

Wine & Spirit Environmental Best Practice

.....
Shining a light on a responsible and sustainable industry





In partnership with our members:
Proud to be working for a better environment



Accolade
Wines

ADNAMS
SOUTHWOLD



AMORIM



AUSTRALIAN VINTAGE LTD

BRIGHTON
GIN
DISTILLED-BESIDE-THE-SEASIDE®

b
Broadland
WINERIES



— Estd 2014 —
COTSWOLDS
DISTILLERY

EDRINGTON-*Beam* SUNTORY
UK



E&J Gallo Winery

 Ethimex

HATCH MANSFIELD 

H HALLGARTEN
DRUIT
& NOVUM WINES

JFHillebrand 
global beverage logistics

 KINGSLAND
DRINKS


By Appointment to His Royal Highness The Prince of Wales
Supplier of Organic Spirits
LONDON & SCOTTISH
International Limited

Moët Hennessy
UK LIMITED


NEW ZEALAND WINE
PURE DISCOVERY

NYETIMBER
PRODUCT OF ENGLAND


Off-Piste
WINES


RATHFINNY

Sainsbury's


TREASURY
WINE ESTATES


THE LONDON DISTILLERY COMPANY


WARNER'S

Contents

Foreword	pg. 5
Contributors	pg. 6
Chapter 1: Reducing Greenhouse Gases	pg. 7
Chapter 2: Redesigning Bottles and Packaging	pg. 13
Chapter 3: Saving Energy	pg. 17
Chapter 4: Optimising Water Usage	pg. 21
Chapter 5: Promoting Wildlife and Biodiversity	pg. 25
Chapter 6: Engaging Communities	pg. 31
Chapter 7: Additional Efforts to Reduce, Reuse & Recycle	pg. 35

The adoption of the Paris Climate Agreement and the UN Sustainable Development Goals (SDGs) in 2015 marked a global turning point. For the first time the world's political leaders agreed a universal development plan for people and the planet with ambitious socio-economic development goals within globally defined environmental targets.

The UK has long been at the heart of the world wine and spirit trade and to remain at the centre of global commerce, UK businesses have had to evolve and innovate and this includes activities linked to meeting those goals and targets. As a global business it is only proper that we use global indicators to measure business activities against. That is why we have based this report around the 17 UN Sustainability Goals (SDGs) which underpin the 2030 Agenda for Sustainable Development.



One of the WSTA's key aims is to help our members ensure their businesses are economically, environmentally and socially sustainable. What follows is a snapshot of some of the excellent initiatives WSTA members are undertaking to meet just one of the three pillars of sustainability: environmental sustainability. SMEs are finding innovative methods to grow sustainably, utilise resources and minimise waste. Established businesses are undertaking wholesale investments to reduce emissions, educate employees and ensure the long-term sustainability of their communities. National organisations are putting in place programmes to support their industry, consolidate knowledge, establish certification standards and enable sustainable growth.

I am pleased to release the WSTA's first sustainable best practice workbook which pulls together an array of practice and knowledge from across our membership. I hope it will act as a resource for understanding, allow business to identify areas of improvement, act as a tool for stakeholders with an interest in the wine and spirit industry, and further the effectiveness of our industry's efforts to bring about transformational change.



Miles Beale
Chief Executive

Contributors

Company	Page Number
Accolade	8, 14, 18, 36
Adnams	8
Amorium	9, 26, 32
Australian Vintage	19
Brighton Gin	37
Broadland Wineries	19, 22
California Sustainable Winegrowing Alliance	27
Concha y Toro	9, 14, 20, 23, 32, 38
Cotswold Distillery	10, 33
Edrington Beam Suntory	23
E & J Gallo	20, 23, 33, 38
Ethimex	38
Hallgarten	39
Hatch Mansfield	10
J F Hillebrand	10, 40
Kingsland	12, 15
London and Scottish International	27, 33
Moët & Chandon	15, 27
New Zealand Winegrowers	28
Nyetimber	15
Off Piste Wines	12, 16
Rathfinny Wine Estate	29, 33
Sainsbury's	12, 16
The London Distillery Company	41
Treasury Wine Estates	20, 24
Warner's Distillery	24, 30

Chapter 1

Reducing Greenhouse Gases





Introduction

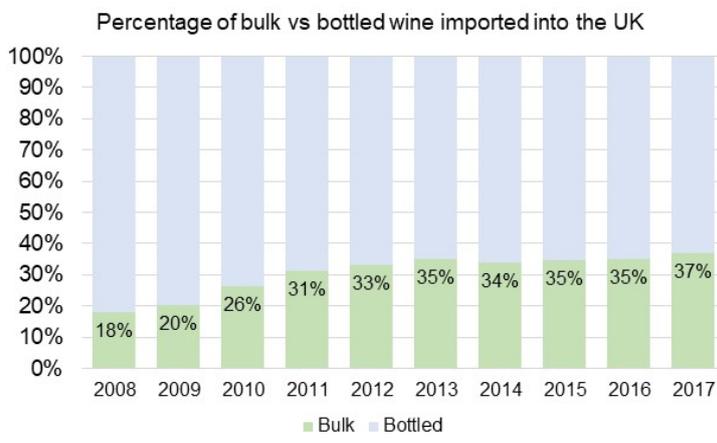
Climate change affects every country on every continent. It disrupts national economies and affects lives, costing people, communities and countries. We are witnessing differing weather patterns, reductions in glacial ice and changes to sea levels. The effects of these changes do not respect national borders.

13 CLIMATE ACTION



In order to meet the Paris Climate Change Agreement target of limiting global warming to 1.5 °C, global carbon emissions need to fall to 55% of the 2010 levels by 2030 and continue to decline to zero net emissions by 2050. These are ambitious targets but as the examples below demonstrate, the wine and spirit industry is fully committed to playing its part in the global response to meet Goal 13 of the UN Sustainability Goals – Combating Climate Change.

