AASB), including Australian Sustainability Reporting Standards' exposure drafts (ASRS ED SR1 and ASRS ED SR2)

Sustainability certifications for our vineyards, growers and bulk wine are covered in detail in the sustainable growing and production section of this report.



Barossa North Vineyards, Moculta.

Corporate governance

Transparent and robust governance practices are critical to delivering value to shareholders. They promote investor confidence, and are in line with our vision of being the world’s most desirable luxury wine company.

TWE’s Compliance Management Policy and supporting Compliance Management Framework (the Framework) promote the Company’s compliance culture and form part of its system of internal control. In particular, the Framework provides an overarching structure for centrally driven oversight and reporting procedures, as well as decentralised business-led accountabilities and systems supporting the management of TWE’s compliance obligations. The Framework is based on continuous improvement, informed by legal and regulatory changes, annual compliance risk assessments and management attestations, as well as incident identification and management processes.

Progress

F24 has seen continued progress and development of TWE’s governance and compliance framework. Ahead of the introduction of new mandatory climate reporting standards¹, the allocation of responsibility for climate and sustainability reporting between the Board and its Committees was considered. The review resulted in amendments to the:

- WOSC Charter to clarify the Committee’s responsibility for all sustainability and climate-related public disclosures (excluding financial disclosures relating to climate)
- Audit and Risk Committee (ARC) Charter to allocate responsibility to the Committee to review financial disclosures included in sustainability reporting and oversee the assurance process required under the new reporting standards.

In F24, our compliance strategy focused on improving TWE’s Online Compliance Training and Whistleblower programs. While the current Online Compliance Training program is considered effective, the improvements ensure training materials and delivery remain relevant.

A pilot adaptive learning feature tailors content to the individual learner, accelerating proficient learners to save on training time. The feature enhances learner engagement and understanding, ultimately improving compliance.

In 2022, TWE (along with 6 other entities randomly selected by ASIC) participated in ASIC’s review of whistleblower programs. In March 2023, ASIC published recommendations outlining good practices for handling whistleblower disclosures. In F24, TWE undertook a number of initiatives to align our policies and procedures with those recommendations including applying a clearer

definition of underlying procedures for handling whistleblower matters, and the documentation of guidelines to better prepare eligible recipients to appropriately handle whistleblower disclosures.

In F24, management continued to focus on the delivery and advancement of our sustainability agenda. Progress against strategic roadmaps for each of our public commitments, alongside key enablers such as communications, reporting, and data, was reported monthly to our executive sponsor with regular updates to the ELT.

TWE’s governance practices provide for continuous monitoring and reporting of sustainability risks across the organisation. We report regularly on a range of topics, including Inclusion, Equity and Diversity, compliance incidents (including breaches of company policies, environmental, health and safety, and HR compliance matters), whistleblower reports, litigation, and internal audit outcomes, and hold private sessions with internal and external audit. These reports extend beyond management level and are submitted to the Board at least bi-annually.

Board oversight of sustainability

The Board oversees TWE’s approach to, and management of, sustainability matters and receives updates on sustainability and the status of key priorities and initiatives. The WOSC, established in 2021, enables greater focus on strategic, long-term planning and operational issues in winemaking, sustainability, supply chains and relationships with the sector in different winemaking regions. The WOSC met regularly in F24, engaging on a broad range of topics including climate risk and adaptation, renewable electricity and net zero emissions, farming philosophy, water stewardship strategy, responsible supply chain and mandatory climate reporting. The Board and WOSC also have oversight of the Company’s key sustainability disclosures, including this Sustainability Report and the Statement on Human Rights and Modern Slavery. The Board approved the full suite of TWE’s sustainability targets outlined in the material topics section of this report. TWE’s sustainability governance structure is represented on the following page.

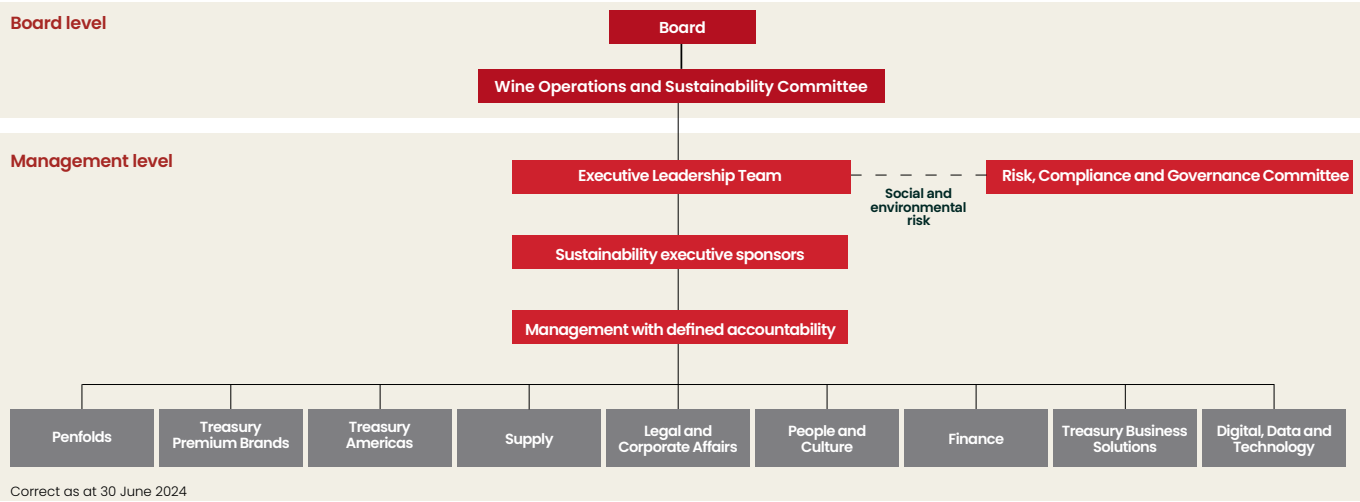


F24 Corporate Governance Statement
A comprehensive summary of TWE’s corporate governance practices for the year ended 30 June 2024 can be found in its Corporate Governance Statement available at tweglobal.com/investors.

¹ This includes mandatory climate reporting standards from the International Sustainability Standards Board (ISSB) and the Australian Accounting Standards Board (AASB).

Corporate governance

Sustainability governance



TWE DNA

This is our ‘cultural code’ which underpins how we think and act, and what we value. The three strands of the TWE DNA are:

- We bring our whole self
- We are courageous
- We deliver together.

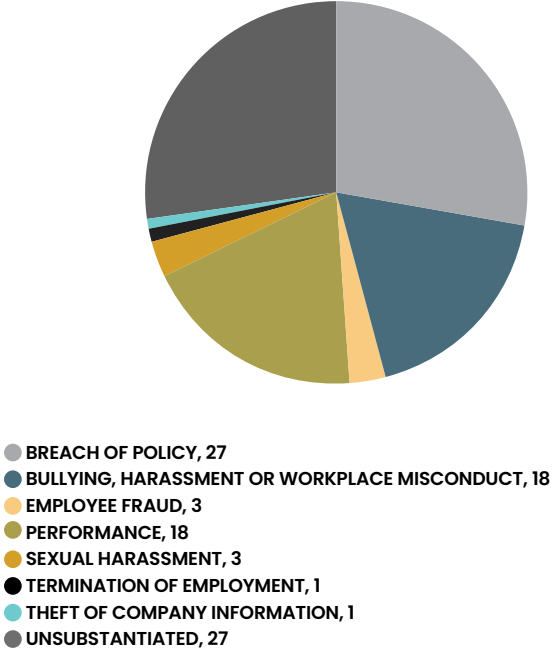
People-related matters

TWE promotes a ‘speak up’ culture. During F24, 98 people-related matters were reported, representing 3.5% of our workforce. Four were handled under the Whistleblower Policy, and 71 (72%) were fully or partially substantiated.

Actions taken in response to substantiated matters include:

- 14% - coaching, counselling or training intervention
- 31% - formal warnings (including final written warnings)
- 44% - termination of employment.

For further information, refer to the Code of Conduct reporting section of our 2024 Annual Report.



Beringer vineyard, Napa Valley.



Risk management

Our continued growth and success depends on our ability to understand and respond to the challenges of the environments we operate in. By understanding and managing risk, we provide greater certainty and confidence for all our stakeholders that we will achieve our growth strategy in a sustainable way.

Progress

TWE has implemented a strategic and consistent enterprise-wide approach to risk management, which is underpinned by a risk-aware culture. TWE’s Risk Management Framework (the Framework) was reviewed in F24 with no significant change. The Framework defines the approach and standards for risk assessment including periodic identification, analysis, and evaluation of financial and non-financial risks at group level and in each major function or region. It includes both financial and non-financial risks, such as environmental and social risks. TWE’s material business risks and how they are managed are set out in the F24 Operating and Financial Review (OFR) of the 2024 Annual Report.

Over the last 12 months, TWE’s environmental and social risk assessments have been reviewed. This includes climate change, which is considered a material risk to the business. Consequently, we continue to build our understanding and disclosure of the risks and opportunities presented by climate change, and monitor emerging trends and changes across the regulatory environment. Further detail is outlined in the climate risk and GHG emission section of this report.

Risk Management Framework overview

Tax transparency

We place significant importance on transparency and maintaining high standards of tax governance and compliance.

- Our Tax Governance Policy includes the following core guiding principles:
- Comply with all tax laws in the countries in which TWE operates
 - Maintain effective relationships with revenue authorities in countries in which TWE operates
 - Adhere to the Board approved Tax Risk Management Framework.

Progress
TWE paid approximately \$170.2 million¹ tax within Australia in respect of its operations in the 2024 income tax year which is made up of a number of different costs relating to employee fringe benefits tax, Wine Equalisation Tax (net of producer rebates), Goods and Services Tax, excise tax and company income tax (net of research and development credits).

**Tax Transparency Report**

TWE produces an annual Tax Transparency Report which meets the voluntary tax transparency code principles and outlines:

- Tax governance and strategy
- Income tax reconciliation
- Australian federal tax contribution
- International related party dealings.

TWE's most recent Tax Transparency Report is available at tweglobal.com/sustainability.



¹ Note this amount includes an estimate of the final income tax payment due in relation to the 2024 income year and is based on the current income tax liability disclosed in TWE's 2024 Annual Report. This number will be finalised after the completion of the Australian income tax return in December 2024.

Managing human rights

Our business and people can only thrive when human rights are safeguarded. We’re committed to respecting human rights and seek to support and uphold the principles of the United Nations (UN) Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the ILO 1998 Declaration on Fundamental Principles and Rights at Work – as well as specific legislation in the markets where we operate.

Progress

TWE’s Human Rights Charter (the Charter) sets out our commitment to upholding human rights and preventing modern slavery. The Charter establishes the expectations across our business from our Board of Directors to our brands – and the role each need to play. The Charter is underpinned by global policies and programs. We’ve also incorporated risk assessments to support the implementation of new legislative requirements. For example, a risk assessment was completed on the requirements of the Anti-Discrimination and Human Rights Legislation Amendment (Respect at Work) Act to identify risks, potential consequences and evaluate the effectiveness of controls (this work was commenced in F23).

The Charter sets out three core commitments:

1. We protect human rights – we believe in acting fairly and making decisions based on merit.
2. We respect human rights – we believe respect for human rights is the cornerstone of a culture where everyone can make a contribution and feel included, so we strive to conduct business in a way that respects the rights and dignity of people and avoids complicity in human rights abuses.
3. We remedy human rights – we encourage all stakeholders to report and express concerns relating to suspected violations of our policies, including the Charter.

This Sustainability Report provides an overview of our progress and performance in human rights in its broadest sense. Further detail on key policies, metrics and specific focus areas that relate to people – in our business and value chain – can be found in our key non-financial performance indicators table.

In April 2023, the United Workers Union (UWU) accused TWE of breaching the Disability Discrimination Act by refusing a number of their members permanent employment, despite previously being engaged at a TWE facility through a labour hire agency. TWE has maintained that health and safety is our top priority, and that the organisation has a duty of care to make sure its employees and labour hire personnel are able to safely perform the duties of their role. The matter was settled without admission of liability in July 2024.

Training

All new permanent, desk-based employees undertake human rights and modern slavery training, and repeat it every two years. The training is designed to raise awareness of human rights, the alignment between human rights and our values, culture, and policies, and give specific insight into modern slavery. In F24, 94% of eligible desk-based employees completed the required training modules, covering:

Human rights:

- The connection to other policies to ensure a fair, inclusive, safe, and respectful workplace and responsible decision making
- Each employee’s role in living and breathing TWE’s human rights commitments
- How human rights apply to hiring practices; inclusion, equity and diversity; and flexible work arrangements
- How human rights apply to treating colleagues with dignity; health and safety including safety at home
- Fair wages and employment rights.

Modern slavery:

- What modern slavery is and TWE’s commitment to preventing modern slavery in any area of our business
- TWE’s specific modern slavery risk areas
- ‘Red flags’ that may indicate modern slavery
- What employees can do to prevent and report modern slavery.

Non desk-based employees in the US complete online training using site-based kiosks and a comprehensive employee handbook that lists key policies. Non desk-based employees in other countries attend face-to-face training covering a range of our governance documents and topics: Code of Conduct, TWE DNA, Anti-Bullying, Harassment and Discrimination Policy and Raising a Concern.

Temporary or contracted labour in our vineyards

Due to the seasonal nature of viticultural work, we use a combination of labour hire and subcontracted labour to support peak periods such as pruning and harvest. While not employed directly, TWE takes its obligations and responsibilities and workplace entitlements for, and working rights requirements of, all workers very seriously. We use our legal and commercial controls (such as contracts, purchase order conditions and expectations set out in our Responsible Procurement Code) as well as operational controls including ongoing engagement, to ensure that suppliers understand and meet the expectations outlined in TWE’s Human Rights Policy and have appropriate policies and practices in place to minimise the risk of modern slavery in the supply chain. More detail will be available in our 2024 Modern Slavery Statement which will be released later this year.



Our Modern Slavery Statement

TWE’s statement on Human Rights and Modern Slavery sets out the actions taken by TWE and its reporting entities to understand, mitigate, and address human rights and modern slavery risks. It is available at [tweglobal.com/sustainability](https://www.tweglobal.com/sustainability).



Harvest at Château Lanessan in France.

About this report

Our reporting

TWE’s 2024 corporate reporting suite comprises the Sustainability Report (this report), the Annual Report, and our Corporate Governance Statement. We have drawn links between the documents where possible so they may be read as a suite. Each report, together with several policies, additional technical information and other relevant disclosures referenced throughout this report are available at tweglobal.com/sustainability.

This report

This report, our annual Sustainability Report, provides an overview of our approach, progress, and performance in TWE’s most material sustainability topics and is structured according to our Sustainability Strategy. Our material topics were identified through a materiality assessment reviewed bi-annually, and last refreshed in F23. These topics reflect the ESG-related areas that are most important to our company and our stakeholders. Unless otherwise stated, this report discloses performance information for the financial year 1 July 2023 to 30 June 2024 (F24).

Sustainability data relating to the acquisition of DAOU Vineyards (US)¹ and Weta (New Zealand)² has been included for the following indicators only:

- Renewable electricity (total and %)
- Smart water meter rollout completion statistics
- Gender performance (females overall, females in senior leadership positions).

Given acquisition occurred after peak periods their inclusion for other metrics would distort performance. We intend to report fully for these acquisitions in F25.

Alignment with ESG reporting standards

This report has been prepared with consideration of a range of ESG reporting standards, including the International Sustainability Standards Board’s (ISSB) International Financial Reporting Standards (IFRS), the Australian Accounting Standards Board’s (AASB) Australian Sustainability Reporting Standards exposure drafts (ASRS), the Global Reporting Initiative Standard (GRI), the Sustainability Accounting Standards Board (SASB), and the United Nations Global Compact (UNGC) and Sustainable Development Goals (UN SDGs). Importantly, due to the global reporting landscape changes over F24, IFRS (IFRS S1 and S2) and ASRS exposure draft (ASRS 2) have collectively replaced the Taskforce on Climate-related Financial Disclosure (TCFD). We continue to enhance and improve our alignment with relevant reporting standards over time, in addition to monitoring the ongoing and rapid evolution of global ESG reporting. Our greenhouse gas (GHG) inventory (scopes 1, 2 and 3) has been prepared in alignment with the relevant GHG Protocol.

Sustainable Development Goals

The UN SDGs provide a blueprint to achieve a better and more sustainable future by 2030. TWE has aligned its Sustainability Strategy to seven priority SDGs relevant to our Company and associated operations which are highlighted below. Our work to drive action towards these goals is highlighted throughout this report.

Verification and assurance

We use a range of internal verification processes and controls to help ensure the completeness and accuracy of the information in this report. They relate to data collection, collation, analysis, and presentation for reporting purposes.

KPMG completed limited assurance over selected data and disclosures in this report. The limited assurance included renewable electricity consumed of 80%, water stewardship progress including installation of smart water meters at 94% of our high risk sites, female leaders in senior leadership roles of 47.2%, overall female representation in TWE employees of 43.7%, and scope 3 GHG emissions of 404.8 ktCO₂e, prepared in accordance with the relevant frameworks GRI Universal Standards 2021, RE100 Reporting Guidance 2021 as published by RE100 Climate Group and CDP, the GHG Protocol Corporate Value Chain (scope 3) Accounting and Reporting Standard as published by the WBCSD and the WRI, and TWE’s Basis of Preparation methodologies. KPMG’s limited assurance report is available at tweglobal.com/sustainability/kpmg-assurance-opinion-2024.



Our F24 UNGC Communication on Progress is completed online via the UNGC’s portal, and is available via the UNGC platform.

1 Acquired on 13 December 2023.
2 Acquired on 28 March 2024.



Key non-financial performance indicators

Metric	Measure	F22	F23	F24	F24 trend ^a
Building a resilient business					
Total water consumed ¹	Gigalitre (GL)	23.3	19.1	20.9	↗
Total water consumed in % of regions with high or extremely high baseline water stress ²	%	–	37.5	30.4	↘
Water efficiency ³	L/9LE	30.8	33.0	34.6	↘
Total energy consumed ¹	GJ x 10 ³	418.6	400.0	388.9	↘
Total electricity consumed ¹	GJ x 10 ³	215.8	207.0	205.3	↘
Renewable electricity ⁴	GJ x 10 ³	11.8	41.3	164.3	↗
Renewable electricity ⁴	% of total electricity consumed	5.5	19.9	80.0	↗
% energy from grid electricity ⁵	%	49.4	49.6	47.0	↘
Total fleet fuel consumption ⁶	GJ x 10 ³	26.3	27.7	24.9	↘
Energy efficiency ³	MJ/9LE	9.4	11.5	11.7	↘
Scope 1 greenhouse gas (GHG) emissions ⁷	Kilotonnes CO ₂ e	13.1	11.9	11.4	↘
Scope 2 GHG emissions ⁷	Kilotonnes CO ₂ e	27.7	18.1	4.6	↘
Scope 3 GHG emissions ⁸	Kilotonnes CO ₂ e	496.1 ⁹	404.8	–	↘
Total scope 1 and 2 CO ₂ e emissions ¹⁰	Kilotonnes CO ₂ e	40.7	30.0	16.0	↘
Carbon emission intensity ratio ¹¹	Kg CO ₂ e/9LE	1.0	0.9	0.4	↘
Environmental incidents ¹²	# incidents reportable to environmental authorities	1	2	3	↗

a. A red arrow indicates a negative trend, a green arrow indicates a positive trend, a grey arrow indicates a negligible positive or negative trend (within 3% of the metric measure), and a grey line indicates no trend.

1 Absolute figures (total water consumed, total energy consumed, total electricity consumed, solid waste diverted from landfill) include all wineries, warehouse and packaging centres, company-owned or leased vineyards, cellar doors as well as offices with more than 20 employees. Electricity for DAOU (US) and Weta (New Zealand) which were acquired in F24 has been included, but all other metrics exclude these sites.

2 SASB defines locations with High or Extremely High Baseline Water Stress as classified by the World Resources Institute's (WRI) Water Risk Atlas tool, Aqueduct. In line with the SASB guidance, this metric discloses the water consumed in regions with High or Extremely High Baseline Water Stress as a percentage of the total water consumed.

3 Water and energy efficiency for TWE's wineries and packaging centres (exclude DAOU) include non-TWE volumes packaged at our facilities under contract. TWE uses a unit of nine litre equivalent (9LE) to represent volume. Efficiency is based on production and what is bottled. It does not include water or energy used at Company-owned or leased vineyards, offices, cellar doors or 3rd party packaging facilities. Production of wine is a multi-year process (i.e. grapes crushed may not be bottled in the same year) meaning efficiency may not be reflective of what is bottled that year. Water and energy consumed on vineyards, offices and cellar doors is captured in absolute figures.

4 Energy Attribute Certificates (EACs) are an important mechanism in accounting for renewable electricity, enabling TWE to claim the environmental benefits of renewable electricity, even when the physical electricity supplied to our operations may include non-renewable sources. For F24, this report shows an 80% renewable electricity percentage, which includes the addition of DAOU and Weta sites. Renewable electricity used across our operations is either generated onsite at owned or leased facilities or procured through offsite renewable sources that meet RE100's technical criteria (see there100.org). This includes EACs, primarily linked to solar and hydroelectric systems, Power Purchase Agreements (PPAs) with solar providers, and retail contracts offering a blend of renewable energy sources, such as solar, wind, and hydropower. The F24 figure will be subject to RE100 verification. Notably, one of DAOU's wineries features onsite solar panels that generate surplus electricity, exported to the grid. To cover F24 electricity usage, TWE has purchased and surrendered 12,000 EACs for Australia in June 2024, with 3,700 EACs of the 12,000 EACs allocated against the F24 usage (and remainder to be allocated against F25 usage), and purchased and surrendered 16,000 EACs for the US in July and August 2024, aligning with RE100's requirements for renewable electricity sourcing.

6 Our current fleet reporting systems accurately track absolute fuel consumption, and we are unable to track miles travelled (as per SASB).

7 The scope 1 and 2 emissions metrics include all wineries, cellar doors, packaging centres and Company-owned or leased vineyards and offices aligned with the operational boundary as per the GHG Protocol. F24 figures exclude DAOU and Weta.

8 We report our scope 3 data with a lag of one FY due to the time, sourcing, and verification of the data. Refer to the climate risk and GHG emission section of the report for further detail about our scope 3 reporting and methodology.

9 We have re-baselined the scope 3 data reported for F22 to ensure consistency with the updated methodology for assessing scope 3 emissions in F23. Prior reported number was 540.4.

10 Includes all wineries, cellar doors, packaging centres and Company-owned or leased vineyards and offices. Does not include scope 3 emissions. F24 figures exclude DAOU and Weta.

11 Carbon emission intensity ratio for TWE's wineries and packaging centres includes non-TWE volumes packaged at our facilities under contract. TWE uses a unit of nine litre equivalent (9LE) to represent volume.

12 Two of these incidents were reported to the environmental authorities; one consists of an exceedance of approximately 2ML identified against a water licence at Coonawarra, and the second relates to incomplete biogas combustion in the Wastewater Treatment Plant Flare identified at the TWE Barossa Winery, which led to high sulfur dioxide emissions into the atmosphere and one operator feeling unwell. The third incident relates to wastewater management issues raised by the Department of Water and Environment during a review at Devil's Lair Winery. Further detail about our environmental management practices, including details about the three incidents which occurred in F24 is included in the sustainable growing and production section of this report.

Metric	Measure	F22	F23	F24	F24 trend ^a
Fostering healthy and inclusive communities					
Employee engagement ¹³	Score in annual survey (%)	70	71	64	↘
Inclusion ¹⁴	Score in annual survey (%)	73	75	71	↘
Lost time injury frequency rate ¹⁵	Lost time injuries per million hours worked	6.4	4.8	4.2	↘
Serious safety incident frequency rate ¹⁶	Serious incidents per million hours worked	1.4	0.2	0.2	–
Serious safety incident frequency rate (3-year) ¹⁶	Serious incidents per million hours worked over 3 years	N/A	0.90	0.55	↘
Safety conversation frequency rate ¹⁶	Safety conversations per million hours worked	996	1,302	1009	↘
Female representation in senior leadership roles ¹⁷	%	44.9	44.5	47.2	↗
Overall female representation	%	41.9	42.7	43.7	↗
Female representation on TWE's Board	%	37.5	37.5	42.9	↗
Alcohol Policy training ¹⁸	% compliant eligible employees	97.0	96.0	95.0	↘
Non-compliance findings with marketing regulation or voluntary codes ¹⁹	# of findings	0	1	1	–
Non-compliance findings with labelling codes or regulations ²⁰	# of findings	0	0	0	–
Producing sustainable wine					
Total solid waste generated	Kilotonnes	46.9	41.4	33.3	↘
Solid waste diverted from landfill ¹	%	95.2	95.4	93.7	↘
% of owned/leased sites certified to relevant standard ²¹	%	–	99.3	99.2	↘
Number of production facilities ²²	# of facilities	21	21	21	–

13 Employee engagement measures the extent to which our people feel connected to, motivated by and committed to TWE. We use Culture Amp's 5-item engagement scale. The score represents the average of the percentage of survey respondents who agreed or strongly agreed with each item.

14 New metric included for F23, however this has been tracked since F21. During F21 inclusion was assessed in the annual engagement survey as an independent factor (impacts engagement) and is not comparable to F22 or F23 results. From F22 inclusion was included in the annual engagement survey as a dependent factor (outcome). The F22 unadjusted score was 70%. The F22 adjusted score (in consideration of a question which was removed) is 73% to enable a like-for-like comparison with F23.

15 Global frequency rate calculations incorporate all TWE regions, all employees and casual workers. Contract workers not under the direct supervision of TWE are not included in the calculations.

16 In F24 TWE moved from a 12-month rolling Serious Safety Incident Frequency Rate to a 3-year rolling Serious Safety Incident Frequency Rate.

17 TWE defines senior leadership roles as senior leaders, professionals, and specialists, including general, department and functional management.

18 Training applies to desk-based employees.

19 The Australian Communications and Media Authority (ACMA) received a complaint that TWE had sent unwanted marketing by SMS to a consumer. Refer to the consumer health and responsible drinking section of this report for further detail of the F24 non-compliance.

20 TWE defines a non-compliance as 'a proven contravention of a compliance obligation applicable to TWE'.

21 The scope of this metric includes applicable certifications for owned/leased vineyards and wineries operated during V24 in Australia and New Zealand, and V23 in Americas, France, and Italy only. DAOU and Weta are excluded in F24. The sustainability certification scheme varies between regions. Refer to the sustainable growing and production section of this report for further detail about our sustainability certifications.

22 Scope includes our globally operated packaging facilities and wineries excluding DAOU wineries.



Water stewardship

Water is one of TWE’s most critical assets, and we acknowledge the growing urgency for ensuring the availability and security of reliable, high-quality water.

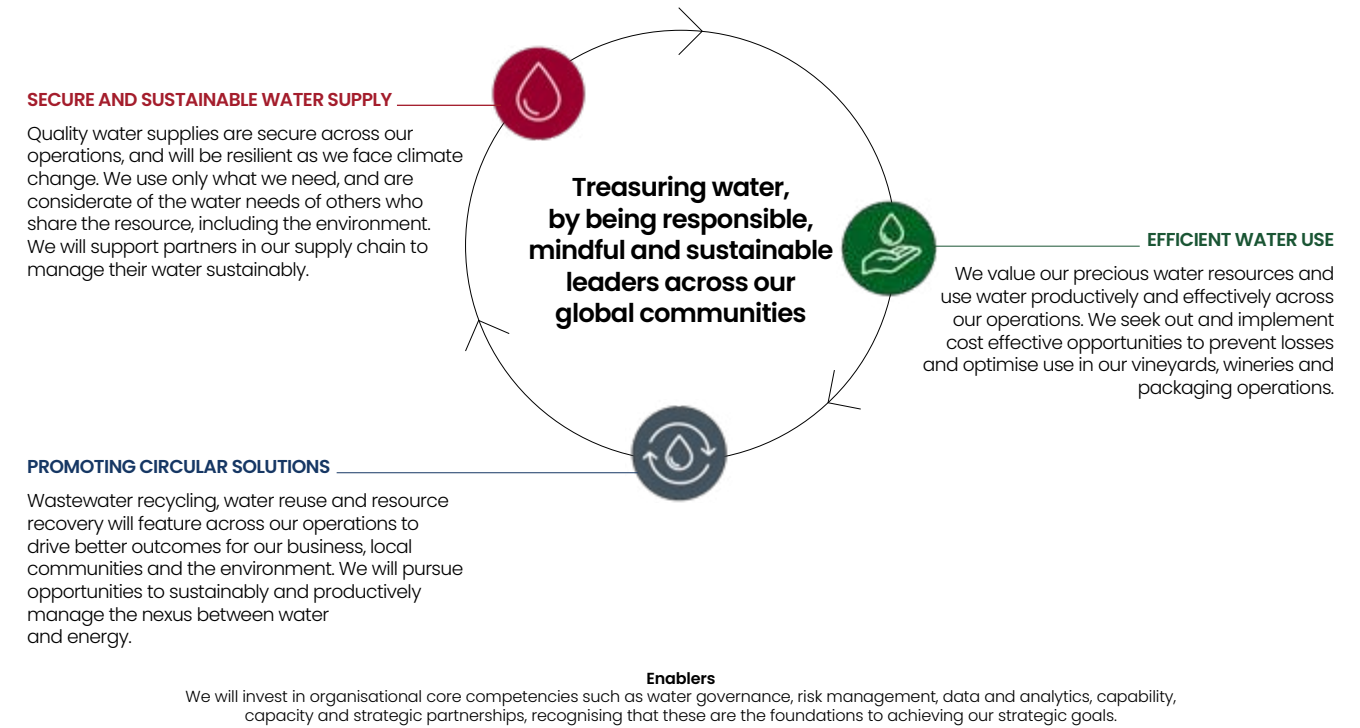
Our climate research shows that TWE’s main growing regions are generally becoming warmer and drier. Water is a critical component in responding to a warmer climate, with our demand for water likely to increase over time. Water scarcity is a risk to our operations, and our regional strategies to meet our water requirements will ensure that we continue to protect this precious resource.

In the face of increasing competitive demands from urban uses, other horticultural crops, and minimum environmental flows, water is emerging as an important part of our social license to operate. We acknowledge our significant role as responsible stewards of water in the regions where we operate.

Progress
In F23 we released our global water strategy, Treasuring Water, to help guide our actions as responsible stewards. It is underpinned by our vision of being responsible, mindful, and sustainable leaders across our global communities. The vision highlights our obligation to responsibly use water while demonstrating leadership in water stewardship across the global communities where we operate. The strategic objectives are:

- Secure and sustainable water supply
- Efficient water use
- Promoting circular solutions.

In F24, our primary focus has been to strengthen water governance, risk management, data and analytics, building a strong foundation for our water stewardship journey.



Secure and sustainable water supply
Water is a critical input to wine production. Most of our water usage each year is in vineyards, and many are in catchments where baseline water stress is high when considering supply, demand and stakeholder factors. Ensuring that we have adequate and resilient water supplies now and into the future is increasingly important, particularly in the face of a changing climate.

A key area of focus in F24 has been to improve our understanding of water use in our Australian vineyards, both historically and into the future, under climate change scenarios. The amount of water we need at each site is influenced by several factors, including the grape variety grown, and specific climatic conditions such as rainfall and temperature. The climate risk and GHG emissions section of this report outlines the work we’ve done to understand this risk, including the impact on future rainfall patterns. This analysis will help us focus attention on areas where additional water needs to be secured through a variety of actions.

Efficient water use
As good water stewards, we aim to use our water productively and effectively, minimising wastage by identifying leaks or reducing water losses through evaporation and seepage in our storage dams. Improving efficiency also reduces the overall amount of water we need to secure and is often the most cost-effective option of securing the required volume. To improve efficiency, it’s important that we understand our water use in real time.

We’re improving the way we manage our water resources by installing smart water meters across our sites, focusing on completing the majority of high risk¹ sites by the end of F24, and medium risk areas by the end of F25. The installation of smart meters is considered material to delivering our strategy (shown on the previous page) and aligns with TWE’s long-term objective to safeguard water security in the regions where we operate. Smart water meters are now installed at 94% of our high risk sites and we’ve made good progress in our medium risk sites, with over 300 new smart meters installed globally. The smart meters will provide high-quality, real time water use data that will help us proactively manage our water assets and build a global water data ecosystem. Real time data allows sites to monitor water usage against allocations and has other benefits like early leak detection. At our US sites, dam depth sensors have been installed to track real time information about water withdrawal and water volumes and help identify potential dam leaks. Based on the success of the US installations, depth sensors will be rolled out in F25 across high risk dams in Australia.

In F24 we started a multi-year dam covering project in Australia. Dam covers help reduce water loss through evaporation, which can be between 10% and 30% each year. This is an ambitious and complex engineering task

which needs to balance timely completion alongside operational requirements. Dams can also lose water by leakage through the dam liner ageing. This has been identified at two of our vineyard sites, Zilms in Australia and Paris Valley in the US. At both these sites, replacement is underway, which will protect against unintended loss.

Promoting circular solutions
Circular water solutions treat water as a valuable asset that’s constantly reused within our operations. We reuse cleaning water at our wineries multiple times and use recycled water from our wineries for other purposes including vineyard and landscaping irrigation. This type of beneficial reuse helps release freshwater resources for other applications. Several of our sites including Australia’s McLaren Vale and Great Western, and California’s Asti vineyard, Etude vineyard, Stanly Ranch and Stags Leap Ranch use recycled water from other supplies for irrigation. In the Barossa Valley, we have implemented stormwater and effluent capture for reuse on vineyards. We are committed to improving the quality of recycled water from our wineries and continue to review and optimise our use of cleaning chemicals.

Our water management practices
Our management approach varies at each site dependent on the available water sources, quality parameters and local regulatory requirements. Most of our global water use is in vineyards, many of them in high risk catchments. Our immediate focus is addressing the risks and opportunities in these high risk catchments, given their impact on our business, the environment, and the community.

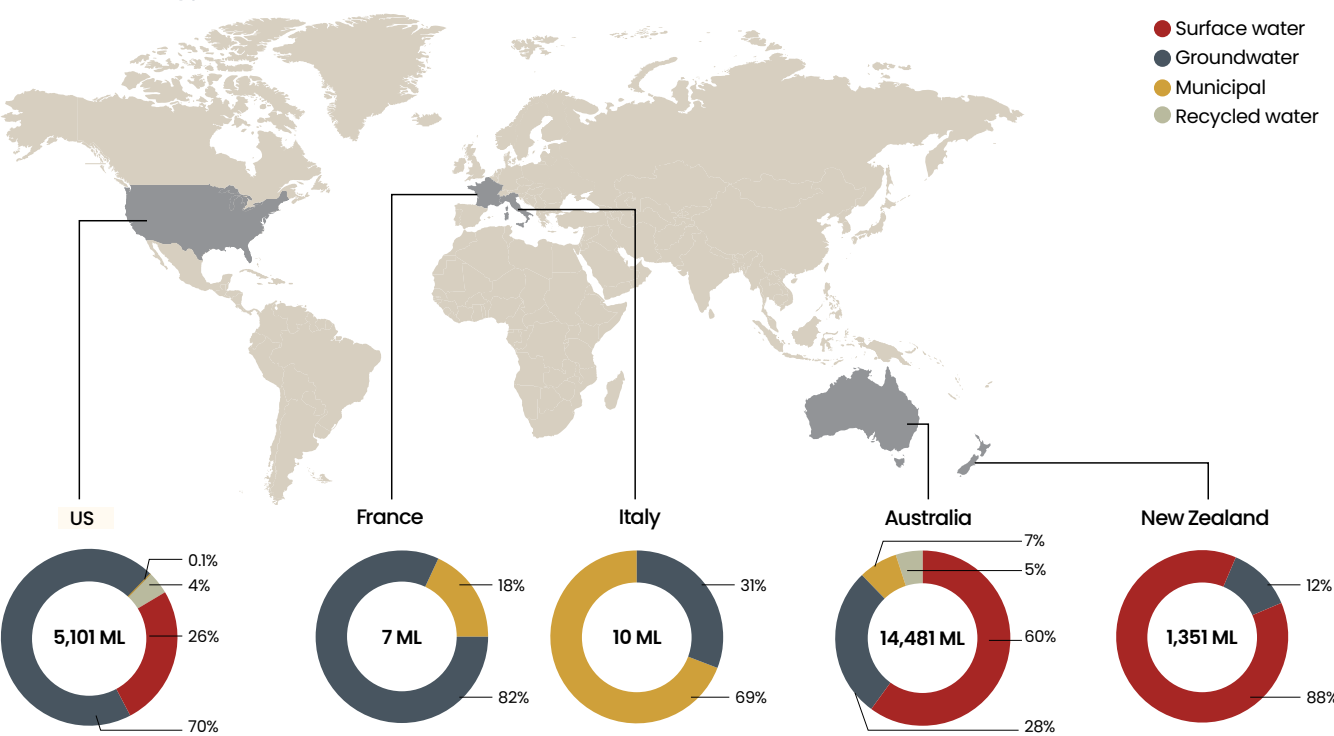
- In F24:
- Around 97% of TWE’s water usage occurred in our vineyards. 69% of global water use was in Australia, with the majority of the remaining consumption in California.
 - Water was mainly sourced from a combination of ground and surface water systems in Australia, predominantly surface water in New Zealand, and primarily groundwater in the US.

A range of water management practices are in place across our operations. Smart meters capture our water usage in real time to help monitor and manage our water resources and provide insights through accurate, timely data. The data also helps detect leaks and conserve water, further supporting regulatory compliance. We’re currently trialling irrigation control systems that integrate with our existing infrastructure, to help determine a vine’s water requirements with information from moisture probes and weather stations. Using data from a range of sources helps deliver desired yield and quality outcomes while optimising water use.

¹ Catchment risk was originally assessed by an external third party expert, additional regions are assessed using ‘baseline water stress’ in the Water Risk Atlas. When classifying a catchment as ‘high risk’ we consider environmental constraints such as supply availability now and into the future and how these interplay with our water demand. We also considered regulatory constraints such as current or future restrictions on water availability and changing regulatory frameworks. Our catchments that have been graded as high risk include Southern Murray Darling Basin, Adelaide Hills, Clare Valley and Eden Valley in Australia, Clutha River Valley and Wairau River Valley in New Zealand and Napa Sonoma Valley and Poso Robles in California.