Greenhouse gases (GHG) include CO₂, methane, nitrous oxide and fluorinated gases. Approximately 75% of UK GHGs derive from road transport, energy and industrial production. As the world's largest exporter of spirits and the world's second largest importer of wine, reducing the impact of greenhouse gases from transport has long been a major focus of the wine and spirit trade. The import of wine in bulk has made a significant impact with a shipping container of bulk wine containing nearly three times the volume of wine than a container full of bottled wine. Over the last 10 years the amount of wine imported in bulk has more than doubled. With close to half a billion litres of wine being imported in bulk to the UK, this saves some 90,000 tonnes of CO₂ per year.



Accolade

On-site nitrogen generation: Perhaps not a natural subject to be included in the reduction of GHG fuel, as this activity causes Accolade Park to consume substantially more electricity on-site than previously. However, from a holistic perspective, the production of nitrogen gas (used to prevent oxidation) at Accolade Park significantly reduces our overall consumption of fossil fuels. This is because it is much less energy intensive to produce nitrogen gas than liquid nitrogen and its transportation via road tankers, with associated emissions and congestion, is almost eliminated.

Adnams

Adnams has collaborated with its bottling supplier to transport wine in bulk by sea freight and bottle in the UK. This change provides significant carbon savings to the wines' journey - a flexitank, containing 24,000 litres, saves over 4.5 tonnes of CO₂e per flexitank in reductions in shipping fuel alone.

Amorim

Cork forests are a perfect example of the balance between preserving the environment and sustainable development - just the fact that no tree is felled during the stripping of the cork is a unique case in terms of sustainability. These trees are the foundations of a sustainable economy of the future.

The forests themselves provide a positive impact on the planet in many ways. It is estimated that for every ton of cork produced, cork oak forests capture over 73 tonnes of CO₂, a vital contribution for reducing greenhouse gas emissions, the main cause of climate change. Equally important is the fact that the cork oak increases its ability to absorb these gases during the natural regeneration process following stripping - a stripped cork tree absorbs, on average, five times more CO₂.

A study by PWC calculated the carbon footprint of the Amorim Neutrocork, concluding that it provides a positive carbon balance.

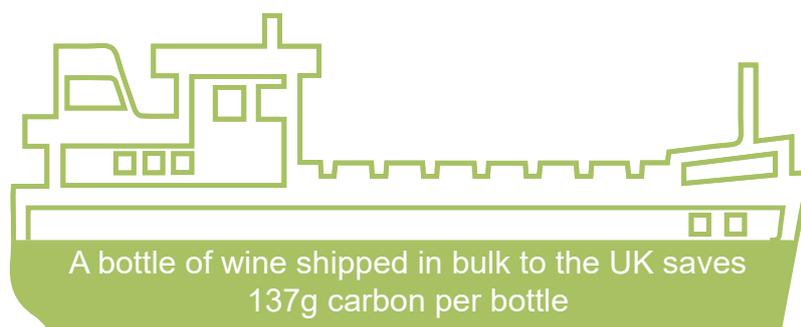
“Amorim’s neutrocorkstopper carbon footprint calculated according to a life cycle approach, in a Business to Business (Cradle to Gate) approach, results in a carbon balance with a positive impact, with a total footprint of -342kg CO₂e/t of product, corresponding to -1.8kg CO₂e/1000 stoppers (-1.8g CO₂e/ stopper). When considering the carbon sequestration at the oak forest associated to cork production, the results are significantly more positive, corresponding to -392kg CO₂e /1000 stoppers (-392g CO₂e/ stopper).”

PWC Dec 2018.

Concha y Toro

Shipping wine in bulk to the UK from the Americas via the ports of Teeside and Port of Tyne, now accounts for over 50% of our wines sold in the UK, resulting in a huge reduction in Concha y Toro’s carbon footprint over the past few years.

In terms of our carbon footprint, Concha y Toro’s 2020 commitment is a reduction in Scope 1 and 2 direct and indirect emissions of at least 30% from the base year of 2014 and having zero waste to landfill from our production facilities. The company is committed to reducing absolute emissions from our operations by 40% (scope 1 & 2) and indirect emissions from the supply chain (scope 3) of 17% by 2030 from base-year 2017. Concha y Toro has achieved scope 3 emissions reductions by 34% and packaging supplies emissions by 22% since base-year 2011.





Cotswold Distillery

Cotswolds are committed to reducing our carbon emissions, reducing our energy usage, and investing in low carbon technologies. Since our inception in 2014, we set out to ensure our carbon emissions were as low as possible. We have achieved this by:

- Sourcing locally all barley used in our whisky and all lavender used in in our gin
- Removing distillation waste to create bio-fuel
- Harvesting heat from waste to preheat the next batch going into the still
- Returning excess heat in the production system to heat water for the site
- Installing solar panels on our warehouse to contribute to the energy used on site
- Sending mash waste created in our whisky production for use by a local farmer for animal feed
- Planting apple trees to help mitigate against our CO₂ footprint

Hatch Mansfield

Each month Hatch Mansfield monitors office energy usage and converts this to tonnes of carbon. To this we add our business mileage and inbound deliveries to give our total carbon footprint. We then offset this volume of carbon through projects in the UK and abroad.

Carbon Footprint

In 2016 we partnered with Carbon Footprint. Each year we invite our team and customers to vote for their favoured carbon offset project to address the annual CO₂ we produce as a business. To date we have offset 2,200 tonnes of CO₂ through various gold standard projects. Last year our selected projects were a carbon reduction project in the Brazilian Amazon and a tree planting project in the Kenyan rift valley offsetting 846 tonnes of CO₂.

Woodland Trust

In 2013 Hatch Mansfield started working with the Woodland Trust. We make a donation to them and through our ongoing support we have so far removed over 1,150 tonnes of carbon by planting in excess of 6,500 native British trees.