Water stewardship

Global water use by jurisdiction and source in F24



Performance

Over F24 TWE consumed 20.9 gigalitres of water in its operations, an increase of 9.7% from the prior year. In F24 there were several factors which impacted water consumption that are not apparent from the trend change in total consumption: a drier year globally compared to F23, and a reduced vineyard footprint in Australia following the F24 divestment of commercial vineyards.

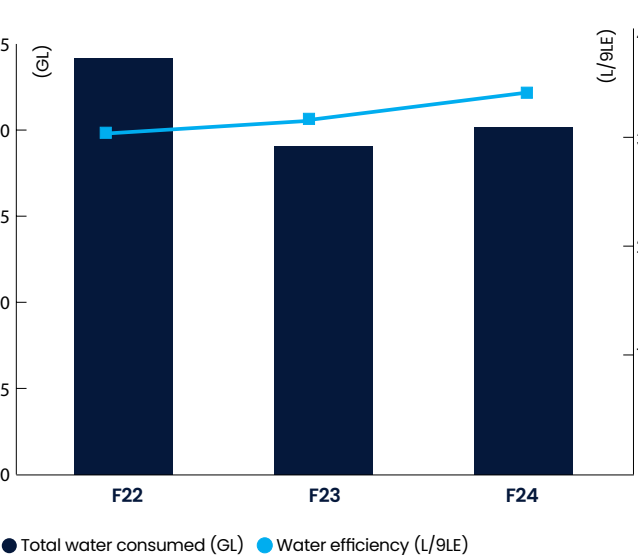
The majority of our water consumption occurs in our vineyards, and weather conditions have a material impact on the amounts of water consumed each year. In Australia, F23 was one of the wettest years on record, resulting in a lower than usual volume of water consumed. In comparison, in F24 parts of our Australian growing regions recorded drier than usual weather conditions, resulting in increased water consumption of 8.4%. This increase occurred despite a reduction in the operating footprint in Australia following a number of vineyard divestments, representing 14% of total use in F23.

Similarly, New Zealand had an increase in water usage of 29.3% due to a warmer and drier than usual season. Water usage in the US also increased by 9.3% despite a relatively cool season in the first half of F24.

As we transition to a luxury led business we are typically working with smaller parcels of fruit and wine. These smaller batches require more handling and more cleaning, both of tanks and barrels for fermentation and storage as well as equipment used

in the production of wine (e.g. filtration technology such as high-pressure membrane cross flow). While production volumes dropped 3.1% in F24, our total water use at winery and packaging plants increased by 0.9%. Combined, this has led to a 4.9% decrease in water efficiency again this year, now at 34.6 L/9LE compared to 32.9 L/9LE in F23.

Total water consumed



Smart water metering

TWE is committed to understanding and improving our water usage across our vineyards, wineries and packaging centres, and we've committed to installing smart water meters at all our sites located in high and medium risk sites by the end of F25. Smart water meters measure and record water use data in real time, with automated meter readings sent to a central server or cloud-based application accessible via an application or web-based portal.

Benefits of smart metering include accurate water consumption information, improved leak detection, and enhanced data analysis for water management. By monitoring our water usage in real time, we will be able to identify areas where we can reduce water consumption in the future and help support water efficiency measures.

Smart water meter installation started in California, followed by Australia. The benefit of real time data has already been observed in the US, helping improve the accuracy and timeliness of water data for reporting purposes. It has also identified water usage anomalies, calibration issues in other equipment and leaks. Over 300 smart meters have been installed globally as at the end of F24.



Entering a meter reading into the smart meter online portal to validate a smart meter installation.

Dam lining and covers

Many of our sites store water in dams for use later in the season. Dams were traditionally constructed and lined with clay, which can develop leaks over time. A leaky liner could lose up to 10% of its volume a year. Depending on climatic conditions, dams can also lose between an additional 10% and 30% of their water through evaporation.

To help preserve water levels in dams, we've started a multi-year dam lining and covering project that prioritises dams in high risk catchments. The dam lining and covering process requires careful coordination, given their critical role as part of the vineyard water supply, storing water sourced in winter for irrigation during the growing season. In Paris Valley, California, a series of four storage dams are currently being restored to their original condition by removing silt and reed growth, and installing plastic liners reducing the amount of leakage and reducing the amount of ongoing maintenance required. The dams will also be fenced, preventing wildlife from entering and drowning in the dams. In Australia, the Zilm dam liner is being replaced, and construction for covers on the two dams at Moculta are near completion.

In the US we also installed dam level sensors to obtain real time data about water levels, helping track losses from leakage or evaporation. At some sites storage levels were decreasing outside of pumping events which we are monitoring and using to prioritise the relining program.



Dam cover replacement and cover installation at Zilm.

Climate risk and GHG emissions

There is an urgent need for action on climate change, and as a global viticultural business, TWE is exposed to the associated physical and transition risks and opportunities. The latest science – the 6th Assessment Report from the Intergovernmental Panel on Climate Change (IPCC) – and subsequent updates reveal the increasingly severe impact of the climate crisis on people and the planet. At TWE, we are responsible for minimising and mitigating the negative impacts of our operations and ultimately building resilience to a changing climate and broader operating environment.

TWE supports the aim of the Paris Agreement to limit the global temperature rise to 1.5°C above pre-industrial levels. We have committed to reaching net zero emissions (scope 1 and 2) by 2030 to do our part to avoid the worsening impacts of climate change and support an orderly and effective transition. We’re engaging with our supply chain to encourage decarbonisation and further understand our associated emissions profile (scope 3), which is a longer-term program of work, given the complexities involved. We have a role to play in supporting the transition to net zero, and our key stakeholders, including our employees, customers, and investors, increasingly value these commitments.

Progress

Over F24 we continued to experience a range of weather events, the impacts of longer-term climatic trends, as well as significant variability within seasons. The adapting our business section provides an overview of the weather and events experienced across our global footprint over the F24 growing season. We acknowledge the urgency required to combat climate change, and the climatic variability experienced highlights the importance for our business to mitigate and adapt to the impacts of a changing climate.

Playing our part

We recognise the need to transition to a lower carbon economy and our responsibility to decarbonise our business operations and broader value chain impacts. We are playing our part by prioritising the delivery of the following commitments:

- 100% renewable electricity by 2024
- Net zero emissions (scope 1 and 2) by 2030
- Scope 3 emissions measurement and engagement with our supply chain to understand their approach and encourage decarbonisation.

Our GHG emissions footprint (scope 1 and 2) was calculated in F21 at just over 47 kilotonnes CO₂e. In F24 TWE’s operations emitted 16 kilotonnes CO₂e, demonstrating significant progress in a short period of time and reducing our scope 1 and 2 carbon emissions by 66.2% since F21.

Keeping our stakeholders informed

Our reporting approach continues to evolve and reflects our approach to managing the risks and opportunities associated with climate change. We continue to track the changing regulatory and stakeholder environment, and we are beginning to plan for other new reporting areas such as nature and biodiversity through the Taskforce on Nature-related Disclosures (TNFD).

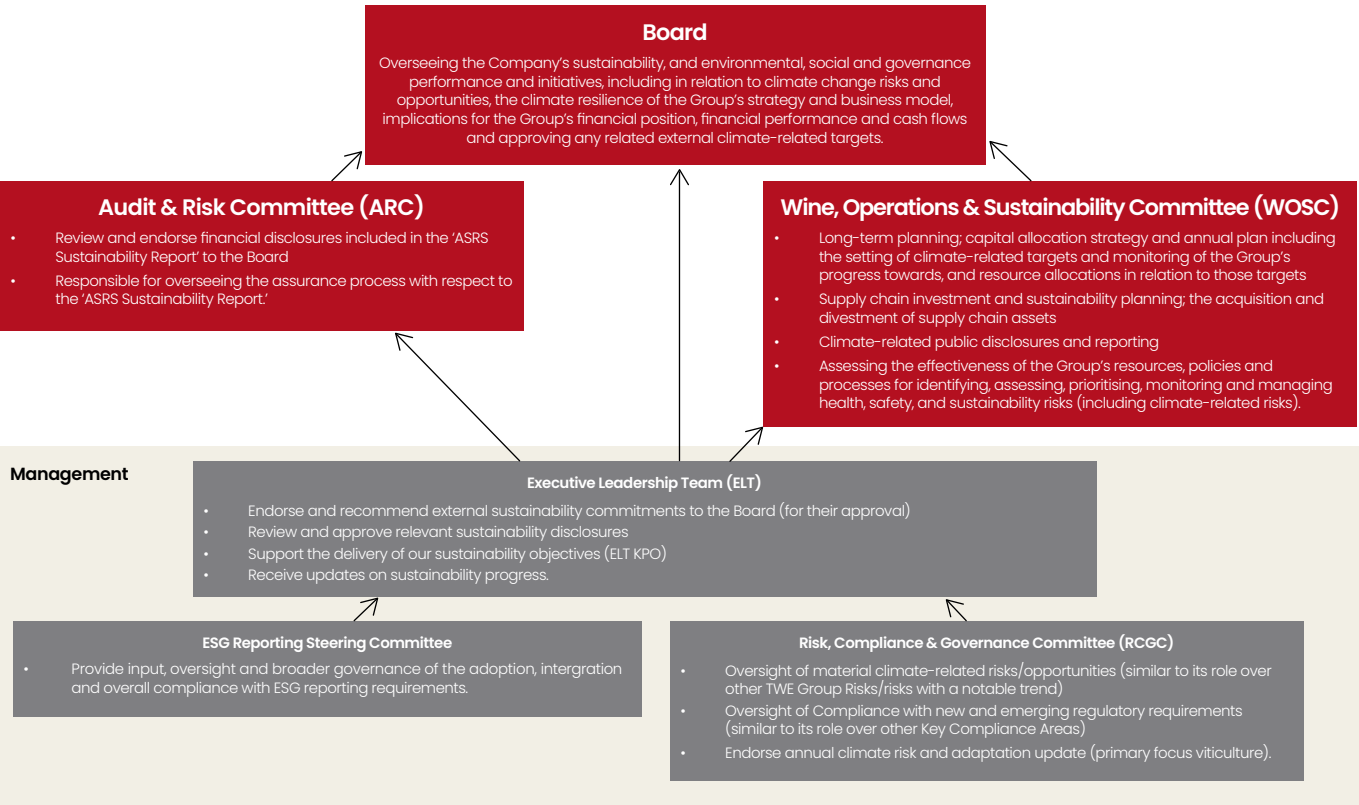
In F24 the focus and expectations of climate reporting shifted from the Taskforce on Climate-related Financial Disclosure (TCFD) to future mandatory reporting from the International Sustainability Standards Board (ISSB) and Australian Accounting Standards Board (AASB). The finalisation of these Standards and associated regulatory changes is expected in F25, with mandatory reporting in Australia likely to commence from F26¹. We are working to progressively align our disclosures with the current climate reporting mandate from AASB. The table on the following page summarises current alignment and provides guidance to further information and context across our F24 reporting suite.

Alignment with future mandatory climate reporting requirements

AASB ASRS core content ²	Location
Governance: Disclosure of the governance processes, controls, and procedures TWE uses to monitor, manage, and oversee climate-related risks and opportunities.	• Corporate Governance Statement: Section 2: Role and responsibilities of the Board • Sustainability Report: Corporate governance; Risk management; Water stewardship; Climate change and GHG emissions (this section).
Strategy: Disclose TWE’s strategy for managing climate-related risks and opportunities.	• Sustainability Report: Our approach to sustainability; Our material topics and commitments; Risk management; Water stewardship; Climate change and GHG emissions.
Risk management: Disclose TWE’s processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the overall risk management process, and to assess the overall risk profile and its overall risk management process.	• Corporate Governance Statement: Section 2: Role and responsibilities of the Board; Section 3: Risk management and internal controls. • Annual Report: Material business risks. • Sustainability Report: Risk management; Water stewardship; Climate change and GHG emissions.
Metrics and targets: Disclose TWE’s performance in relation to its climate-related risks and opportunities, including progress towards any targets (inclusive of those required by law or regulation).	• Sustainability Report: Our material topics and commitments; Key non-financial performance indicators; Water Stewardship; Climate change and GHG emissions.

Climate governance at TWE

We have clearly articulated roles and responsibilities for climate change governance.



¹ Based on current information available from ISSB, AASB and Australia Treasury as of 30 June 2024. At this stage, TWE will be subject to mandatory reporting against AASB’s ASRS. We continue to track other emerging requirements and related initiatives (e.g. TNFD).

² Core content based on current available version of AASB’s ASRS (exposure draft) dated October 2023.

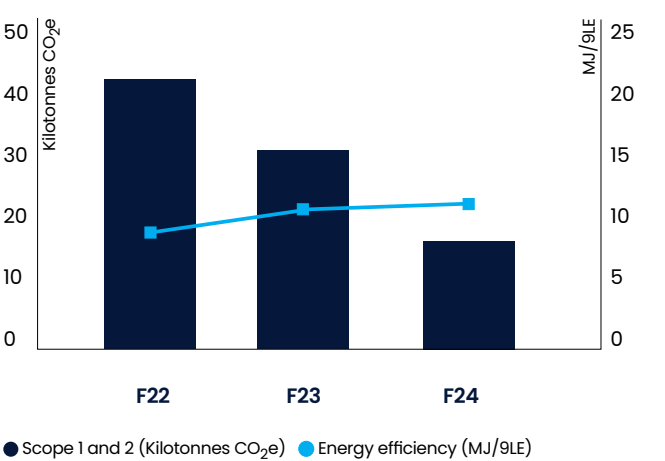
Climate risk and GHG emissions

Energy and emission performance

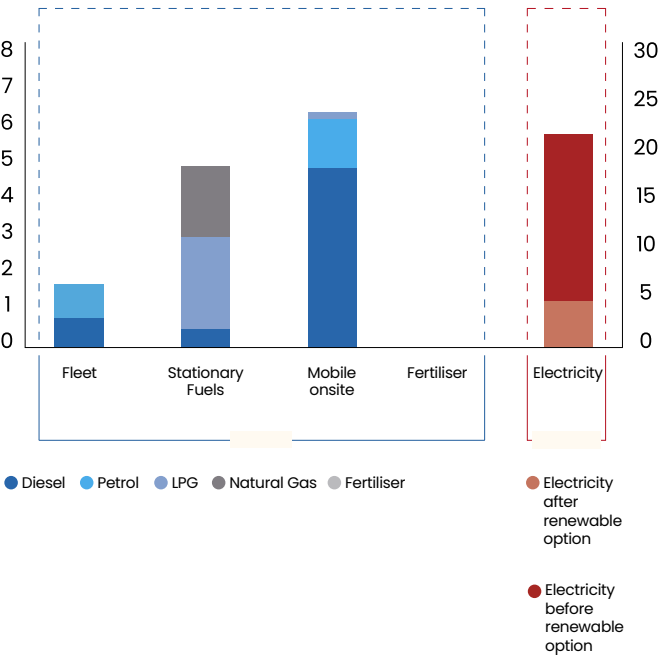
There are a range of energy sources and types required to power our global operations. On a global scale, our total emissions for the reporting period were 16 kilotonnes (scope 1 and 2 emissions). This reflects a 66.2% reduction (31.3 kilotonnes) when compared to our established baseline (F21). This reduction was driven by a range of factors, notably the significant increase in renewable electricity (from 0.2 x 10³ GJ in F21 to 164.3 x 10³ GJ in F24). In absolute terms, since F21 our overall electricity consumption has reduced by 15% and our overall energy consumption by 16.5% (2.8% since F23) thanks to a range of energy efficiency measures. Production volumes have also decreased since F21 (~40%), however, a significant portion of our electrical consumption is tied to maintaining the infrastructure and systems that support our operations. Around 74% of total electricity consumption at our wineries can be considered baseload – in that it is required for day-to-day operations that are not directly related to the volume of wine production. These essential services include climate control for storage facilities, lighting and other building services, as well as operational machinery for cellaring and wastewater treatment, which remain relatively constant regardless of production levels.

Energy efficiency continues to decline as a result of reducing production volumes, decreasing to 11.7 MJ per 9 litres equivalent (from 11.5 in F23). This is also a function of our transition to a luxury-led business where a larger share of fruit and wine is handled as individual parcels or batches within the winery and smaller runs in packaging centres. This means more tanks and specialised equipment are used throughout the winemaking process, requiring cleaning after each use. This transition has impacted both our energy and water efficiencies since F21. As highlighted throughout this report, we continue to investigate and adopt efficiency opportunities and invest in upgrades and enhancements across our global operational footprint. A series of efficiency and upgrade projects were implemented in F24, which have also contributed to the reduction in our overall Scope 1 and 2 greenhouse gas emission footprint.

Our global GHG emissions and energy efficiency footprint



F24 GHG emission by source (Kilotonnes CO₂e)



We are RE100 Members, a global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity. At the end of F24, we were operating at 80% renewable electricity (pending RE100 verification).

Switching to renewables

When we set our target, around 70% of our scope 1 and 2 footprint was linked to electricity usage. Switching to renewables allowed us to make the biggest impact in a relatively short period of time. We established a clear roadmap across our global footprint to switch to renewable electricity and have consequently built good momentum in decarbonising our broader business operations. We have made significant progress since commencing our journey in F21 at 0.1%, achieving 80% renewable electricity in F24. We are on-track to be powered by 100% renewable electricity by the end of the 2024 calendar year.

We anticipate investing around A\$29 million in onsite solar capacity from F21 until the end of F25. We have now completed 24 onsite solar installations across our global operational footprint that will provide over 6,470 MWh of renewable electricity, equivalent to powering 1,182 homes³. Collectively, our solar investment will reduce approximately 6% of our scope 1 and 2 footprint (~1,700 tonnes).

In F24, the second phase of solar installation projects across Australia was completed, covering a number of our wineries and Markaranka vineyard (pictured). This 164 kW installation provides nearly 100% of the site's energy needs during daylight, reducing the electricity from the grid required to operate the water pumps by 27%. We're now installing a portfolio of 10 small solar systems (under 20 kW) across the next tranche of Australian sites in the Barossa Valley, McLaren Vale, Yarra Valley, Coonawarra and Robe. These will be completed in early in F25 alongside an expansion of solar capacity at the Barossa Valley Winery, and battery storage.



Solar panels installed at our Markaranka vineyard in South Australia.

In the US, we have completed the construction of a 121 kW solar system at Etude Winery, which is expected to come online in the first half of F25. A series of projects in the Napa Valley region at Sterling, Frank Family and Beringer Wineries as well as Paris Valley Ranch Vineyard, are expected to be complete in the second half of F25.

Across our other global assets, a 100 kW solar system became operational at the Castello di Gabbiano Estate in Italy in April 2024. A 100 kW solar system became fully operational at the TWE France Winery, complemented by a 112 kWh battery energy storage system in June 2024.

Alongside these onsite solar installations, we continue to purchase certified renewable electricity and Energy Attribute Certificates (EACs). We have adopted an 'active' approach to renewable electricity procurement, meaning that our renewable electricity claims are based on our actions instead of reliance on the percentage of renewable electricity in the national grid (for example, 39.4% of electricity in Australia is currently renewable⁴ – a metric we don't use as the starting point in our renewable electricity claim). This approach is considered best practice, and ensures our business drives renewable electricity capacity in each of our operating regions.

In F24, we procured renewable electricity for our operations in Italy, as well as head offices in Australia, the US, and United Kingdom. Additionally, from 1 January 2024 all Australian electricity meters using more than 160 MWh per year (Large Electricity Market) have switched to a 100% renewable electricity tariff. This includes all Australian wineries (Barossa Valley, Coldstream Hills, Wynns, Magill, Devil's Lair and Great Western), Barossa Valley Packaging Centre, Penfield Distribution Centre and several vineyards. Sterling and Frank Family Vineyards wineries in the US are sourcing 100% renewable electricity. By switching to renewable electricity contracts across some of our operating regions, we have reduced our scope 2 footprint by 44%⁵.

We procured EACs for our New Zealand operations, Shanghai office, and a portion of our US and Australian operations. In F24, we purchased EACs and retired them to account for our use in these markets, given the nature of some existing agreements. We will use EACs to manage our 100% commitment moving forward.

Global electricity markets are continuously evolving, and we continue to review our electricity footprint and associated opportunities across our operating regions. We plan to use a combination of behind-the-meter solar generation, certified renewable electricity, power purchase agreements, energy storage, alternate fuels and EACs to achieve our 100% renewable electricity goal.

³ Based on the average Australian electricity consumption of 5,475 kWh per annum. (Reference: Table 9: Average electricity consumption by DNSP (kilowatt hours, kWh), residential energy consumption benchmarks final report for the Australian Energy Regulator, 9 December 2020).
⁴ Clean Energy Australia Report 2024. Clean Energy Australian Report 2024.
⁵ ~7228 CO₂e. Scope includes Australia, Italy, UK, and parts of the US.

Climate risk and GHG emissions

Energy efficiency

Our decarbonisation efforts also focus on optimising the efficiency of our operations to ultimately reduce our overall demand and work towards net zero carbon emissions (scopes 1 and 2) by 2030. Achieving our 100% renewable electricity commitment only gets us partway to our net zero goal, with about 30% of baseline year emissions from scope 1. Ultimately, we expect to sequester any remaining emissions that are difficult or uneconomical to decarbonise and anticipate this will be approximately 10% of our baseline footprint⁶.

The source of our scope 1 emissions varies considerably, and we expect transitioning to lower carbon solutions will be a lengthy and non-linear process. Scope 1 emissions are typically harder to abate or decarbonise as they're directly linked to processes and equipment with longer life spans, and generally have a reliance on fossil fuels. For example, the key challenge in our vineyards is frost fans, which are diesel or propane powered. Currently there is no viable alternative solution, and ongoing innovation and industry partnership is needed to decarbonise the technology. In contrast, the boilers used in our wineries are typically powered by natural gas or propane. These have a useful life of up to 20 years but have a range of viable alternatives such as electrification, heat pumps and solar hot water.

Our net zero emissions roadmap captures a range of fuel-switching (i.e. electrification) and efficiency-based projects to reduce our scope 1 emission footprint. Our roadmap assesses the associated technology landscape, the benefit of the forecast emissions reduction, and ease of implementation to determine project prioritisation. Around 100 opportunities are included, covering areas such as lighting, compressed air, heating, ventilation and air-conditioning (HVAC), refrigeration, hot water, process heating/cooling and motor efficiency.

In F24, we delivered a range of efficiency and upgrade projects across our global footprint. Since commencing LED lighting upgrade projects in 2022, we have now completed upgrades across all Australian operations (including wineries, vineyards, and our Barossa Valley packaging facility) with estimated savings of ~1,235 T CO₂e. Additional projects are underway in Italy, the US and New Zealand which are expected to be completed in F25. We also commenced the replacement of the HVAC system servicing the wine warehouse at Penfolds Magill, which has an anticipated reduction in electricity consumption of around 30% compared to existing equipment when fully operational (equating to around 16 MWh reduction each year). We expect this project to be completed by the end of the 2024 calendar year.

Over F24 we continued to invest in sub-metering at our operational sites and rolled out smart electrical and gas meters. This technology detects unusual usage patterns and provides feedback that can lead to further consumption savings. Around 90% of our global electrical footprint was covered by this program of work at the end of F24. Adoption of this technology in conjunction with onsite energy audits assessing energy efficiency and consumption provide valuable insights into further opportunities for improvement. To date, we have completed energy audits at 30 sites globally, in addition to a detailed analysis of compressed air leaks across most of our global operations.

We continue to actively explore and trial emerging low-carbon technology. More detail about on-farm technologies is provided in the sustainable growing and production section. Over F24 hybrid and electric fleet and supporting infrastructure (such as electric vehicle (EV) chargers) continued to progress across our Australian, US, and European operations. To date in Australia, around 22% of fleet vehicles have transitioned to hybrid/electric and rollout of EV charging infrastructure is underway at three South Australian sites – Magill Estate, Coonawarra and TWE Barossa Valley – due to these sites having relatively frequent travel, a high proportion of pool cars, a large number of onsite team members and an opportunity for consumer engagement at the cellar doors.

We anticipate 19 EV chargers will be installed by November 2024, complementary to an EV strategy recently completed for Australia to provide insight into the expected charging costs, future EV adoption and infrastructure requirement to support their adoption. In the US, around 9% of fleet vehicles have transitioned to hybrid/electric, and EV charger installation will be informed by a tender process currently underway. In Europe we have installed eight EV chargers in France and one in Italy.

Nature based solutions

At Tuscany's Castello di Gabbiano Estate, an artificial wetland method (referred to as phyto-remediation) replaced the wastewater treatment plant. The system utilises horizontal sub-surface flow in constructed wetlands filled with gravel and vegetation, effectively mimicking natural purification processes. It promotes aerobic and anaerobic bacterial activity for decomposition, achieving significant pollutant removal rates, including 70-90% for biological oxygen demand and suspended solids, and 90-99% for bacteria. Its design uses gravity to reduce energy input, which is approximately 30% lower the previous system that relied on electric-driven aerators for wastewater treatment.

During construction



After construction



Treasury Americas electric fleet vehicle.

6 F21 baseline is 47,348 tonnes CO₂e.

Climate risk and GHG emissions

Scope 3 emissions

Scope 3 emissions are the indirect emissions from activities we rely on to package our goods, operate our business and provide products to our customers and consumers. This includes emissions upstream (i.e. made by our suppliers when manufacturing packaging) or downstream (i.e. by the transportation of goods to customers and consumers) to our operations. They are difficult to accurately measure because, in many ways, they are out of our direct control. Scope 3 emissions account for a significant portion of our overall footprint – around 405,000 tonnes CO₂e – which is approximately 25 times our scope 1 and 2 footprint.

We continue to build a better understanding of the various sources and associated emission profiles that make up our scope 3 footprint. In accordance with the GHG Protocol⁷, our greenhouse gas emission disclosures include all relevant scope 3 emission categories⁸. Within these categories, purchased goods and services (category 1) and upstream transportation and distribution (category 4) contribute to most of our scope 3 emissions, at 67% and 17% respectively. We follow a detailed scope 3 assessment methodology that was updated over F24, which is available at [tweglobal.com](https://www.tweglobal.com).

A significant portion of our scope 3 data relies on informed assumptions and estimates. This year, we took further steps to improve the accuracy of our data and our methodology. This has meant a re-baselining of our F22 scope 3 assessment, which was completed in F23. Our relevant categories remain the same and are summarised in the graphic below.

These methodological refinements and re-baselining have resulted in adjustments to our scope 3 emission footprint. If we compare F22 (reported) to re-baselined we see a 8.2% reduction. Overall, the scope 3 footprint changed 25.1% between the years (F22 reported to F23). Despite these methodological changes, purchased goods and services (category 1) and upstream transportation and distribution (category 4) remain the two leading contributors to our scope 3 footprint (covering 85% of scope 3 footprint under the new methodology).

There are also changes as we advance from generic spend and sector-based emissions factors to company-level emissions as our suppliers’ ability to provide this data improves. Our approach was also adjusted this year to cover our top suppliers globally based on their estimated share of overall emissions. In total we sent 110 requests, covering 36% of supplier spend but approximately 60% of emissions. However, many of our suppliers are in the early stages of emissions data collection or have not fully accounted for their scope 1 and 2 emission footprints and were unable to provide sufficient quality data. A total of 19 suppliers were able to participate in the survey, indicating there is more work to do to build capability and reporting system maturity among our suppliers.

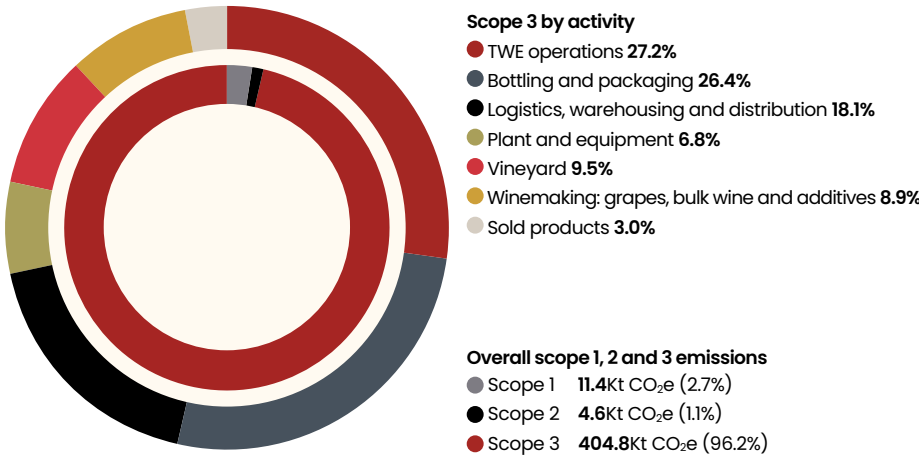
While we were able to re-baseline this year, we anticipate that in some instances, it may not be possible to re-baseline prior year data. Given that this is an area of maturing practice and standards, we are committed to being as transparent as possible and we will identify when re-baselining can or cannot occur, as well as providing relevant contextual information. Details of movements in each of our material scope 3 categories from this year (F23) to the previous (F22) are available in our scope 3 emissions methodology.

To help address this ahead of requesting information, we worked more closely with some of our suppliers, hosting webinars to improve their understanding of the process and the role we needed them to play. We will continue to engage with our suppliers and support them as their data, support and alignment on a 1.5°C world is essential.

Most of our data is based on the amount spent across the supply chain, resulting in a one-year lag in reporting due to the time, sourcing, and verification of the data. As we continue to measure our footprint into the future, we will use the most relevant and accessible methodologies and boundaries at the time of review. This may mean our carbon footprint baseline numbers vary slightly over the years.

Emissions breakdown by scope and activity

Outer Ring: Scope 3 emissions by activity (F23)
Inner Ring: Scope 1 and 2 emissions (F24) and overall scope 3 (F23)



7 The Corporate Value Chain (Scope 3) Accounting and Reporting Standard.
8 Our relevant scope 3 categories are as follows, and the numbers are rounded: 1 – Purchased goods and services (272,000 tonnes CO₂e/year); 2 – Capital goods (29,600); 3 – Fuel and energy related activities (9,600 tonnes); 4 – Upstream transportation and distribution (70,100); 5 – Waste generated in operations (1,300); 6 – Business travel (1,200); 7 – Employee commuting (5,200); 9 – Downstream transportation and distribution (8,100); 10 – Processing of sold products (200); 11 – Use of sold products (4,000); 12 – End of life treatment of sold products (2,600); 13 – Downstream leased assets (900). Refer to our basis of preparation document for scope 3 further information on our methodology and calculation approach.

Adapting our business

It is evident that ongoing climatic changes and extreme events are causing disruption, and the ongoing success of our business will depend on building and enhancing resilience. Global vintages over 2023 and 2024 brought a number of challenging conditions. The 2023 calendar year was confirmed as the warmest year on record, and the earth just experienced its warmest day in human history (global average temperature). Across the world, our seasons had a range of conditions to manage.

Climatic events and extremes experienced in F24

Location	Physical climate-related challenges experienced	Impact to TWE
Australia	- Significant variability of weather within-season - An El Niño event was declared with below-average rainfall and warmer conditions predicted. Despite being drier overall, there were notable high impact rainfall events - Temperatures were average, driven by a combination of warmer spring temperatures and average ripening conditions. Within these average conditions, there were notable spikes in temperatures.	- Extreme temperature events at flowering in Central, Fleurieu and inland Murray regions of South Australia - Late spring frosts - A series of fires in western Victoria led to smoke taint affecting fruit.
California (NB: 2023 vintage as 2024 is mid-season at time of writing)	- Record snowpack and above (north coast), to very above average rainfall (central coast and interior) which eliminated surface water drought - Late budbreak continued throughout a relatively cool season (coastal California was below long-term average temperature), culminating in slow ripening and a very late harvest.	- Some flooding occurred, damaging irrigation infrastructure - Extremely late harvest and high yields caused vintage compression.
France (NB: 2023 vintage as 2024 is mid-season at time of writing)	- High climatic variability between our growing regions - Humid and wet pre-vintage with extreme temperatures impacted during June and July 2023, increasing water stress - Parts of south of France experienced heavy rainfall and an episode cévenol (period of intense storms) and incredibly heavy rains, causing extensive flooding in Languedoc.	- Reduced yield - High downy mildew pressure - In regions with high heat, alcohol content increased with a decoupling from phenolic maturity.
Italy (NB: 2023 vintage as 2024 is mid-season at time of writing)	- High mildew pressure experienced early in the season - High temperatures and hot winds immediately prior to harvest (June and July 2023).	Reduced yield and quality.
New Zealand	- Warmer than average season, with lower growing season rainfall totals driven by El Niño - December, January and February were significantly drier than average and exacerbated by a windy summer, resulting in overall lower humidity, but higher evapotranspiration.	- Overall, disease pressure was significantly reduced - Phenological stages were shorter, in particular the period between flowering and harvest. This resulted in harvest commencing earlier than average, driven by a combination of above-average temperatures and lower yields.

Climate risk and GHG emissions

Our strategic approach to climate change

Our strategic response and action on climate change considers the projected physical and transitional impacts, as well as a range of opportunities. We assess climate risk in line with our Enterprise Risk Management Framework (ERM Framework) and use a range of approaches to anticipate short-term weather conditions through to longer-term climate impacts.

Building our capability on climate risk – from both a data and management perspective – will be increasingly critical to ensure we make informed, strategic decisions considering longer-term possible future conditions. A critical starting point is a climate adaptive business strategy. Our multi-regional sourcing program features an agile, efficient production and processing footprint. These strategic approaches are designed to increase our resilience to a changing climate and provide greater flexibility.

A range of operational measures and equipment also support the delivery of our strategy, and ensure we have greater control over production consistency and quality. This includes detailed weather data and forecasting, as well as technology to measure factors such as moisture at various soil depths and canopy stress. Development of vineyards incorporates the latest thinking (e.g. row orientation and optimised irrigation technology) and agronomic practices such as delayed pruning. Together with altered canopy architecture, these factors help manage various aspects and ensure quality.

Collaboration with universities and industry experts helps ensure continued research and development in new and emerging technologies. For example, in Australia we have partnered with the Australian Government's scientific research agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), to implement traditional breeding practices that select for disease resistance. In the US, we are participating in a soil biochar project funded by the United States Department of Agriculture (USDA) in collaboration with the Napa Resource Conservation District (RCD). We also work with a range of start-ups, applying new thinking and technology to assist with yield and harvest predictions. We actively participate in industry forums to help inform our thinking on the emerging policy and regulatory landscape and share our approach, challenges, and progress with peers and interested stakeholders.

Potential impacts of climate change to TWE

Unless we take reasonable steps to strengthen our overall business adaptability and resilience, our ability to grow, make, and market quality wines will be affected by various climate risk factors in the future. Our analysis indicates we are exposed to a changing climate, with high and low emission scenarios likely to present challenges to our business, strategy, and operations. The level of global emissions will drive the significance, timing and impact of climate-related risks and opportunities. Our climate modelling suggests that climate-related risks are materially more severe under the high emissions scenario. In most cases, the projections do not widely diverge until after 2030.

Climate Scenario Analysis (CSA) shows that there will be a range of physical impacts experienced from the middle of this century (2050) on our viticulture assets, including:

- Variations in yield, quality and fruit expression as flavour and colour development decouple from sugar ripening at elevated temperatures
- Changes in growing season temperatures which could lead to compressed vintages and varietal suitability across the different regions where we operate
- Increasing aridity will change the availability and supply of water, likely driving increased demand. This could lead to water security, yield and quality being at risk, as well as escalation of purchasing prices
- Increased frequency and severity of extreme events such as frost, high winds, hail, heavy rain and flooding, heatwaves, and extreme heat factors
- Increased pest and disease pressure, bushfire risk (wildfires), and smoke taint.

Equally, there are a range of transition risks which we are exposed to. They include those arising from policy, legal, technology, market and reputational changes associated with the transition (or lack thereof) to a low-carbon economy. We continue to monitor and understand emerging trends, policy developments, and changing customer and consumer preferences. There is significant opportunity and value in responding to climate change and its impacts, and businesses combined with industry that take the lead will be well placed to demonstrate resilience and succeed in the future.

Each year we aim to build our understanding of climate risk and preparedness for a changing climate. We continue to conduct deep dive assessments of specific regions or assess specific areas across our portfolio. In F24 we conducted a specific assessment of our Cabernet growing operations in California's Napa Valley, detailed in the case study on the next page.

We recently conducted a cross-company exercise assessing climate-related risks and opportunities across our business and value chain. It found that yield, quality, and vintage timing changes resulting from physical risk factors will impact some growing and winemaking processes and affect a range of supply chain inputs. Our logistics and freight will also need to consider the changing climate to ensure temperature control and storage requirements are met. The assessment also highlighted future regulatory changes relating to areas such as water security, carbon pricing mechanisms, packaging, and land use changes could impact various stages of our value chain. In addition, pressures arising from stakeholders such as investors, local communities where we operate, and consumers, raise both risks and opportunities. In F25 we plan to undertake further in-depth assessments adopting both a worst-case scenario and Paris aligned scenario, develop a risk and opportunity register, and begin to understand the possible financial implications of these risks and opportunities.

Climate adaptation

Even with concerted action to reduce global emissions in the near term, humanity will need to adapt to a changing climate. We continue to build an array of known and potential adaptation options for our viticultural assets to ensure we identify and respond to the most pressing issues at each location.

Assessing climate risk and cabernet in the Napa Valley

We used one scenario – the worst-case or business-as-usual scenario (RCP8.5) – because it is most reflective of the current trajectory of emissions and the most appropriate scenario to ensure we are prepared and consider the worst-case projected impacts of climate change in the middle of this century (2040-60). A range of metrics was assessed, including those broadly related to temperature (including the likelihood of extreme heat events, heatwaves, and bushfires), water (including total availability and winter rainfall, the likelihood of extreme rain and flood) and the suitability of grape varieties to growing season temperatures more specifically. The outcomes of this empirical assessment were 'ground-truthed' with localised knowledge.

The models predict a rise in the frequency of extreme temperature conditions (particularly high growing season temperature and heat events) as we get closer to mid-century. In contrast, average precipitation is projected to remain relatively flat, but with heightened variability – both compared to current patterns with less rain in the 'shoulder months' and greater chances of drier or wetter seasons running together. This is likely to impact the supply of luxury Cabernet Sauvignon fruit, with associated increases in costs.