In 2011 we were the first UK wine agency to achieve ISO 14001:2004. In 2017 we transitioned to ISO14001:2015. ISO 14001 is a comprehensive environmental management system. This ensures we make incremental improvements each year in our business with respect to resource usage and waste management. We have systems in place to measure and control this. Results have included us reducing office energy usage by 29%; cutting down on fuel emissions by incentivising the use of more fuel efficient company cars; moving to complete eco-packaging for samples; as well as appointing a local waste carrier in line with our environmental policy.

J F Hillebrand

As a logistics provider, we recognise our role in the consumption of conventional energy like diesel and heavy fuel oil and we are restless in our pursuit of reducing the usage of fossil fuels where possible.

In April 2018, the IMO (International Maritime Organisation, a specialised agency of the United Nations) adopted a new Greenhouse Gas (GHG) emissions strategy with a goal to reduce the global GHG shipping emissions by at least 50% by 2050, compared to 2008.

Our goal is to reach a 45% reduction from 2008 levels in the carbon emissions related to our shipments by 2025. Our efforts so far have resulted in a 27% per container reduction according to the Clean Cargo data published last year.

Together with our customers and suppliers, we will meet our goals by:

- Shipping through feeder services into smaller regional ports. Products arrive closer to the final delivery point, road miles are minimised and congestion reduced at port and container terminals
- Utilising inland waterways and barge services where possible to reduce road miles
- Prioritising rail services as they produce fewer emissions compared to road and air transport. More than 71% of the shipments imported by JF Hillebrand into the UK from new world countries are railed inland
- Engaging with Maersk Line, the largest sea shipping line worldwide, in a Carbon Pact, where both companies commit to reducing CO₂ emissions by 20% per container between 2017 and 2025
- Using insulation liners created by JF Hillebrand provide an effective alternative to using refrigerated containers as they cause approximately 20% less carbon emissions per journey (due to energy saved by not having to refrigerate)
- Transporting liquids in bulk with our Flexitank systems. Bulk transportation allows shippers to reduce transport costs while also decreasing the associated carbon emissions per litre by up to 50%. Importing liquids in bulk and bottling them at destination using lightweight recycled glass or other materials further reduces carbon emissions

myHillebrand

We created a new web-based transport management platform called myHillebrand, which documents and records the carbon emissions for every shipment entrusted to us. We aim to help customers to understand the impact of their operations, what that means for them in terms of GHG emissions and provide them with tools like myHillebrand so they can make better informed decisions about the shipping of their products.





Kingsland

At the heart of our green approach is the bulk shipment of wine from country of origin to the UK. In 2017, Kingsland imported over 100 million litres of wine in this manner, realising 40% reduction in CO₂ emissions (on similar quantities shipped in bottle).

Kingsland has worked with Peel Holdings in the development of containerised transport along the Manchester Ship Canal – a means of low-carbon transport that now takes between fifty and sixty HGVs off the motorway network each week, cutting congestion, CO₂ and improving air quality. Large quantities of product arriving into Liverpool Docks can be shipped almost to our doorstep in Salford by barge.

Kingsland has made a significant investment in solar power, fitting a 1750m² photovoltaic array to the roofs of two largest warehouses. Annual electricity generation from these panels is approximately 216 MWh. During peak sunlight hours, the array can contribute nearly three quarters of the site's electricity demand and save in the region of 114 tonnes of CO₂ per year.

Off Piste

Over the course of the past decade, our company has made a major shift from bottle to bulk imports. Shipping 26,000 litres of wine in a bulk container dramatically reduces our carbon footprint from transportation when compared to shipping the same volume in a fully finished bottle of wine. Currently over 60% of our volume travels into the UK in bulk containers. Our contract packer's plant is entirely self-sufficient with regards to energy, with two wind turbines on site as well as electric solar panels on the roof.

Sainsbury's

We're big advocates of planting trees! Not only are trees great for the environment, wildlife and wellbeing, but also the economy – the total benefit provided by the UK's trees and woods is valued at £270 billion. We've been working with the Woodland Trust since 2004 and have raised £7 million from the sale of eggs, chicken and turkey among other products. The money has funded the planting of three million trees in the UK - mitigating 750,000 tonnes of CO₂.

We use cutting edge technology to minimise emissions from our logistics. Working with partners, we were the first company in the world to trial refrigerated vehicles powered by liquefied natural gas rather than diesel. We are also testing KERS (kinetic energy recovery system) technology, pioneered in the Formula 1 industry, on ten vehicles to understand if it can help us further reduce vehicle emissions, especially in urban areas.

Chapter 2

Redesigning Bottles and Packaging



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Chapter 2: Redesigning Bottles and Packaging



Introduction

Sustainable production and ensuring resource and energy efficiency are key to reducing future economic, environmental and social costs: continued technological progress and innovation are the foundations for achieving these key aims.

This chapter explores some of the methods WSTA members have used to redesign bottles and packaging. Working with the Government and WRAP, the WSTA and its members helped develop the Glassrite tool (a directory of lightweight bottles that allows bottlers to select from existing designs) and developed glass bottles which retain strength capacities while ensuring huge savings in the volume of glass used per bottle and which reduce CO₂ transport emissions. And it is not just innovation in bottles and other containers such as bag-in box and cans, other packaging innovations such as smart stacking pads and lighter weight corrugated packaging have contributed to significant reductions in carbon emissions.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



The examples of industry action set out in this chapter contribute to meeting two of the UN sustainability goals: Goal 9 - Industry, Innovation and Infrastructure and Goal 12- Responsible Consumption and Production ('doing more and better with less').

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Brighton Gin



California Winegrowers

Accolade

In August 2018 an improved lightweight bottle was introduced at Accolade Park. The new design is the result of a collaborative project started in 2017 between Accolade and its glass suppliers to increase the impact resistance of the 330g bottle. The new design redistributes the glass within the bottle without adding any extra weight or cost. The change in design has reduced glass breakage, resulting in lower wastage and improved line efficiencies.