Cabernet vineyard in Napa Valley, California.

Canopy cover in the Barossa Valley

Over F24, we continued to pilot a range of adaptation measures to support our strategy and enhance our overall resilience to the practical challenges faced by the physical climatic impacts. We invested A\$1 million into an enclosed vineyard canopy at our 14-hectare Koonunga Hill vineyard in the Barossa Valley, South Australia.

The Barossa Valley is a key sourcing region for some of our best-known luxury Shiraz and Cabernet wines, with the Koonunga Hill site specifically contributing to some of the most renowned wines in the Penfolds portfolio including Grange, Bin 707, St Henri, and RWT (Red Winemaking Trial) Bin 798 Barossa Valley Shiraz. The region is also considered a higher-risk water catchment area, and therefore creating conditions where vines producing luxury grapes can thrive with less water is a significant step forward in our climate resilience efforts.

While the experiment is still in its early phases, grapes harvested over vintage 2024 have shown potential, by ripening earlier with more colour vibrancy when compared to similar fruit sourced from outside the canopy. We will continue to monitor this pilot over coming growing seasons with an array of technology and sensors.



Enclosed canopy at our Koonunga Hill vineyard in the Barossa Valley, South Australia.

Fostering healthy and inclusive communities

A healthy and safe workplace is our priority, and behind every bottle of wine is a team that is also passionate about building an inclusive and equitable culture that delivers better outcomes for all of our stakeholders. At TWE, we want to foster safe, sociable, and connected communities where our brands are promoted, and our wine consumed safely and responsibly.



We achieved a 39% reduction in the 3-year rolling Serious Safety Incident Frequency Rate as a result of the ongoing focus and continued success of our Build Safe campaign



Women in senior leadership increased by 2.7 ppt to 47.2%, with overall female representation increasing by 1 ppt to 43.7%



Achieved an engagement score of 64% and inclusion score of 71% in our annual survey



Female representation on TWE's Board is 42.9%, with three female Directors out of seven as at 30 June 2024



We opened our Barossa Valley pilot plant Cellar 0, which will pioneer new products including wine that is lower in alcohol



Health, safety and wellbeing

A safe and supportive environment is crucial for promoting physical and mental wellbeing. The health, safety, and wellness of our team members and everyone who engages with our business is a core focus area. This commitment is evident in our proactive risk management and dedication to fostering a culture where health, safety, and wellness are collective responsibilities. By prioritising the overall wellbeing of our people, we enable our team to thrive and reach their full potential.

Progress

During F24 we strengthened our focus on our Destination Zero Harm ambition through a leader-led behavioural safety campaign ‘Build Safe Together’, as well as initiatives to design out safety hazards – with a particular focus on manual handling. We launched Safe Driving and Safe Celebrating double checks that continued to build awareness of key risks in our business while giving team members easy-to-follow checks and strategies, reinforcing the approach that safety is part of everyone’s role, no matter which division or location they’re in.

We introduced barrel claw equipment in the Barossa Valley Winery, the first of its kind in a wine production setting. The barrel handling technology has eliminated the manual handling previously involved in receiving empty barrels, minimising the risk of physical strain and injury. The initiative makes the site safer, more productive, and more efficient, while demonstrating our commitment to fostering a safe and healthy work environment.

In F24 we increased the use of collaborative robots (‘cobots’) in our packaging centre to reduce repetitive tasks and manual handling, including in our gift box processing area. For example, 3 litre bottles (weighing around 5kg) were previously manually handled from their carton into the automatic waxer and onto the labelling area. The process would be done 20 times an hour, with overall runs comprising 10,000 bottles. Cobots have helped eliminate a significant proportion of the manual handling risk in this process, with benefits to team members’ physical and mental health. The case study below has more information on our TWE Barossa Packaging Centre cobots.



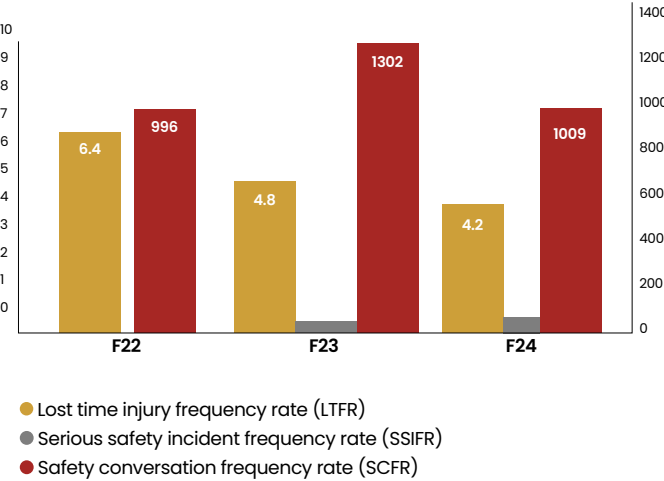
The Barossa Valley Winery’s barrel claw in action.

Safety metrics

Ongoing and innovative safety initiatives continue to drive a reduction in serious safety incidents and lost time injuries. To ensure sustained improvement, in F24 we shifted our Serious Safety Incident Frequency Rate (SSIFR) from a 12 month calculation to a 3 year frequency rate, and saw a 39% reduction from 0.9 to 0.55. Following 19 consecutive months without a Serious Safety Incident (SSI), one serious safety incident occurred in February. The Lost Time Injury Frequency Rate (LTIFR) also decreased by 12.5% to 4.2. As we mature our safety culture, safety conversations are becoming embedded into how we operate rather than a standalone, scheduled action.

While we’re confident that these conversations are part of regular site walks, toolboxes, team meetings, and in day-to-day interactions, the number of conversations recorded in our reporting system has declined, leading to a decrease in the Safety Conversation Frequency Rate from F23 to F24. Going forward, we’ll focus on a more targeted ‘safety observation’ approach as a lead indicator of safety leadership. This approach involves systematically observing and assessing workers’ actions in real time to identify both safe and unsafe practices, involving employees in the process to encourage personal responsibility for safety, and promote open communication about safety concerns.

Outline of our safety performance



Graeme Dingle Foundation visit to Matua Winery in New Zealand.



The Matua team in New Zealand hosting participants of the Graeme Dingle Foundation workplace experience program.

Health, safety and wellbeing

Mental wellbeing at TWE

We're well progressed in our mental health and wellbeing program, with a shift in the last 12 months towards overall wellbeing rather than addressing mental health and physical wellbeing as separate areas. A holistic wellbeing focus is more than risk mitigation: it's a key employee value proposition and important in attracting and retaining top talent.

In January 2024, we launched Lyra Employee Assistance Program globally to provide uniform, best-in-class access to therapists through an online booking system and more sessions available to our team members. The online system, Lyra Workplace Essentials, consolidates mental wellbeing resources into a single accessible location that proactively supports holistic wellbeing.

We also promoted mental health through our 'Build Safe Together' and 'Double Check' programs, face-to-face mental wellbeing workshops for people leaders and non-desk-based employees, and people leader upskilling to identify signs of stress and mental ill health in themselves and their teams, allowing them to access resources and provide timely support.

To support our refreshed approach to wellbeing, we have combined our global safety and mental health communication and activities into one annual wellbeing calendar covering news and activities across physical, mental and financial health. We've introduced the monthly 'Treasury Wellness' magazine which averages 300 online views each month. Physical copies of the magazine are also distributed across operational site lunch rooms and noticeboards for our frontline workers.

Safety highlights

Safety continues to be at the forefront of everything we do. Key highlights of our safety program from this year include:

- Launching the inaugural Global Safety Month across all our regions, designed to reinforce TWE's culture of safety, and further embed concepts such as 'double-check', 'Un Momento', 'Destination Zero Harm', and 'Build Safe Together'. The modular campaign allowed teams to curate a monthly agenda of content, activities and events relevant to their site, with promotion and encouragement from senior leaders. The month culminated in a live panel event with TWE team members across different regions and divisions discussing why safety is important to them and how they bring it to life within their teams.
- Achieving a back-to-back win in the South Australian Wine Industry Awards with our Barossa Valley Winery team member, Jordan Roesler, taking out the Safety Champion Award. This was awarded to Jordan for actively role modelling workplace health and safety through championing the implementation of new and improved equipment and processes to keep people safe.

- Partnering with our communities to spread safety, inside and outside TWE:
 - As we approached harvest in the US, our vineyard teams partnered with machinery suppliers to run a pre-harvest training day, giving our team members a hands-on opportunity to refresh operating skills on seasonal equipment such as harvesters, address equipment-related risks and reinforce what to do in the event of an incident.
 - Our Matua Winery team in New Zealand hosted its third group of students from the Graeme Dingle Foundation, as part of a program that supports young people across the country with insight into working environments across multiple industries. The visit covered our strong health and safety culture, our induction process, training videos, and a site tour.



Jordan Roesler wins the South Australian Wine Industry Association's Safety Champion Award.

Inclusion, equity and diversity

At TWE, it's in our DNA to bring our whole selves to work. The diversity of our people makes us unique, and we strive to create a professional and safe working environment where respect for human rights is the cornerstone of our culture and where everyone can contribute and feel included.

The diversity of our team and their contribution to the business broadens our collective knowledge and capabilities. It's also a source of competitive advantage, helping us understand and connect more effectively with our customers, consumers, communities, and each other. It is fundamental to being the world's most desirable luxury wine company.

Progress

As at 30 June 2024, TWE has achieved:

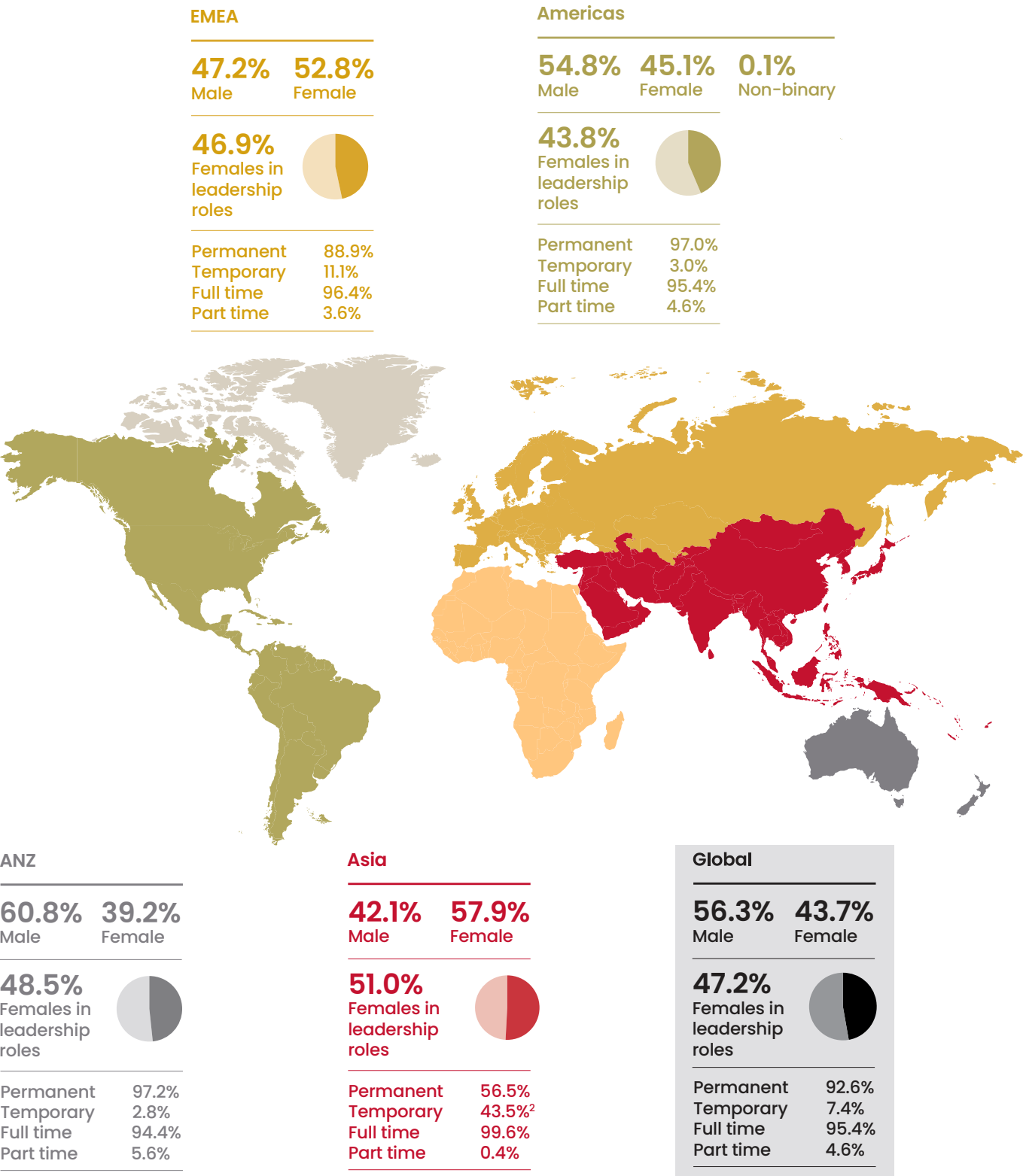
- 47.2% female representation in leadership roles, 2.7 percentage points closer towards our target of 50%
- 43.7% female representation overall, a 1 percentage point increase from F23, meeting our target of 42% overall women by 2025
- 42.9% female representation on the Board.

We continue to strive towards delivering our vision of 'One globally inclusive team where we all belong, contribute and thrive', through three strategic pillars:

1. Leaders who model our DNA: leaders who steadfastly role-model and lead inclusion and have a true understanding of employee experience and culture, enabled by world class leadership and development programs
2. Engaged employees, consumers, and communities: employees who bring their whole selves to work, consumers who recognise our commitment to inclusion, equity and diversity through our brands and partnerships with purpose-aligned communities, suppliers and initiatives which produce meaningful outcomes
3. Employer of choice: Industry leading policies and work processes that maximise inclusion and minimise bias, innovation optimised through team contribution and data informed plans and allocation of resources.

TWE's commitment to Inclusion, Equity and Diversity (IE&D) is governed through an IE&D policy and strategy, which is overseen by the Board, the Global IE&D Council, and supported by Regional IE&D Committees and Employee Resource Groups. IE&D commitments are included in the Key Performance Objectives of ELT members and selected senior leaders. The TWE Board is also committed to ensuring that it maintains a membership of individuals with diverse experience and backgrounds, including cultural, geographic and gender aspects to ensure that TWE maintain a broad representation and support the Company's strategic objectives. Further information on diversity can be found in our Corporate Governance Statement.

A snapshot of TWE employees across the world¹



¹ The information in this table is current as of 30 June 2024 and includes casual, on call and seasonal employees and excludes contractors, which make up 5.0% of TWE's total workforce.
² The Asia region has a higher proportion of employees identified as 'Temporary' due to common legal practice in China to place employees on three-year fixed term contracts. After 10 years, an employee is considered permanent.

Inclusion, equity and diversity

This year the IE&D plan built on the foundations established in recent years, and repositioned IE&D as leader-led and integrated into the way that we work and inclusive of all employees. Key achievements against each strategic pillar are outlined in further detail below.

Leaders who model our DNA

Our ambition, in seeking to continuously progress our IE&D maturity as a company, is to create a culture that is inclusive of all. While we’ve made significant progress demonstrating a leadership-led, visible commitment to IE&D and embedding IE&D into our ways of working, we have some specific challenges to overcome in certain areas of the business. It was this insight that underpinned our IE&D plan and focus for F24; continuing to encourage leaders to embed IE&D into their ways of working, whilst seeking to better integrate IE&D activities and outcomes. This has been a particular focus in the growing, production, packaging and distribution of our wines which is managed by the Supply division.

The Supply Leadership Team and new members of the ELT participated in Inclusive Mentoring. In the US and ANZ, IE&D and the Employee Resource Group (ERG) topics have been included in Front Line Supervisory training for new and developing front line leaders.

Engaged employees, consumers and communities

TWE recognises the importance of taking steps towards Reconciliation with Australia’s First Nations peoples, who are the traditional custodians of the land on which we grow, make and sell our wine. Under the guidance of the Chief Supply and Sustainability Officer, the Chief People Officer and Chief of Staff, and with the support of an external partner, TWE has submitted and received provisional approval from Reconciliation Australia for our first Reconciliation Action Plan (RAP). Full approval is expected in Q1 F25. Activities have commenced against each RAP element with a specific focus on establishing and strengthening mutually beneficial relationships with Aboriginal and Torres Strait Islander communities and organisations, and increasing understanding and recognition of Aboriginal and Torres Strait Islander cultures and histories.

As part of our ongoing commitment to raise awareness of a diverse range of causes and communities, we hosted or participated in events including 16 days of Activism against Gender Based Violence, International Women’s Day, A Taste of Harmony, Pride Month, Indigenous Walks of Melbourne and Culture Days. We also participated in industry events including The Black Food and Wine Experience in the US, Black Business Week and Diversity and Inclusion in Grocery LIVE! in the UK and the Yarra Network in Australia. We leveraged our brands to celebrate and raise awareness of the diversity of LGBTQIA+ communities, with TWE and Squealing Pig sponsoring the Summer of Love at the Australian Open tennis tournament in Melbourne.

In the US we initiated a distributor partnership alignment project. In Australia, we were recognised as an Australian Workplace Equality Index (AWEI) Silver Status Employer and participated in the Access and Inclusion Index for the first time, an important step in identifying, measuring and progressing TWE’s access and inclusion maturity.

Employer of choice

Until recently, we’ve collected demographic data (gender and date of birth) at the point of hire. Having limited data on our people restricts our ability to understand the make-up of our employee base and how to focus or tailor our policies, practices and ways of working. To support future IE&D planning, we’ve started to collect non-anonymised, personal demographic data for our people in the UK, US, Australia, New Zealand and Singapore. The process was designed following significant employee consultation and engagement, and an in-depth Data Protection Impact Assessment to ensure necessary controls and protect individual privacy. Employees are invited to voluntarily disclose demographic data including racial or cultural background, disability, caring status, sexual orientation, gender (including a non-binary option) and veteran status. Declaration rates vary by demographic category, with the highest participation rate for the ‘Primary culture, race or ethnicity’ category at 28%. The employee has the opportunity to enter the demographic data at the end of the onboarding process, with access to review, change or delete it at any time.

To ensure remuneration equity globally, we reviewed our gender pay gap to determine the difference between male and female earnings, irrespective of role or seniority. Eleven adjustments to remuneration were made as a result of this analysis in F24.

TWE Americas was recognised as the Healthiest Employers of the Bay Area in the mid-sized company category.

Consumer health and responsible drinking

As the producer of some of the world’s most renowned wines, consumers around the world have long enjoyed our wines as part of an occasion, building a collection for cellaring to drink later, or to pass down through generations. We recognise our role in promoting and celebrating moderation to foster safe, sociable, and connected communities.

Our progress against our commitments in F24 continues to be informed by the World Health Organisation’s (WHO) Global alcohol action plan, and the UN SDGs – both with the goal of reducing harmful use of alcohol by 20% by 2030 (compared to 2010).