Concha y Toro

Concha y Toro actively seeks to minimise its environmental impact at every stage in the wine supply chain. Our UK bottling processes are carbon negative thanks to a range of green energy initiatives - for example, the entire bottling plant is powered by wind turbines.

During 2018, 98% of our portfolio used lightweight bottles. This means a reduction of 13,577 tonnes of glass, which translates into a reduction of 14,127 tonnes of CO₂e emissions due to production and transport – this is equivalent to removing 14 million glass wine bottles from circulation.

Kingsland

Kingsland has worked with two of its biggest customers, Tesco and The Co-operative, to bring lightweight glass bottles to the market. The Tesco project - carried out in partnership with Encirc Glass - developed two reduced weight bottles that were suitable for high-speed filling. This has saved over 3,500 tonnes of glass every year and over 2,500 tonnes of CO₂. Kingsland also rationalised a total of twenty-six wine products for The Co-operative into three different weight bottles, saving 445 tonnes of glass each year and 305 tonnes of CO₂. A 650g bottle was reduced to 484g, while a 460g bottle was reduced to 400g.



Off Piste



Nyetimber

Moët & Chandon

In 2010, Moët & Chandon introduced an eco-design approach to all of its new packaging developments. There are 12 criteria used to calculate the eco-design indicator, including sources of materials; use of solvent-free inks, wood from sustainably managed forests, packaging recycling, separability of materials and packaging reuse. Almost 2,000 tonnes of glass per year has been saved by the introduction of a lightweight bottle format. Furthermore, while the eco-designed Grand Vintage Moët & Chandon box still looks the same, it is in fact 32% smaller and uses removable wedging to make the materials easier to recycle.

Nyetimber

Since 2008 all Nyetimber glass bottles, of 750ml, have weighed 835g, compared with the industry standard of 905g (for bottles designed to withstand pressurised liquids). The result is a significant 10% saving in the number of truck journeys and fuel consumption, which drastically reduces the carbon footprint of distributing our wines to consumers.





Off Piste

At Off Piste we are constantly looking at alternative packaging formats which offer a reduced impact on the environment. Off-Piste were the first UK company to successfully bring two new single serve wine formats to market – still wine in a single serve 187ml pouch and lightly sparkling wine in a 200ml single serve can. Feedback from consumers has been excellent, and the cans in particular have seen huge sales growth since 2018.

Five can facts:

1. Aluminium cans are a lightweight packaging option for smaller format beverages
2. On a litre basis, emissions for transporting and cooling wine are between 35-49% lower for cans than they are for glass bottles
3. When recycling cans, they are almost always recycled into another can
4. The recycling of aluminium uses only around 5% of the energy and emissions needed to make it from the raw material bauxite
5. Globally, around 70% of cans are recycled, the highest of any recyclable resource and the recycling process can mean a can is back on shelf within 60 days

Sainsbury's

Less is often more in packaging terms, as streamlined packaging saves on raw materials and reduces environmental impact. We've redesigned our own-brand sherry bottles, for example, to make them 10% lighter. This saved 79 tonnes of glass in 2015.

That followed an earlier redesign of our own-brand vodka, gin and brandy bottles, which we switched from a standard 35cl flask to a taller, round glass bottle. The change reduced packaging by 35% saving 400 tonnes of glass per year – the same weight as more than 30 London buses.

Sometimes, especially with products that are not sold in relatively small volumes, changing packaging designs can be a challenge – as creating unique containers would make the items too expensive for customers. So, when we changed our spirits bottles we relied on initial work by WRAP, the Waste and Resources Action Programme, on an industry-leading 70cl bottle.

Such actions have allowed us to reduce our own-brand packaging by almost 33% since 2005/06 – a total we've pledged to raise to 50%. This, in turn, will contribute to the industry-wide aim of achieving a 20% reduction in the greenhouse gas intensity of food and drink consumed in the UK by 2025, as part of the Courtauld 2025 commitment that we've signed up to. The Courtauld commitment is a voluntary agreement aimed to improve efficiency and reduce waste within the UK grocery sector. It was launched in 2005 and continues to develop in phases.

Chapter 3 Saving Energy





Introduction

The environmental advantages of renewable energy, including lower carbon emissions and reduced air pollution have been widely known for decades. Its numerous socio-economic benefits, however, have only become apparent in recent decades as the deployment of renewable energy technologies has become more widespread. Renewable energy provides a significant - and growing - number of jobs worldwide each year. In addition, wind, solar and hydropower produce little or no air pollution. Other renewable energy technologies, such as biomass and geothermal, while emitting air pollutants, do so at much lower rates than most conventional fuels.

7 AFFORDABLE AND CLEAN ENERGY



Some 60% of total global greenhouse gas emissions are attributable to energy production. Increasing the share of renewable energy in the global mix, doubling the rate of improvement in energy efficiency, facilitating access to clean energy research and technology and promoting investment in clean energy technology are critical targets in UN Sustainability Goal 7: access to affordable and clean energy.

This chapter highlights the efforts WSTA members have made investing time, research and capital into increasing energy efficiency and developing sources of renewable energy. Examples of large-scale investment required to secure long term renewable energy sources include building wind turbines, solar panel arrays and bio-energy plants, while smaller scale investments include improved energy monitoring and the use of energy efficient lights.

Accolade

Viewing our consumption of electricity through weekly-read sub-meter readings alone hampered our ability to identify energy saving opportunities. Near to real-time monitoring at half-hourly intervals, provides the insights which we can use to challenge our manufacturing processes.

We use our ISO 50,001 certified Energy Management System to drive continual improvement through both behavioural and process change. After seven months of use sixteen actions have been recorded, ranging from a third party carrying out compressed air leak surveys of our BMS air-handling process, improving control of our office and activity specific lighting, replacing fluorescent lighting units with LED, retro-fitting invertors on our bottling vacuum pumps and reducing the temperature of a 'domestic' hot water supply. Larger projects underway and planned include replacing external industrial metal halide lighting with LED.



Accolade Wines will contribute to reducing GHG emissions by changing the way we operate our business; in this instance by changing the way we source the majority of our electricity. As most businesses, we import our electricity from the national grid, however from 2019 we began to offset grid imported electricity with renewable energy from an onsite Wind Turbine avoiding 2,540 tonnes of carbon emissions each year. As Accolade Park is within 500m of the Severn Estuary, the wind resource available on site is such that the energy generated is equivalent of powering 1800 UK homes annually. The wind turbine is expected to provide more than 50% of the 9 million kWhs of electricity Accolade Wines consume each year. Electricity not consumed by Accolade Park will be exported to the grid network.

Australian Vintage

In November 2018, we secured a landmark deal with Flow Power, an energy wholesaler, to ensure that 90% of energy consumption at one of our sites will be met by renewable sources. This ground-breaking renewable energy deal makes us one of the first businesses to sign a Hybrid Renewable Corporate power purchase agreement in Australia.

The deal follows a commitment to improving efficiency at one of our New South Wales sites, Buronga Hill. An on-site solar panel system has reduced the CO₂ emissions drastically as the winery increases its resilience on solar power. Refrigeration accounts for approximately 50% of the total power used at a winery and, having made the decision to upgrade our equipment to increase efficiency, this has reduced electricity usage by 9% while also cutting down our CO₂ emissions.

The agreement with Flow Power will accelerate the commitment to sustainability by supplying 60% of the winery's power requirements through renewable sources. A large privately-owned solar system produces 30% of the power requirement (1.65MW), making up 90% of our total energy consumption. The addition of the solar and wind energy from off-site wind farms and solar plant will meet the site's power needs for the next ten years.



Australian Vintage

Broadland Wineries

The electrical energy provided to Broadland Wineries is reported as zero carbon and 100% renewable (the UK average is 29%). The ratio of different energy sources used to generate our electricity is: 94.1% wind, 3.2% hydro and 2.7% solar. Broadland wineries are currently speaking to two solar panel consultancies to look at the feasibility of producing part of our electricity requirement on site.

In early 2018, a compressor failure on a glycol chilling system gave us the opportunity to review replacement options. It was established that for many months of the year, the ambient temperature could provide sufficient cooling for the process and a plant providing both traditional compressors and ambient “free cooling” was installed. This has shown to reduce the electrical load by 50% for more than 6 months of the year.

We have so far saved approximately 150 tonnes of CO₂ emissions by rolling out a programme of replacing inefficient warehouse light fittings with an LED alternative. As and when fittings fail or additional items are required in other areas of the business, we use LED's as replacements.



Concha y Toro

Concha y Toro UK is committed to 100% renewable energy sources by 2020. In 2018 we achieved 67% energy from renewable sources, including energy from five new solar plants. In 2019, nine solar plants will be installed in vineyards expecting to reach 73% renewable supply when activated. The 15 Solar plants will generate 2.5MW of energy per annum.

E &J Gallo

We believe renewable energy should be used wherever possible. As a company, we have invested heavily in solar operations throughout our organization; 10 acres of solar panel fields have been installed in the Central Valley and Central Coast over the last five years. This has resulted in significant energy savings and generated more than 11 million kilowatt hours of electricity since 2015.

We designed and built an integrated wastewater and energy plant at our winery in Livingston, California. Here we convert wastewater and pomace (skins, pulp, seeds and stems) into electricity through a biological reaction that generates a natural bio-gas. In doing so we've offset our energy usage by 20%. Our Fresno winery uses an anaerobic process water treatment system for generating reusable bio-gas which reduces our natural gas usage by more than 30%.

Treasury Wine Estates

We recognise the importance of managing our energy sourcing, use and efficiency as a part of operating sustainably, safely and responsibly. Through our efforts we have realised a 15.47% improvement in energy efficiency from 2015 to 2018.

Actions taken to reduce energy use and improve efficiency include:

- Improvement to process in our wineries and packaging centres, where we are increasing the use of counter-current heat exchange, and pulse cooling, while implementing highly efficient cold stabilisation technology.
- We have invested in solar energy systems at several US sites. Of the total electricity consumed at our US wineries and bottling centres from off-site sources, almost 50% is from renewable energy, which equates to approximately nine million kWh per year. We continue to investigate alternative energy sources for use across major sites in Australia. Our winery and packaging centres are continuing to invest in innovation through building controls including, motion light sensors, economic temperature control, and night time cooling, to reduce the demands from heating, ventilation and air conditioning.
- In our vineyards, we have invested in energy efficient lighting, pumps and tractors; multi-row harvesting equipment and energy efficient re-design of driving pathways. Across our wineries and packaging centres, we are replacing older equipment with energy efficient options such as variable frequency pumps, LED lights, and smart-meter electricity sub-monitoring.

Chapter 4

Optimising Water Usage





Introduction

Ismail Serageldin, when Vice-President of the World Bank delivered a speech in Stockholm in 1995 which included the statement that

“The wars of this century have been on oil and the wars of the next century will be on water...unless we change the way we manage water”.

6 CLEAN WATER AND SANITATION



While the opening part of the statement was widely reported by the media at the time, the caveat, the operative part, was widely overlooked. That is no longer the case. Water is now seen as a valuable and finite commodity and its sustainable use is now front and centre of the wine and spirit industry’s response to meeting the challenges of environmental sustainability.

Water protection and access forms Goal 6 of the UN Sustainability Development Goals in particular targets to increase water-use efficiency across all sectors by 2030, to implement integrated water resources management at all levels, and to protect and restore water-related ecosystems. Wine and spirit production is heavily reliant on water use. Often over 90% of our industry’s water footprint comes from growing and harvesting crops and there is a great deal of water that can be saved by minimalising use and utilising water effectively. Examples of WSTA members’ actions include the investment in precision agriculture techniques, ground moisture monitoring water treatment, smart irrigation research and grey water reuse.