Progress

Following the launch of our first Board-endorsed ‘Celebrating moderation’ Alcohol and Health Policy (the Policy), our focus in F24 has been delivering on our policy commitments. The Policy acknowledges our role as a leading global wine producer in promoting moderation to help build communities that are safe and sociable, where consumers have access to comprehensive information and a broad product range, including no-alcohol and low-alcohol wines, to make informed choices about their alcohol consumption. We’ve made pleasing progress in a range of areas including labelling, together with education to build awareness of responsible consumption among our global team and through external channels, in collaboration with global industry partners.

Our existing Alcohol Policy sets out TWE’s expectations for responsible consumption of alcohol by our employees, contractors, consultants and visitors to our sites. Approximately 95% of eligible employees completed the associated mandatory compliance training in F24. Our Fair Trading Policy, which details our approach to responsible consumption in our marketing materials, was completed by 93% of eligible employees in F24.

Product transparency

We believe information about alcoholic products should be readily accessible by consumers to support their decision making on alcohol consumption. Product transparency supports alcohol health literacy, and our Policy details our commitments on labelling across our product range, including a general health warning on all products (on track for implementation from 1 January 2025), as well as energy information for all products from 2025 (where permitted by regulation and excluding products below 375ml). Around 40% of our products now carry on-label energy information.

The implementation of labelling transparency initiatives is subject to a number of complexities, including changes in global regulatory requirements (such as those introduced in the EU December 2023, which require wine labels to contain a QR code that links to online nutritional information).

Given foreshadowed regulatory reform in Australia and New Zealand, we’ve extended the timeline for the labelling change for approximately half of our global SKUs. To continue supporting consumers to make informed choices during this transition period, product-specific energy information is available at tweglobal.com/calories.

Leading in moderation

Aligning with our broader sustainability ambition, we’ve invested significantly in R&D and partnered with industry pioneers around the world to improve the taste of no and low alcohol wine and build on the brand equity in our existing portfolio. We aspire to lead the industry in moderation and responsible consumption. With a continued focus on experimentation and ing with winemaking techniques for improved flavour profile and a fresh approach to marketing the category, we further expanded our no-alcohol and low-alcohol product range to offer consumers even more choice. Leveraging our winemaking credentials, global reach and diverse portfolio of brands, we’ve cemented our leadership position in this growing segment by bringing together the art of traditional winemaking and the science of cutting-edge de-alcoholisation and flavour retention technology.

We’ve grown our product range in the brands that our consumers know and love. Joining the award-winning Wolf Blass Zero range, 19 Crimes, the Pepperjack mid-strength products released in F23, Matua Lighter, and Lindeman’s ranges, the popular Squealing Pig brand complementing no-alcohol and low-alcohol/low alternatives in a number of brands in the portfolio including Pepperjack, Lindeman’s and Wolf Blass, Squealing Pig expanded its no and low alcohol offering this year with mid-strength Sparkling Pinot Noir and Sauvignon Blanc, as well as a no-alcohol Sauvignon Blanc and Rosé that’s also available as a half bottle.

Recognising the ongoing strength of the category, in F24 we also opened our pilot plant in the Barossa: Cellar 0. The facility is designed to support small-scale experimentation in new products that respond to consumer needs, including the growing popularity of wine that’s lower in alcohol.

Collective impact

Industry, government, and other stakeholders need to collaborate if we are to reduce harmful consumption of alcohol. We work with several industry groups and organisations to promote responsible consumption programs and community activities including DrinkWise (AU/NZ), Drinkaware (UK), Portman Group (UK), The Australian Alcohol Beverages Advertising Code Scheme (ABAC), and Community Alcohol Partnerships (UK).

As part of our commitment to working with organisations that help achieve the WHO target of a 20% reduction of harmful alcohol use by 2030, we have reviewed TWE’s alignment with new and existing partners to ensure their support of the targets.

Demonstrating our long-term commitment to industry engagement and representation, we continue to hold Board and Committee roles across a range of

Consumer health and responsible drinking

organisations in our key operating regions. In 2024, TWE assumed the industry-nominated Director role for the independent, not-for-profit Australian organisation DrinkWise, representing Australian Grape and Wine. Our DrinkWise membership is one of our most significant industry investments, and together with our peers and industry contributors, is an important platform to create a healthier and safer culture of alcohol consumption in Australia. TWE representatives chair the Large Winemakers Membership Committee of Australian Grape and Wine, and have roles on the US national wine industry association Wine America’s Executive Committee having concluded a two-year term as Chair. Also in the US, TWE is represented in an elected role on the Wine Institute’s Board of Directors.

TWE has joined the Portman Group, the UK’s social responsibility body and regulator for alcohol labelling, packaging and promotion. In London, TWE participated in the Wine and Spirit Trade Association’s policy working group to engage more deeply in the development of consumer health policy.

Initiatives we have supported and/or participated in during the year include:

- Drinkwise’s Parliamentary campaign for no-alcohol and low-alcohol products at Australia’s Parliament House
- Australian Grape and Wine’s Australian Federal Budget submission for advancement of the no-alcohol and low-alcohol product category
- As part of our strategic, long-term partnership with the China Alcoholic Drinks Association, we participated in the University Wine Education Program with Tsinghua University and Shanghai Jiao Tong University to promote responsible consumption
- TWE joined the non-government association Community Alcohol Partnerships (CAP) UK, which leads programs to reduce alcohol harm in local communities from drinking by young people under 25, with a particular emphasis on preventing underage drinking; with our involvement including taking part in their annual Parliamentary Reception.

Responsible marketing

Our commitment to the responsible marketing and sale of alcohol is covered by TWE’s Alcohol and Health Policy. TWE’s global Marketing teams complete training on the Alcohol Policy, Social Media Policy, as well a range of responsible marketing compliance materials and training provided by TWE’s global legal and governance team. Our marketing team ensures that all marketing communications comply with the Policy through a comprehensive marketing checklist, by seeking legal guidance, and escalating approvals as required. This process applies to digital and social media, as well as traditional marketing platforms.

In F24 the Australian Communications and Media Authority (ACMA) received a complaint that TWE had allegedly sent unwanted marketing by SMS to a consumer. ACMA did not investigate the matter nor find that TWE had breached spam laws. Through an internal review, records showed that the complainant had not previously opted out of messages through the STOP functionality. To address

ACMA’s notification, the complainant was removed from receiving all future forms of communication. The STOP functionality on our SMSs was tested and confirmed to be operational and included in all SMS messages. A response was provided to ACMA, informing it of the internal review and remedial actions.

Review of responsible marketing

During F24, Australia’s Charles Sturt University was engaged to conduct an independent report on TWE’s marketing practices, to support our adoption of a leadership position in line with our consumer health and responsible drinking commitments. Due for completion in early F25, the report will provide in-depth analysis of current advertising materials and assess TWE’s level of compliance with global and local regulations, industry standards and voluntary codes of practice.

The benchmarking exercise covers a range of areas, with marketing practices for selected brands across relevant platforms compared in mature and emerging markets. The research methodology includes analysis of guidelines and checklists used by marketing and compliance teams, together with qualitative insight from legal, brand and marketing roles that specifically contribute to the implementation of responsible marketing in each region where we operate. The report findings will inform our future approach to responsible marketing.

Alcohol in the workplace

In partnership with the independent UK charity Drinkaware, we developed a training, education and engagement program that supports our policy commitment to improve alcohol health literacy among our team, create a healthy and productive working community, and lead by example in the international wine category. The first ‘Train the trainer’ session in partnership with Drinkaware was held in F24, with the content informing training guides for the remainder of the project, due for rollout during F25.

Our best practice global training program combines both e-learning and face-to-face modules to encourage interaction and will include region specific-health guidelines on themes including unit education, physical and mental wellbeing effects, impact on the workplace, drinking patterns and drink-free days.

In addition to raising awareness through education, TWE will support deeper engagement with region-specific resources so consistent and engaging information is accessible to all employees.

Consumer health and responsible drinking

Lighter wine appeals to the health-conscious consumer

Squealing Pig expanded its range of no and low alcohol wines in several formats in F24, catering to the growing demand for full-flavored wine experiences without the full effect of alcohol and joining the family of no and low alcohol products in our other popular brands including Wolf Blass, 19 Crimes, Pepperjack, Matua, and Lindeman’s. The new range gives consumers more options to participate in an occasion with the quirky and irreverent Squealing Pig brand.

The new mid-strength range – with alcohol by volume of between 5% and 6.5% – caters to those wanting a lower alcohol and calorie option and includes a Sparkling Pinot Noir and Sauvignon Blanc. They’re complemented by a zero alcohol Sauvignon Blanc and a Rosé that’s also available in a 375ml size. The innovative winemaking techniques used for these products have resulted in a range that’s as close as possible to the full-alcohol version of each varietal in taste, aroma and structure, catering to a variety of palettes and preferences. In line with its accessible, fun approach to consumer marketing, the launch of the range was accompanied by campaign taglines: “This little pig found its midweek match”, and “This little pig had zip, zero, zilch.”



Squealing Pig Zero Sauvignon Blanc.



Squealing Pig mid-strength wines: New Zealand Sauvignon Blanc, Prosecco and Victorian Pinot Noir.

Product quality and food safety

At TWE, we commit to making products that are consistently high quality, safe for consumption and compliant with market access requirements in each region of sale. This commitment is underpinned and delivered by adherence to our Food Safety and Quality Management systems.

Progress

During F24 our technical teams took a ‘back to basics’ approach with the communication and training requirements for our food safety and quality systems, in an effort to further improve employee engagement and further enhance the effectiveness of our Quality Management systems.

With continuous improvement at the core of our approach, our teams have a focus on training to strengthen our food safety and quality culture, and upskill employees to understand the importance of our food, safety and quality system within our broader business priorities.

We successfully maintained our third-party Quality and Food Safety accreditations across key operating regions. We continued to utilise our specification management and bottling approval systems to ensure that our wines consistently meet high-quality standards across our

portfolio. By effectively implementing these standards with our wine supply partners, we achieve consistency in wine blend style and compliance with regulations in both source and sales regions.

Our Quality Management systems are integrated into our production processes, guaranteeing the reliable delivery of high-quality wine products. As our Quality and Assurance system develops, we actively review our internal verification performance to identify opportunities to improve. We are currently standardising our change management processes across the business and formalising our completion review. This will ensure that changes are implemented to standard, and lessons learned are shared across the business.



Grapes being crushed following harvest.

Traceability
TWE’s food safety and quality management systems span our grape growing, winemaking, and packaging processes from raw materials to distribution. These systems are designed to ensure traceability of all aspects of grape growing and winemaking inputs from grape to bottle and ultimately the consumer. The track and trace system captures the specific variety timing and location of fruit sourcing (i.e. to a vineyard block) as well as use of agrochemicals (e.g. herbicide, pesticide and fertiliser). In the winery each parcel is tracked through the winemaking process to the final bottled product composition, picking up additional information at each stage (e.g. additives and processing aids and dry good materials).
Over F24 in Australia we expanded the capability of our traceability systems to support verification of our Sustainable Winegrowing Australia (SWA) traceability processes. This has become an important step in the overall process, as our scope of eligible products has increased significantly in alignment with our expansion of SWA certified grape and wine sourcing (see the sustainable growing and production section). This increased sourcing of SWA certified fruit and wine allows us to communicate our sustainability credentials on package in the marketplace as well as in supporting material (e.g. tasting notes).
TWE’s product quality and food safety systems are verified via third party audits and certifications. These vary by region and include Hazard Analysis Critical Control Points (HACCP), BRCGS Global Food Safety Standard, and Food Safety System Certification 22000 (FSSC). We challenge our traceability systems on an annual basis to verify our ability to trace products in an effective and timely manner.

Community

As a business with a significant operational footprint in regional winegrowing areas, we’re proud to contribute to local communities as an employer, purchaser and through our community relations and engagement. Our community engagement is focused on positive impact, to build strong, long-term relationships, and includes collaboration through partnerships, volunteering opportunities, and regional economic development initiatives.

Progress

We are involved in local communities through a range of partnerships and volunteering activities. To encourage connections between our people and their local communities through fundraising and volunteering activities they’re passionate about, we provide two days of paid volunteer leave each year and the opportunity to boost fundraising activities with matched donations.

Fundraising and volunteering activities

In F24 our global teams engaged in a range of activities, and our charitable partners received financial and volunteering support as well as product donations to support their fundraising activity. In the US, volunteers from the Treasury Americas team planted a monarch butterfly garden at Etude Winery in partnership with invertebrate conservation not-for-profit organisation The Xerces Society. Around 700 native California transplants were planted in the garden, including milkweed, vervain, phacelia, and California goldenrod, helping create a pollinator habitat that contributes to Etude’s commitment to sustainability.

In the Barossa Valley, South Australia, volunteering activities included building aviaries and wildlife enclosures at Barossa Wildlife Rescue, and planting native plants with the Friends of Barossa Bush Gardens.

Our team in Italy volunteered at the local ‘Campionato della Bistecca’ (Steak Championship) in Mercatale, located in the Tuscan municipality of San Casciano in Val di Pesa. The annual initiative by Pro Loco San Casciano is designed to promote and enhance the tourist, cultural, environmental, social, historical, and artistic development of the local area. Volunteers supported the Association of Chianti Classico Producers of San Casciano, which Castello di Gabbiano is a member of.

In France, a tree planting initiative to support the local Rugby team means that for every point the Bordeaux Rugby Team scores at home, Essai Vin Coeur plants 10 trees in the Bordeaux vineyards.

Supporting STEM

We continued to support local schools and universities over F24 with work experience opportunities and in-kind support for STEM and agricultural studies. Our collaboration with the University of Adelaide supports student research about grapevine productivity and sustainable viticulture practices. TWE Barossa Valley

hosted a group of 67 University of Adelaide Oenology students and provided insight into sustainable practices in wine clarification and stabilisation.

In addition, Penfolds funds a PhD scholarship through the University of Adelaide to support a student’s research in alternate and adaptive grape varieties that have the potential to adapt to a changing climate. Penfolds, in collaboration with the China Agricultural University, launched the One by Penfolds student fund in 2022. The collaboration supports winemaking and viticulture studies, and provides financial assistance together with academic and cultural exchange. To date, the program has supported more than 20 students with their studies.



Monarch butterfly garden planting at Etude in California.



TWE team members installing an aviary at Barossa Wildlife.



TWE Italy team at Campionato della Bistecca.

Community

Penfolds Evermore

Penfolds Evermore commits to making a positive contribution towards a world where future generations can thrive. Evermore has three strategic priorities:

- Community and culture: Supporting Penfolds communities, local and global to thrive through fostering connection and culture
- Future winemaking: Advancing winemaking and viticulture through ongoing innovation and supporting the next generation of bold and curious winemakers
- Towards sustainability: Taking steps to help preserve our natural world, focusing on production practices and innovative winemaking and viticulture.

Penfolds Evermore grant program

Under the community and culture priority area, we have established the Penfolds Evermore Grant Program, with A\$1 million dedicated to support local communities over the next five years. In F24 the pilot grant program launched in Australia. Following Australia, the grant will be available to communities in France, the US and China. The purpose of the Penfolds Evermore grant program is to support community and culture in communities across the themes of food, winemaking and viticulture and creative arts.

Penfolds Evermore will fund innovative and visionary projects that are aligned with Penfolds Evermore’s vision. In Australia, from the 80 applications received, the following four successful recipients shared Evermore’s A\$200,000 funding pool:

A Fitting Connection | Project FeFELT

A Fitting Connection will use the grant to transform textile waste into recycled fabrics and run workshops to empower individuals with disabilities to create new, sustainable fabrics, as well as supporting them to establish micro businesses.



A Fitting Connection project underway.

Planting Seeds Project | B&B Highway Project

The B&B Highway is a regenerative and educational community initiative focusing on bees, birds, plants and other pollinators essential for biodiversity and ecosystem health.

Mobius Farms | Closing the Loop on Grape Marc Project

Using grape marc (a residue of winemaking) as a feedstock, this project will assess the impacts of insect frass (castings) on vineyard soil and plant health, with an aim of enhancing viticulture sustainability through insect bioconversion.



Insect frass.

Barossa Farmer’s Market | Kitchen Library Project

A new kitchen library in South Australia will act as a hub for community, connection, information, and knowledge through food preparation equipment and educational workshops. The project is designed to connect people to healthy, seasonal and local produce.



Trevallie Orchard stall at the Barossa Farmers Market.





Sustainable growing and production

We are committed to implementing and promoting sustainable wine growing practices wherever we operate. Wine production is energy and water intensive, and adopting sustainable agricultural practices is crucial to maximise the efficient use of resources.

We seek to maintain and improve nature-related interdependencies such as soil health, biodiversity, access to clean water, and habitat protection. Sustainable practices can also enhance natural ecosystem services, which can reduce negative impacts from invasive species, catastrophic wildfires, excessive flooding, and extended drought. Careful measurement of the resources we use, coupled with the adoption of lower carbon technologies, can collectively support our commitment to long-term sustainable growing and production.

Upholding these practices is underpinned by our environmental management system, which aims to safeguard our environmental footprint and implement continuous improvement. TWE's Environment Policy reflects our commitment to sustainability and recognises the direct link between effective management of our environmental impacts and our overall business success. We continue to review and adjust relevant processes to increase efficiencies and minimise our impact.

Progress

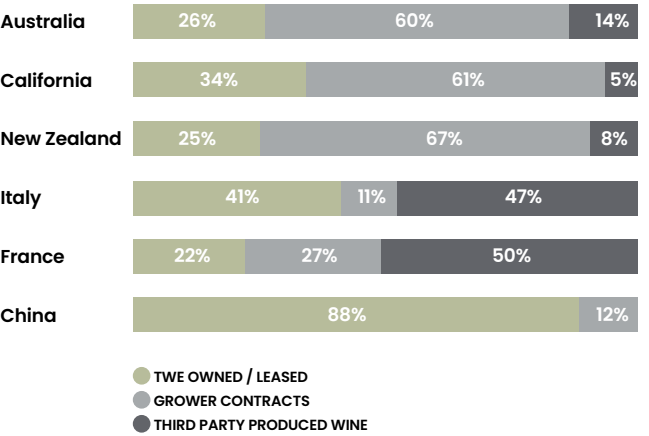
A fundamental component of our sustainable growing and production approach is the attainment and retention of third-party verified sustainability certifications. These sustainability certification schemes are applied to our owned and leased vineyards and wineries while encouraging an increasing proportion of our growers and bulk wine producers to participate.

We align these certification schemes where possible to local sustainability standards, which generally require annual reporting on our practices and progress. Over F24 our global focus has remained on maintaining or increasing the proportion of certified sustainable products we produce.

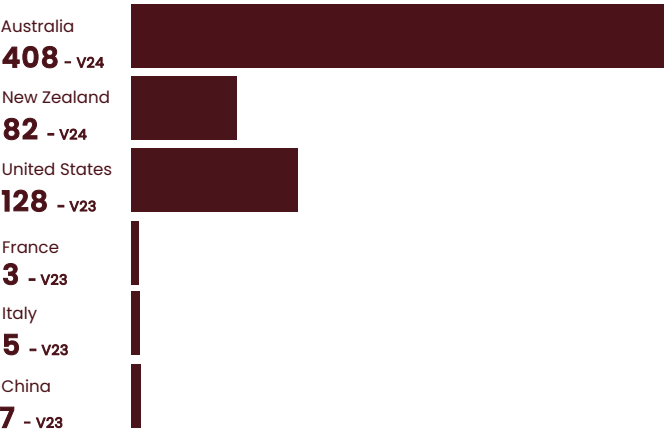
Grape growing and sourcing

TWE has a variety of fruit sources including owned and leased vineyards, contracted growers, and the bulk wine market – the diagram below shows a proportional summary by region. This approach provides flexibility through the economic cycle and assists with managing the risks arising from agricultural factors beyond our operational control such as pests, disease, and extreme weather conditions (see the climate risk and GHG emission section for further detail). TWE's owned vineyards ensure consistent access to premium fruit from key viticultural regions including the Barossa Valley and Coonawarra in Australia, Marlborough in New Zealand, Napa Valley and Paso Robles in California, and the Bordeaux region of France.