Concha y Toro



Warner’s Distillery

Broadland Wineries

Our wastewater treatment plant is the second largest capital investment by the company in the last eight years, with the objective of returning our waste water back to the local water authority, in an economic and environmentally efficient manner.

Instead of having to use registered waste contractors with HGV tankers to take the water offsite for disposal, wastewater will be processed to a standard that the local water authority can accept and then entered into their water distribution. The advantages to the local community are the reduction of daily HGV’s onto site, typically 3-4 per weekday, and the associated noise of vacuum tankers operating. Taking into account the typical mileage to Broadland and then to a disposal location, this equates to 106 tonnes of CO₂ saved per year. The new plant uses a recognised national supplier of SAF equipment, but the installation of all ancillary equipment & control systems was achieved using local specialist contractors.

Concha y Toro

Concha y Toro have reduced the water footprint for a glass of wine by 56% less than the average in the global industry. 93% of water footprint activity entails grape growing and harvesting. 6% is attributable to vinification, bottling and packaging, and 1% to distribution. We believe the continuing opportunities to reduce our water footprint derive largely by moving to even greater precision agriculture techniques. We have measured our water footprint for several years – water being a precious resource in both South and North American vineyard regions. We are committed to a 10% reduction in our water footprint by 2020 from the base year of 2014.

Edrington Beam Suntory

In 2016, Beam Suntory collaborated with the University of Kentucky and the Kentucky Water Resources Research Institute to develop watershed protection plans near the Maker’s Mark and Jim Beam distilleries in Kentucky.

A watershed is the land area that drains to a common waterway, such as a river basin. Watershed protection plans are designed by community stakeholders to establish methods and monitoring to ensure the long-term sustainability of a community watershed.

The work in Kentucky is in the fourth year and will continue. This watershed protection and sustainability work was extended to India and Mexico in 2018. In 2019 work will commence in Spain and the US Virgin Islands. This work will continue over the next 10 years to include our other sites in Europe, the United Kingdom and Canada to further our commitment to preserving and protecting the quality and quantity of our shared water supplies well into the future.

Protecting water resources is a key area of Edrington’s sustainability strategy in Scotland. Our distilleries are on track to meet the 2020 target of improving distilling water efficiency by 10%.

E & J Gallo

Water stewardship is critical to our long-term business growth and has always been a top priority for our company. We are currently working to achieve an industry-leading 3:1 water to wine ratio by 2022. We have put this commitment into action through numerous process improvements in both the winery and the vineyard. By recycling and reusing process water and switching to ultraviolet sanitation, our Sonoma winery has saved 100,000 gallons of water. By recycling 93% of water at our Gallo Glass plant, we have achieved a 25% reduction in water use across our wineries through 2017 alone.

We also pursue new innovations in the vineyard. We recently partnered with IBM Research on a “smart” irrigation system. The system fuses weather reports, satellite imagery and remote sensor data regarding soil conditions to deliver precisely the right amount of water to each vine. This represents a revolutionary approach compared to the current technology that, at best, delivers water to a specific row of vines. The smart irrigation system reduced water use by 25% and produced better quality grapes.





Treasury Wine Estates

We have seen a 7.27% improvement in water efficiency from 2015-2018 and we are continuing to work to mitigate the impact of water scarcity through a combination of actions, including:

- Using drip irrigation in our vineyards, to ensure water is applied in minimal amounts and only when needed. In addition, TWE uses select drought-resistant rootstocks and grape varieties appropriate for the environment; we use recycled municipal water where available; and place compost and mulch under vines to retain soil moisture, as required.
- Monitoring soil moisture at selected vineyard sites and visualising water stress through analytical processes that take into consideration climatic conditions, vine requirements and soil moisture levels. We are trialing the use of thermographic cameras, hyperspectral imaging and real-time evapotranspiration monitoring to enhance these processes. Across selected winery and packaging sites, submetering and real-time monitoring technology has been deployed to identify and reduce water intensive activities or leaks. 'Pigging' technology, which pushes wine with inert gas instead of water, has been installed at frequently used transfer lines.
- Replacing sprinkler frost protection in several vineyards with automated frost fans to reduce the amount of water used when protecting our vines from frost events. In our winery and packaging network, there has been a focus on updating barrel washers to more water efficient models.

Warner's Distillery

We are working to make better use of the natural water sources on Falls Farm – the water from which we use in every distillation – and have installed a borehole to minimise our use of mains water, bringing us closer to self-sufficiency. We are also capturing grey water from our reverse osmosis operations to irrigate our Botanical Gardens.



Warner's Distillery Falls Farm

Chapter 5

Promoting Wildlife and Biodiversity





Introduction

Goal 15 of the UN Sustainable Development Goals promotes the protection of our natural environment, wildlife and combatting the loss of biodiversity. Targets include:

- Ensuring the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services
- Taking urgent action to reduce the degradation of natural habitats
- Halting the loss of biodiversity; and
- Integrating ecosystem and biodiversity values into national and local planning processes

15 LIFE ON LAND



Wine and spirit production is inherently linked to the natural environment. The contribution to ecosystem services from responsible vineyard management are significant and include increased biodiversity, increased soil stability, carbon sequestration and reducing water run-off. Similarly, the responsible production of the raw materials used in the production of spirits – such as grain, sugar cane or agave, or the botanicals used to add the unique characteristics to spirits such as juniper - all contribute to achieving the UN targets.

Beyond production, cork has been used in bottling dating back to Ancient Egypt. Its harvesting and production is sustainable and occurs every nine years without harming the tree. According the UN, thirteen million hectares of forests are being lost every year and finding sustainable management processes which promote forestation are key to the longevity of our woodlands. Recent evaluations show cork usage creates less greenhouse gases than other closure methods and cork oak forests, spanning 2.2 million hectares, provide vital habitats for a wide variety of flora and fauna across the Mediterranean basin.



Amorim

There are 2.2 million hectares of cork oak forest in the west Mediterranean basin. It is the basis of one of the 36 most important ecosystems in the world for preserving biodiversity. Over 200 animal species and 135 plant species find ideal conditions for survival in these cork oak forests. The flora of the Mediterranean basin is dramatic. It's 22,500 endemic vascular plant species are more than four times the number found in all the rest of Europe. Additionally, the forests protect against erosion and resulting desertification, they work as a barrier against fire, due to the slow combustion of cork, and they undertake an important role in the regulation of the hydrological cycle. By preventing the infiltration of rain and preventing soil erosion, cork forests contribute to water cycle regulation, an environmental service particularly important in the Mediterranean basin.

In Portugal, where the cork oak is the National Tree and occupies 23% of the national forest area, important initiatives in reforestation have been developed at a rate of ten thousand hectares per year, or an annual growth of around 4%.

London and Scottish International

Juniper Green Organic Gin (and Utkins Organic Vodka) were the world's first organic spirits. They have been built up steadily by London and Scottish International Ltd owned by the Parker Family. All our grain is grown organically without the use of pesticides, insecticides and industrial fertilisers. Farming organically works with nature and boosts biodiversity, giving us the high-quality organic grain which, when distilled, produces the base for Juniper Green.

Moët & Chandon

Preservation of the landscape around the vicinity of the Maison's plots is encouraged via the cultivation of 180 hectares of biodiversity reservoirs - including ponds, shrub hedgerows, floral meadows and forest - and 95% of the Maison's vineyards now have grass cover.

From 2008 to 2018 we have seen a decrease of 50% in the use of phytosanitary products. In 2012, the Maison was the first in the world to invest in an electric straddle-tractor for use in viticulture - mechanical soil tillage enabling a reduction in the use of herbicides. Moët & Chandon now has a fleet of eight electric tractors with the objective of growing this to 20 tractors by 2020.

Moët & Chandon is working with more than 2,000 growers to help them to become individually-certified in sustainable viticulture, notably through training sessions with the support of the Committee Interprofessionnel du Vin of Champagne (CIVC) and our local Chambers of Agriculture.

California Sustainable Winegrowing Alliance

California Sustainable Winegrowing Alliance (CSWA), a non - profit organisation created in 2003 by Wine Institute and the California Association of Winegrape Growers. California vineyards and wineries use sustainable winegrowing practices to produce high quality grapes and wine, protect the environment and enhance the communities in which they live and work by implementing sustainable winegrowing practices that are environmentally sound, socially equitable and economically viable. The California wine industry came together in 2002 to establish the Sustainable Winegrowing Program, which includes the comprehensive California Code of Sustainable Winegrowing, online tools and resources, and educational workshops that provide how-to information on sustainable winegrowing.

Introduced in 2010, Certified California Sustainable Winegrowing (Certified Sustainable) provides independent verification that vineyards and/or wineries meet stringent requirements that ensure key sustainability areas such as soil health, water and energy, habitat, etc. are addressed. In addition to meeting stringent requirements, certified wineries and vineyards must also continuously improve their sustainability practices each year that they are certified. To date, nearly 70% of California wine is made in a certified sustainable winery.



Moët & Chandon



Moët & Chandon



New Zealand Winegrowers

As the national organisation for New Zealand's grape and wine sector, part of our mission is to promote best practice for sustainable grape production and winemaking, and manage sustainability in the industry through the nationwide Sustainable Winegrowing New Zealand (SWNZ) programme.

SWNZ is an industry-wide certification that was first introduced commercially in 1997 and adopted by grape growers and winemakers throughout New Zealand. Currently, 98% of New Zealand's producing hectares are certified as sustainable producers under the SWNZ programme. This programme is based on international standards outlined by the International Organisation of Vine and Wine and provides a robust platform for validating sustainability credentials. Nine pillars of sustainability act as our framework: Biodiversity, People, Business, Air, Water, Pest & Disease Management, Soil, Energy, and By-products. These pillars promote a holistic approach to sustainability whereby environmental, economic and social factors are considered.

All our members are required to submit information annually to ensure they are following guidelines and meeting targets. Every vineyard and winery is required to complete an annual scorecard providing details of their practices during the past season. Vineyard members are also required to submit annual spray diaries to prove that they have applied agrichemical sprays within correct parameters, and update their annual Vineyard Register for biosecurity purposes. All SWNZ members are independently audited on a regular basis to confirm the information they have provided in their annual submissions is true and accurate.

SWNZ Continuous Improvement (CI) is an extension of the programme that is available for grape growers and winemakers that aim to go 'above and beyond' in one or more areas of sustainability. Members of CI choose at least one pillar of sustainability to focus on and create individualised plans to help them reach their unique goals and targets.

The SWNZ programme has helped New Zealand's grape growers and winemakers adapt and refine their practices in ways that protect and enhance the natural environment and their businesses. For instance, members strive to minimize the use of chemicals, water and energy to grow grapes and make wine, and aim to reuse and recycle materials and waste wherever possible. It is a key objective of NZW that the SWNZ programme continues to promote and enhance the sustainability of the country's grape and wine sector for years to come.