TWE's regional sourcing model¹



Grape growing partners



1. Regional sourcing is historical data for the northern hemisphere 2023 vintage and the southern hemisphere 2024 vintage.

Our grape growing partners are an important aspect of improving growth and resilience across our business and help mitigate risks such as variable weather cycles and climate change. Our wines rely on grapes sourced from our directly managed vineyards and grower vineyards, with the graph on the previous page highlighting our global grape growing partners. Collaboration with our growers is key to supporting sustainable growing outcomes and achieving region-relevant sustainability certification.

In May 2024, TWE collaborated with other major players in Australia's wine industry, calling on the Australian Government to support winegrowers across inland regions who continue to face an oversupply of commercial red wine grapes. As a result of recent trade impediments, climate change impacts, and evolving consumer preferences, the fundamentals of the

commercial wine segment have changed substantially. The businesses of some commercial wine growers – particularly in inland regions of South Australia such as Riverina, Riverland and Murray Darling – are no longer viable, with many exiting the industry. Governments around the world, including in Chile, the United States, and France, have provided significant financial support packages to alleviate similar challenges for wine growers and their local industry in recent years.



In F24, TWE retained the following certifications for both owned and leased vineyards and wineries, and grower and bulk wine:

- Australia:** Sustainable Winegrowing Australia (SWA)
- New Zealand:** Sustainable Winegrowing New Zealand (SWNZ)
- Americas:** Certified California Sustainable Winegrowing (CCSW), Fish Friendly Farming, Napa Green Winery, Lodi Rules, Landsmart, Oregon LIVE
- Italy:** VIVA Sustainable Wine, ISO 14001 – Environmental Management and SA8000 – Social Accountability Standard
- France:** Haute Valeur Environnementale (HVE), ISO 14001 – Environmental Management and Level 3 of Label Cultivons Demain (based on ISO 26000 – CSR).



Winemaking process underway.

Sustainable growing and production

Certifying our wines

Over F24 we maintained the relevant sustainability certification across 99.2% of our owned and leased winery and vineyard sites globally. In Australia, 90.7% of intake (i.e. own fruit, grower and bulk wine) was Sustainable Winegrowing Australia (SWA) certified in V24. This comprises 89% for growers and approximately 75% of the volume through contract processors and bulk wine partners. Around 16 million litres of wine was eligible to use the SWA trust mark on the label for brands such as Wynns, Coldstream Hills and Devil’s Lair in F24.

We continued to maintain 100% certification across our New Zealand owned and leased winery and vineyard sites as well as contracted growers and bulk wine suppliers.

Similarly, 100% of owned and leased vineyards and 85% of grower vineyards in the US were certified by one or more sustainability certification programs for vintage 2023. Combined, this resulted in 95.2% of grapes being certified, allowing an additional 23 SKUs to show sustainability certification on the bottle in F24.

The EMEA region has a long history of sustainable farming, and we continue to leverage this strong base with advances in both sustainability and environmental certifications more broadly. In France, all company-owned vineyards (Cambon, Belle-Vue and Lanessan) have been certified with High Environmental Value Certification (HVE) and the ISO 14001 Environmental Standard. The HVE logo is currently being used on all wine labels of these brands. In Italy, Castello di

Gabbiano Estate has obtained certifications that reflect sustainability in viticulture as well as respect for labour rights, showcasing our dedication to broader social responsibility and sustainability. Our certifications include the VIVA Sustainability and Culture standard, ISO 14001, and SA8000 standard. Five of our wines, all crafted from 100% estate-grown fruit, display the VIVA logo on their labels. These wines are sold locally and globally, and include the Castello di Gabbiano Chianti Classico, Castello di Gabbiano Classico Riserva, Castello di Gabbiano Bellezza, Castello di Gabbiano Alleanzia, and Chianti EUC (produced by our subsidiary, BBI).

At present, no sustainable certification scheme applies to viticulture or winery operations in China.

TWE remains an active Founding Member of the Sustainable Wine Roundtable (SWR), providing input into the assessment mechanism to measure global sustainability standards against their previously published Global Reference Framework. TWE also collaborated with producers around the world to develop the SWR’s Sustainable Viticulture Protocol, which highlights minimising chemical use, promoting regenerative practices, supporting diverse growing conditions and ensuring sustainability across the supply chain. We remain committed to ensuring that our certifications are internationally recognised as best practice by retailers and readily understandable to our consumers, regardless of where they are purchased.

Environmental compliance

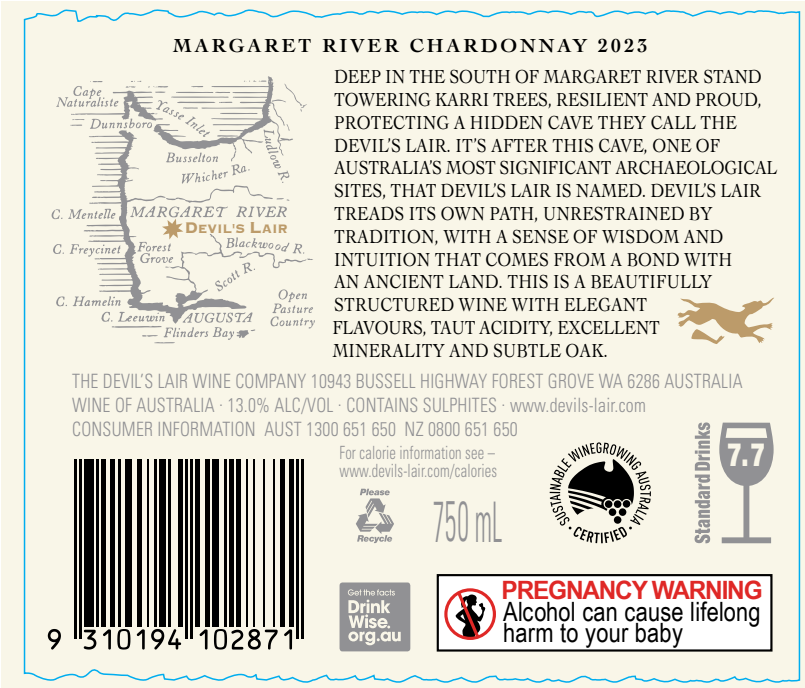
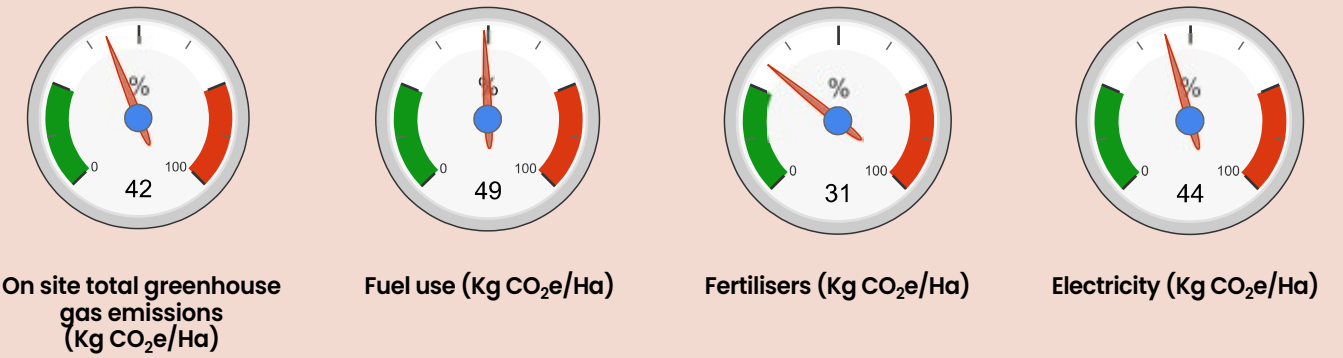
TWE is subject to various environmental laws and regulatory frameworks governing energy, water, waste, and greenhouse gas emission reporting across its global operations. TWE’s Environment Policy sets out the company’s commitment to environmental management, compliance, and continuous improvement. It is supported by a range of other policies, procedures, and management practices to ensure that we focus on resource efficiency and continuous improvement, and that environmental laws and permit conditions are complied with across our global footprint.

Our environmental management system includes practices and protocols about how we respond, manage, and learn from environmental incidents. There were three reportable environmental incidents that occurred in F24¹ – two of these were self-reported

to the environmental authorities, while the third was raised by the Department of Water and Environment during an Annual Environmental Report review at Devil’s Lair Winery. The self-reported incidents consisted of an exceedance of approximately 2ML identified against a water licence at Coonawarra, and incomplete biogas combustion in the Wastewater Treatment Plant Flare at the TWE Barossa Winery, resulting in high sulfur dioxide emissions into the atmosphere. Thorough investigations were conducted, and corrective actions were implemented to prevent similar incidents in the future.

Benchmarking performance of TWE’s Australian vineyards

As part of the SWA program, each member submits annual performance data and a workbook assessing current on-farm practices. This data allows the vineyard to benchmark its performance against peers based on yield, planted area, region, or country. The benchmarking results encourage the vineyard to develop a continuous improvement plan, driving operational excellence and promoting sustainable practices. Additionally, members benefit from improved resource efficiency, enhanced biodiversity, and increased market advantage through recognised sustainability certification. For example, the dials below show Padthaway vineyard’s ranking compared to others in Australia.



The SWA trust mark on the Devil’s Lair Margaret River Chardonnay 2023 wine label.



Certified Sustainable California trust mark on the Beringer Private Reserve Cabernet Sauvignon 2022 wine label.

1. Excludes DAOU and Weta.

Sustainable growing and production

Nurturing biodiversity

As caretakers of properties worldwide, we actively seek opportunities to improve and preserve habitat diversity and quality in conjunction with our operations. Our efforts span across a wide range of opportunities, from supporting kestrel research in California, to enhancing pollinator habitats around our cellar doors, and innovative approaches to wastewater treatment at our Castello di Gabbiano winery in Tuscany.

The US: American kestrel box at Gamble Ranch, Oakville. Nest boxes will be regularly checked to understand kestrel diet and breeding habits in California. Kestrel numbers have plunged by 50% since the 1970s, but TWE vineyard properties still provide high quality habitat for the birds.



France: 'Dry hedge' installation at Château Lanessan, Bordeaux France providing rich habitat for insects, small mammals, and the higher trophic levels of animals they support.



Italy: Constructed wetland treatment system – Castello di Gabbiano, Tuscany Italy.



Australia: Wynns winery team planting native trees and grasses at the Coonawarra siding, South Australia.



Australia: 15 years of water donations at our Markaranka Vineyard in South Australia, in collaboration with the Murraylands and Riverland Landscape Board, the Commonwealth Environmental Water Office, have led to a substantial regeneration of wetland habitat and increase in floodplain health.





Research and development

TWE continues to focus on research and development opportunities for new and innovative product offerings to improve our product quality and supply efficiencies and reduce risk. We partner with globally-recognised research institutes, start-ups, innovation (i.e. venture capital) funds and industry experts on research priorities aligned with TWE and industry requirements, which also keeps us informed of the latest scientific and technological developments.

Progress

In F24 we continued to focus on a range of research opportunities including innovation to mitigate or adapt to the changing environment on our viticultural footprint. Research breadth includes improving water availability and utilisation, managing vineyards to be more heat and drought tolerant, and improving our long-term climate prediction modelling. We also opened a dedicated small lot winery facility to expand our capability in research trials and new product development. The Barossa Valley facility provides for rapid testing and evaluation, accelerating adoption and scale up of new technologies. We continue to refine and improve our production methods and winemaking techniques related to our offering of no-alcohol and low-alcohol wines.

We continued to use technology to progress digital platforms and management of big data to better forecast vineyard production and changing weather patterns to protect our crops and improve overall operational efficiencies. Our research focus on

automation has been extended to evaluating smart irrigation solutions, use of autonomous vehicles, technical developments in weed mitigation and chemical use on vineyard floors. For more information, refer to this report's pesticide use and management section.

Cellar 0

During the 2024 vintage, we opened our Barossa Valley pilot plant: Cellar 0. It's designed to pioneer new products to meet changing consumer needs in an agile, small scale, low cost and flexible way. The facility allows multiple variations within a trial for rapid assessment and progression from trial stage to implementation. The promising trials conducted over vintage 2024 have resulted in products for further exploration in future vintages.



Harvested grapes in Napa Valley, before undergoing the winemaking process.

Pesticide use and management

Pesticides serve to safeguard and enhance grape growing by combating insects, weeds, microorganisms, and other threats. Additionally, the judicious use of both organic and inorganic fertilizers can replace essential nutrients that are removed with the annual grape harvest.

However, certain pesticides can be harmful to humans, non-target species, soil, and aquatic ecosystems. Equally, excessive fertiliser use can have off-farm impacts to the immediate vicinity, including surface and ground water and adjacent native vegetation. To minimise the overall lifecycle impact of grape cultivation and winemaking, agrochemical use is carefully managed, while considering native growing conditions, water demand, carbon footprint, crop health, employee wellbeing, and production efficiency.

Progress

TWE’s approach to agrochemical use and pesticide management weighs human health protection, environmental impact, and fruit quality, backstopped by all applicable national and export regulations. We aim to deliver reliable commercial outcomes for crop value while minimising our inputs and external impacts. The increasing adoption of electric and autonomous farm equipment, including tractors and drones, reduces our carbon footprint and application costs for crop protection materials and weed control. This remote operation enhances overall efficiency while safeguarding workers from direct exposure to agrochemical products and field hazards. Additionally, we employ traditional methods like beneficial cover crops and grazing to reduce the need for additional pest control.

Where agrochemical inputs are necessary, their use is regulated globally across our operational sites. At a minimum, we abide by the relevant legislation in the jurisdictions where we operate. Still, as a business that exports its products, we must also abide by the legislation of where our goods might be exported. This results in an approach that follows the most stringent requirements and the latest health advice in relevant jurisdictions.

We employ an integrated pest management strategy that combines biological, cultural, and chemical practices to control pest and disease. Our viticultural standards prioritise effectiveness while minimising our agrochemical footprint. This involves a combination of techniques and approaches:

- **Weather modelling:** Forecasting, modelling and autonomous disease monitoring reduces crop risk and the frequency of chemical applications.
- **Cultural control:** We use pruning techniques, mulch, canopy management trellis design and irrigation as the first line of defence against pests and diseases. We also limit the movement of equipment between pest and disease affected areas, without phytosanitary procedures.

- **Agrochemical use:** When necessary, we use minimal chemical inputs and rotate treatments to prevent resistance in the case of pesticides, and run-off in the case of fertilizers. This also limits carbon footprint and cost of materials and operations.
- **Traceability:** Every agrochemical application – on our vineyards or our growers’ – is recorded to verify compliance of application and ensure adherence to withholding periods prior to harvest.
- **Industry engagement:** We actively participate in grape growing and industry forums to stay informed, monitor emerging issues and incorporate the latest scientific advice.
- **Research support:** We collaborate with research groups across all our growing regions, contributing to novel solutions and more sustainable pest and disease management approaches.
- **Innovation:** We invest in novel techniques and materials, such as disease-resistant varieties that require fewer agrochemical inputs, or aerial imaging to identify weed outbreaks for targeted attack (see case study on the following page). Some innovation involves revisiting approaches such as reduced- or herbicide-free farming, long followed in our Italian vineyards, and is now applied throughout our Californian Central Coast and Rutherford properties with the advent of improved mechanical equipment and robotics that create efficiencies.

Managing employee health and safety

Ensuring employee health and safety around pesticides and other chemicals is a priority. Our general approach to health and safety is outlined in the health, safety and wellbeing section of this report, however specific to the management and use of pesticides across our operations, we ensure our employees:

- Have the right training and the correct accreditation (e.g. ChemCert in Australia)
- Follow strict processes and HSW guidelines
- Have the right personal protective equipment (PPE) and know how to use it (e.g. Standard Operating Procedures)
- Have the relevant information (e.g. Material Safety Data Sheets) available
- Follow regular risk assessments of chemicals and avoid handling chemicals where possible.

Ensuring consumer health

In addition to the range of methods we use to ensure product quality and safety, we proactively monitor and test our products to ensure that they meet requirements. This testing is completed on a both random and targeted bases and involves residue testing fruit and wine selections. The risk is elevated during high pressure seasons, such as when rain is close to picking, so we increase our sampling and testing regime to confirm compliance to the respective market-based residue standards.

Aerial imaging helps identify and target weed treatment

Across California we employ a range of techniques to control weeds, including aerial imaging. This allows us to quickly identify vine vigour differences for more accurate irrigation across vineyards, as well as areas of excessive weed growth. This approach allows us direct spray (i.e. precision application) or mechanical follow up to any hot spots. The application of technology allows us to be more efficient (essential given some of our properties are more than 500 hectares in size) and targeted in our application of herbicides, lowering our environmental impact and footprint.



Colour infrared imaging used at Meridian Home Vineyard, Paso Robles, California.

Responsible supply chain

We believe that by working closely with our suppliers we can reduce our impacts, manage risk and position TWE for growth. We take care in the selection process to ensure constructive, long-term relationships with suppliers and partners that share our commitment to socially responsible and sustainable business practices.

In F24 we purchased goods and services worth approximately A\$1.7 billion, sourced from around 50 countries. Given this large global supply footprint many of our social, ethical, and environmental impacts reside as much in our supplier relationships as in our own activities.

Our approach includes:

- Clearly defined acceptable standards for suppliers via the Responsible Procurement Code (RPC)
- Working with key or high risk suppliers to improve performance and to ensure key risks and opportunities are identified and managed
- Ensuring a fit for purpose risk assessment platform is in place to address key risks in our supply chain.

Performance

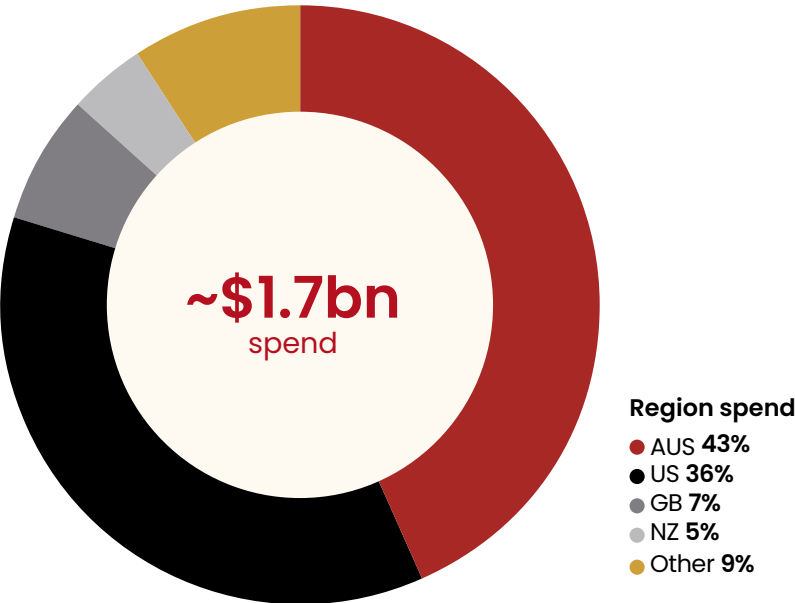
In F24, a substantial 90% of our procurement expenditure was concentrated in four key markets: Australia, the United States, the United Kingdom, and New Zealand. This spending was distributed across a network of around 5,000 suppliers. However, a significant portion, equating to 61% of total spend, was channelled through our top 140 suppliers.

Supplier governance framework

In F24 we continued to improve our Supplier Governance Framework, which assesses suppliers against seven categories of risk (see the table on the following page). This involved implementing a new operating model for procurement that had an additional focus on effective risk management, sustainability, and governance of our suppliers. We continue to improve our strategic approach to key supplier relationships to enable joint business planning, and a focus on achieving sustainable packaging and circular economy outcomes. As part of this, process reviews and/or updates to relevant policies such as our Source to Pay Policy and our Responsible Procurement Code were undertaken.

In F23 an internal working group was established to refine the supplier governance framework with an objective to simplify supplier onboarding while strengthening the controls across the seven risk categories. The group designed a future operating state which went live in the second half of F24. This refreshed framework is designed to meet our governance objectives as well as increase our ability to more closely manage high risk suppliers. In F24 TWE partnered with a third-party sustainability solution provider to help manage sustainability risks and compliance across our supplier base. Implementation will begin in early F25.

Procurement expenditure by region



High level summary table of supplier expectations by risk category

Risk category	We have expectations that suppliers:
Conduct	Comply with all applicable laws and regulations as a non-negotiable minimum and we prefer to work with partners that demonstrate leadership in how they act in an ethical, fair and responsible manner.
Business continuity	Have resources and plans in place to understand, prepare, and respond to disruptions to minimise the impacts on continuity and quality of supply.
Bribery and corruption	Do not tolerate any form of bribery and corruption and promote a culture of compliance.
Modern slavery and labour practices	Respect the human rights and labour rights of the workers in their operations and supply chain.
Health and safety	Provide a safe and healthy workplace for their workers.
Environmental management	Minimise the environmental impacts of their operations, products, and services and have environmental practices and policies in place.
Privacy and information security	Maintain standards to safeguard the security, confidentiality and integrity of information assets and resources.

Responsible procurement code

TWE's Responsible Procurement Code (RPC) sets out the expectations for suppliers across the areas of human rights, employee benefits (covering wages, conditions and working hours), health and safety, discrimination as well as environmental impacts. The RPC is provided to all suppliers during the selection process, embedded into TWE contract templates, TWE Purchase Order terms and conditions, as well as being a compliance requirement for all new suppliers. Failure to meet these requirements will result in remediation actions which may include removal of a supplier from the selection process.

Supplier risk assessment

In F24 TWE introduced a new approach¹ to assessing supplier risk. When we onboard new suppliers they are assessed using a Primary Risk Assessment which ensures the supplier complies with key TWE policies such as RPC and Purchase Order T&Cs. If the supplier does not meet certain conditions within each of the seven categories, they are flagged as High Risk and are directed to a Secondary Risk Assessment. Should further risks be identified post-Secondary Risk Assessment, the system flags the appropriate people within the business to take action to mitigate the risks prior to onboarding a supplier. If the supplier fails to comply with the Secondary Risk Assessment, TWE will not transact with the supplier.

TWE committed to risk assessing all contracted suppliers by the end of F24, which involved re-assessing some suppliers given the change in approach in F24. In F24, 436 existing suppliers were re-assessed (from the former risk assessment approach) and 522 new suppliers underwent the new approach.

Over F23 and F24, we successfully completed a total of 958 supplier Primary Risk Assessments via the new approach. The suppliers who were categorised as High Risk (429 or 44%) as a part of this assessment will be run through a Secondary Risk Assessment from F25 to F26. Out of the 429 High Risk Suppliers, 233 (54%) were rated High Risk due to a number of contracts in the viticulture and winemaking category that have a higher potential risk around labour rights given the presence of temporary labour.

Joint planning with suppliers

In December 2023 a range of internal stakeholders met in South Australia's Barossa Valley to discuss and identify opportunities to improve our packaging efficiency and sustainability performance. Over a number of days the team met with key suppliers to share our ambitions, discuss ideas and jointly develop shared plans to reduce our impacts. Several opportunities were identified, with savings and efficiencies achieved for both us and our key suppliers.

 Refer to the Managing Human Rights section of this report for further information on how we manage human rights and modern slavery across our business.

1. Our prior approach to assessing the ethical, social, and environmental performance of our suppliers was used from F21 until early F24. This former approach risk assessed a total of 2,435 suppliers. Given the change in supplier risk assessment and onboarding approach in F24, we will no longer report against this cohort, and future reporting will capture progress against our Primary and Secondary Risk Assessments only.

Sustainable packaging and circular economy

As a producer of exceptional wines, we are unapologetic about our focus on quality. Glass is currently the ultimate vessel for storing wine, and while we deliver alternate options, we continue to work to ensure our glass is as sustainable as possible. We seek to increase recycled content, remove weight, particularly in lower (commercial) tiers. We also seek to tailor our range of packaging choices to align with post-consumer recycling conditions in our key markets.

To achieve our commitments, we must work closely with our suppliers to build their awareness of our ambitions, including our desire for circular economy outcomes and sustainable packaging design. We continue to focus on refining and improving governance and reporting with a particular focus on improving data quality across our dry good materials.

Progress

At the beginning of F24, our sustainable packaging target was adjusted to focus on the development of solutions to known challenges to further progress our ambition of 100% recyclable, reusable or compostable packaging by the end of 2025. This was to reflect the progress we have made and the reality that solving the challenges with our packaging requires us to act collaboratively – across industry and sectors. We remain committed to minimising packaging and improving design to ensure materials are recoverable, and wherever possible, we will seek to increase recycled content or remove unnecessary materials.

A key challenge continues to be the availability and currency of dry goods data, and we have continued to work with around 86 dry goods suppliers globally to improve and standardise key data points.

Over the past year, we have worked to enhance our understanding of how to address the use of problematic materials (i.e. materials that cannot be easily recycled). Our procurement, New Product Development (NPD), technical and capability teams continue to drive action, such as influencing brand decisions for more efficient

packaging selections, as we strive to reduce material usage and our scope 3 carbon footprint.

Improving recyclability

There are a small number of problematic materials used in wine packaging and the extent of such use varies by location, given the variety of post-consumer recycling schemes that operate across our different global markets of manufacture. In F24, we continued to work on addressing several problematic materials used in our products, including:

- Transitioning single and multi-pack polystyrene shippers to a 100% cardboard material designed with equivalent thermal properties
- Completing exit plans to phase out PET sleeves on bottles to help remove unnecessary single-use plastic from waste streams
- Implementing a design change to Penfolds Bin Series gift boxes to increase their recyclability by removing magnets, laminates, plastic fitments, and tertiary plastic transport sleeves. This design was peer reviewed and won an international Formes de Luxe Award
- Continuing sensory and shelf-life trials on alternate closures (screwcaps) and bagnums (1.5L pouch) to improve recyclability without compromising product quality.

We continue to innovate and find ways to reduce the total use of materials. Our Australian Capability team conducted extensive trials to review alternate shrink wrap options for our finished goods pallets, with a brief to reduce the plastic wrap required per pallet, but retain the current strength and pallet integrity in transport. The team found a solution that decreased plastic use by around 55%.

The main problematic materials (e.g. screwcap liners) typically represent an industry-wide problem which require further research and development to identify environmentally friendly alternatives. We believe that working on those key challenges as an industry is necessary and significantly increases our chance of success. For example, in Australia we supported our cork supplier, Amorim Cork, to introduce a post-consumer cork recycling scheme, Recork Australia, with the installation of over F24 of cork recycling bins in a number of retail outlets. Corks are collected, granulated, and recycled into new floor mats. It is a small, but important start on the journey to have cork classified as post-consumer recyclable in Australia.

Recycled content

Glass is the most significant driver of progress towards our ambition of having 50% recycled content on average across our portfolio. We seek to increase recycled glass (cullet) content in our bottles and make choices that help enable this action. For example, increasing recycled glass content can change the colour profile of the resulting bottle. As a result, we have adjusted bottle colour specifications so that suppliers can increase the amount of recycled content more easily. The amount of cullet in glass bottles varies across our operations from around 25-80% depending on colour and location.

There are continuing challenges for the industry in securing high-quality volumes of recycled content for inclusion in the manufacturing process, given variations in local recycling rates and challenges of moving cullet from areas of disposal to recovery sites. We expect to see growing momentum in this space as systems mature and circular economy initiatives become more widespread. Global container deposit schemes

(CDS) are also evolving, and TWE is participating in policy debate around their development. Many of our alternate formats (e.g. cans and PET bottles) already operate under CDS or their equivalent around the world. We support the harmonisation of these schemes and encourage their operation to ensure cullet and other resources generate good recycling outcomes.

Glass weight

Reducing glass weight is another way to reduce its associated GHG emissions (alongside increasing recycled content). A number of glass lightweighting initiatives have progressed over F24, and include the continued transition of ranges towards lighter bottles. Our Australian sparkling range completed through the transition to a bottle that is 100g lighter. This has reduced the greenhouse gas emissions associated with each bottle by 10% compared to the previous bottle. St Huberts continued to transition to lighter bottles and a number of brands were selected to transition to lighter weight bottles at product refresh in F24 including Penfolds Koonunga Hill, Wynns Coonawarra Estate Shiraz, and Lindeman’s Bins.

A cross functional workshop held in the Barossa with key divisional, procurement, operations, quality, finance and sustainability representatives met in December 2023. Over a number of days the team engaged with key suppliers, conducted site visits, ultimately identifying 13 viable projects that deliver benefits in terms of cost reduction and simplification as well as reduced environmental impacts.

These 13 projects are anticipated to be completed by end of F25 and cover initiatives such as an extension of our lightweighting of bottles plans, existing of packaging that uses additional materials for no practical reason, refreshes for cartons, labels and closures as well as other productivity enhancement initiatives. Given the success of this collaborative approach a similar exercise was conducted in our US operations over June and July 2024.



Improving gift box sustainability

Gift boxes are an important part of the wine gifting experience, protecting the bottle and its contents while adding to the visual appeal of the wine. In 2019, Penfolds started its sustainable packaging initiative for gift boxes, and after four years in development, the Penfolds Bins gift box series was recognised in F24 with an international sustainability packaging design accolade, the Formes de Luxe Award. The Bins gift boxes were re-designed to increase their recyclability, removing magnets, laminates, plastic fitments, and tertiary plastic transport sleeves. We continue to work with our suppliers to advance our packaging design and explore innovations in sustainable packaging, as well as improving the sustainability performance of our Australian gifting operations with a range of process, design and optimisation initiatives to reduce waste and improve task efficiency. Cobots help automate simple repetitive tasks, to avoid worker strain and fatigue.



Our Cobot named ‘Cooper’, is a Fanuc Collaborative Cobot programmed to unload 6 and 12 pack cartons of wine onto the line for relabelling.

Reduced stretch wrap on finished goods pallets by 55%

Driven by our commitment to sustainable packaging and efforts to reduce single-use plastics and optimise material efficiency, the Australian capability team trialled and implemented a new stretch wrap solution at the Barossa Packaging Centre in F24. Stretch wrap is crucial for load containment when transporting goods across our supply chain. The existing product used a 23um film, and it was imperative any alternative solution maintained the strength and integrity of the existing product, for packaging safety. Following an evaluation and testing process, a 12um Nano film was identified as the optimal choice, meeting performance standards and improving sustainability outcomes. The 12um Nano is a new stretch wrap film for TWE that has 55 layers which gives the performance required to hold the cartons of finish goods pallets together, used throughout our supply chain. The transition to the new stretch wrap product has reduced the quantity of single-use plastics used on finished goods pallets by approximately 55%, and has also lowered operational costs. This project achieved a significant sustainability win, while maintaining operational efficiency and product integrity.



Waste management

In F24, TWE successfully diverted 93.7% of our global waste from landfill, reflecting our commitment to sustainable waste management practices. Our approach focuses on waste avoidance, reduction, reuse, and recycling. During winemaking, a significant portion of waste—such as stalks, stems, and marc—is repurposed. These materials are typically provided to local livestock owners as supplementary feed or for compost. Grape skins and seeds are also sent for further processing to extract additional value, including grape-derived alcohol and tartaric acid.

Across our wineries, packaging centres, cellar doors, and office sites, we actively segregate cardboard, glass, plastic, and organic materials for appropriate disposal, emphasising reuse, recycling, and composting. In Australia, TWE maintains ongoing partnerships with key suppliers like Orora and Visy to implement closed-loop processes for 'waste' glass and carton packaging from our Barossa Packaging Centre. These initiatives reduce waste, while also enhancing the recycled content of our products.



Recycling at the Barossa Packaging Centre.





Appendix

Preparing for mandatory climate reporting

Our F24 climate disclosure progress table below captures how we’re beginning to align with the future mandatory climate reporting requirements. We have evolved our disclosure approach and expanded our response from the previous eleven Taskforce on Climate-related Financial Disclosure (TCFD) recommendations to capture the broader International Sustainability Standards Board (ISSB) and Australian Accounting Standards Board (AASB) requirements.

ASRS summary table

AASB ASRS core content ¹	Summary of our approach and F24 progress	Location
Governance: Disclosure of the governance processes, controls, and procedures TWE uses to monitor, manage, and oversee climate-related risks and opportunities.	Our approach: - We have defined roles for WOSC, ARC, RCGC and Board concerning mandatory climate reporting. - Climate risks and opportunities are overseen by the Board, as well as the ARC and WOSC committees of the Board. In F24, the WOSC received quarterly updates on material sustainability topics. The ARC is updated annually. - Material climate-related risks and opportunities are reviewed annually. - Responsibility for climate-related risks and opportunities applies to all business areas, and the Global Sustainability Team manages the strategic response and overall direction. Progress this FY: - Updates have been made to the Board Charter, ARC Charter and WOSC Charter to reflect emerging mandatory climate reporting obligations - Over F24, the WOSC engaged on a broad range of topics related to our performance including climate risk and adaptation, renewable electricity and net zero emissions, farming philosophy, water stewardship strategy, responsible supply chain, modern slavery statement, and mandatory climate reporting. - Developed strategic roadmap capturing future mandatory climate reporting requirements and associated improvements required. - Established an internal ESG Reporting Steering Committee, comprising relevant ELT and other senior members from across the business. We also established internal working groups to support ongoing progress against our mandatory climate reporting roadmap.	Corporate Governance Statement Role and responsibilities of the Board Sustainability Report: Corporate governance; Risk management; Water stewardship; Climate change and GHG emissions
Strategy: Disclose TWE’s strategy for managing climate-related risks and opportunities.	Our approach: - Climate adaptive multi-regional sourcing is embedded into our business strategy. - We have identified a range of climate-related risks and opportunities through global and site-based climate risk modelling, focused on our viticultural operations. - There is ongoing collaboration with universities, start-ups, and industry experts to research, trial and implement new and emerging technologies. - Further work is required to begin quantifying the financial implications of climate change (and associated material climate-related risks and opportunities). Progress this FY: - Continued to develop our climate model to support ongoing risk and opportunity assessments, M&A and adaptation planning. - In F24 we commenced a climate-related risk and opportunity assessment across our broader value chain, with further work planned for F25.	Sustainability Report: Material Topics; Water stewardship; Climate change and GHG emissions

1. Core content based on current available version of AASB’s ASRS (exposure draft) dated October 2023.

Preparing for mandatory climate reporting

AASB ASRS core content ¹	Summary of our approach and F24 progress	Location
Risk management: Disclose TWE's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the overall risk management process, and to assess the overall risk profile and its overall risk management process.	Our approach: - TWE has identified climate change as a material risk to the business. Therefore, ongoing assessment and management is in place (through our ELT and management committees such as the Risk Compliance Governance Committee and is governed by the Board and two main Committees, the ARC and the WOSC. - TWE's Enterprise Risk Management (ERM) Framework outlines the process to identify and monitor climate-related risks. - We have assessed various climate-related risks and opportunities across our global operations using climate risk modelling. This aligns with the use of TWE's ERM Framework for risk identification. - Material climate risks and opportunities are reviewed annually. - Our A\$1.7 billion Sustainability Linked Loan demonstrates how we are seizing climate-related transitional opportunities. Progress this FY: - We continued to refine the site-specific assessments conducted across our viticultural operations in Australia and the US, and assessed a range of metrics such as temperature, water, and the suitability of grape varieties to growing season temperatures more specifically. - We undertook a deep dive of future winegrowing of Cabernet in the Napa Valley. Refer to our case study for further detail. - We commenced a climate-related risk and opportunity assessment across our broader value chain, capturing five key stages.	Corporate Governance Statement: Section 2: Role and responsibilities of the Board; Section 3: Risk management and internal controls Annual Report: Material business risks Sustainability Report: Water stewardship; Climate change and GHG emissions
Metrics and targets: Disclose TWE's performance in relation to its climate-related risks and opportunities, including progress towards any targets (inclusive of those required by law or regulation).	Our approach: - We have a series of commitments in place to decarbonise our operations; we are aiming for 100% renewable electricity by 2024, and net zero for our remaining Scope 1 emissions by 2030. These voluntary targets are expected to exceed any future policy or regulatory requirement in Australia. - We continue to track progress against our Sustainability Linked Loan and associated performance milestones. - Our KPIs disclosed within this report outline the key metrics, targets and associated performance for F24. Progress this FY: - We have reduced our carbon emissions (scope 1 and 2) by 66.7% compared to F21. - In F24, we completed the CDP climate change disclosure (based on F23 given the reporting timeframe), which includes a range of climate-related metrics and performance.	Sustainability Report: Material topics; Key performance indicators; Water Stewardship; Climate change and GHG emissions

Our F25 commitments

Focus area	Target
Building a resilient business	
 Water stewardship	Install smart water meters at 100% of high & medium risk sites by end F25
 Climate change and energy	100% renewable electricity by 2024 Net Zero by 2030 (scope 1 and 2)
Fostering healthy and inclusive communities	
 Health, safety and wellbeing	Reduce our SSIFR 3 year rolling average by 20% (to 0.43) with a focus on active participation in our safety culture programs
 Consumer health and responsible drinking	100% of TWE brand product labelled from 2025 will include energy information (excluding products below 375ml) 100% of TWE brand product labelled from 2025 will include a general health warning.
 Inclusion, equity and diversity	50% women in senior leadership by 2025 42% female representation overall by 2025 A gender balanced Board (at least 40% women/at least 40% men/up to 20% any gender)
Producing sustainable wine	
 Sustainable growing and production	Continue to increase sustainability certification of our brands Develop a global farming framework, supported by metrics
 Responsible supply chain	Complete Secondary Risk Assessments for 100% of High Risk Contracted Suppliers by end of F26
 Sustainable packaging and circular economy	Develop solutions to known challenges to further progress our ambition of 100% recyclable, reusable or compostable packaging by end of C2025 100% of product packaging to comprise 50% average recycled content by end of CY2025