Nyetimber



Nyetimber

Rathfinny

- Our Winery is approximately 60m in length and four storeys high, due to its location in a natural landscape it has been constructed with a wildlife flower roof, including a number of insect hibernacula. The calcareous wildflowers allow the building to disappear into the valley while also providing insulation. We have utilised the natural fall of the land to place our Winery in such a position that we are a gravity fed system e.g. juice flows from the press to the settling tanks by gravity rather than pumping. The majority of the timber used in both buildings is reclaimed.
- Viticulture, unlike most combinable crops requires fewer inputs overall. Any inputs we may use are mainly applied as a targeted foliar spray. Concentrating foliar spray on to new growth at key times such as between budburst and flowering reduces the overall quantity required.
- We currently use a recycled garden waste compost to increase organic matter and much needed micro nutrients into the soil for the vines. We also mulch down the grape skins to use in subsequent years under the vines, this also means that nothing is wasted. Organic seaweed is also utilised here as a fertiliser if needed.
- From a pest control perspective we have a series of monitoring schemes to ascertain when thresholds are met, only then will a specific pesticide be used. For example, in 2018 we used no pesticides.
- The entire estate is in an agri-environment scheme (Higher Level) under Defra's Rural Development Programme.
- The vineyard has been planted with grass between each row which has benefits for the soil and indirect benefits to the vine by enhancing parasitic insect populations.
- On the arable element of the estate we have planted wildflower and pollen and nectar mixes to encourage wildlife. We have over 12 acres of unharvested crop for wild birds as well as mixed arable field margins.
- Rathfinny has around 15 acres of calcareous grassland on our north facing slopes which we manage for wildlife in accordance with Natural England and the South Downs National Park.
- Linked to our Trail we have installed maps and talking posts so people's visits to the estate can be further enhanced with snippets of knowledge about the land and the vineyard.



Rathfinny



Warner's Distillery

We are farm born and bred, and love giving back to the land and community where we can. Recent projects and successes include:

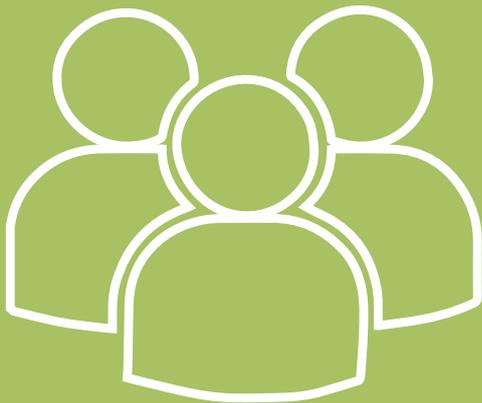
- Giving wildflower or lemon balm seeds with our Honeybee Gin and Lemon Balm Gin respectively, enabling gin fans to create foraging habitats for pollinators.
- Sowing over five acres of wildflower meadows and working to engage local land owners in conservation initiatives and catchment sensitive farming practices.
- Running initiatives with local colleges and beekeepers to promote the protection of our pollinators around Northamptonshire and the UK.
- Working with the Royal Horticultural Society, Buglife and the People's Trust for Endangered Species, providing funding towards species conservation, habitat management and helping to raise awareness.
- Providing solitary bee hotels to provide habitat for pollinators in a national initiative focusing on wildlife corridors called B-Lines.



Warner's Distillery - Beehives

Chapter 6

Engaging Communities





Introduction

UN Sustainability Goal 11 – sustainable communities - requires societies to create the conditions that allow people to have quality jobs that stimulate the economy while not harming the environment. In particular, in this chapter we show best practice from members of the WSTA who are investing in their communities, investing in staff training, scholarships and local project work. Examples include the cork sector where cork harvesting is among the best paid agricultural activities in the world and employs thousands of people across the Mediterranean. Other WSTA member business activities include ensuring the juniper for their gin is harvested by hand, recruiting each year from their local community, investing heavily in providing training, supporting local conservation charities and projects, and matching employee charitable donations 2:1.

11 SUSTAINABLE CITIES AND COMMUNITIES



Amorim

The cork industry helps to maintain thousands of jobs and keeps people on their land, in areas prone to desertification. The harvesting cork industry is among the best paid agricultural activity in the world. According to the World Wild Fund for Nature, over one hundred thousand people in southern Europe and north Africa directly and indirectly depend on these forests. In Portugal alone, which boasts the largest area of cork oak forest in the world, around 700 companies directly depend on this economy; involving around 8300 direct jobs and thousands of indirect jobs (catering, tourism, etc.).

Concha y Toro

Ethical people management is a crucial part of any sustainability strategy. We have certified our ethical management system under the SA8000 standard, and we are close to our goal to provide at least 45 hours of training per employee per year by 2020.

We have a wide range of initiatives to improve conditions and prospects for the society which we are part of. For example, a long-term objective to improve our grape suppliers' vineyard management skills will see all our grape suppliers receive training in this area by 2020.

In 2015, we opened our Centre for Research and Innovation (CII) in Talca, in the Maule Valley. The Centre is dedicated to research and developing more sustainable ways of production and is at the disposal not just of Concha y Toro but the Chilean wine industry in general. The location was significant in bringing expertise and employment to an area far removed from the capital city Santiago.



Hatch Mansfield



Moët & Chandon

Cotswold Distillery

Cotswolds Distillery supports the Caring for the Cotswolds conservation charity which we promote and take donations for, both in our stores and online. The company also matches any given donations each month. The money raised by Caring for the Cotswolds supports a variety of projects that:

- Conserve and enhance the natural beauty of the landscape
- Manage and restore habitats for wildlife
- Manage and improve footpaths and bridleways
- Look after the area's distinctive historical heritage

E & J Gallo

We're proud to support a variety of non-profit organizations, community events, scholarships and more. This includes our employee matching gift program that doubles employee contributions up to \$5,000 annually. This empowers employees to direct much of our company's charitable giving.

Our employees also give their time generously. We've partnered with an elementary school near our headquarters for more than two decades. Dozens of employees mentor an assigned student each week throughout the school year. As the holidays approach, many employees also select a student wish list from the Giving Trees placed around campus. Employees shop for their student knowing the gifts will make a child's wish come true.

The impact and importance of our efforts became clear in the wake of the 2017 wine country fires. We're humbled by the way our employees came together to support our colleagues, friends and neighbours. Employees collected essential items and delivered them to colleagues who lost their homes. Employees from around the globe also donated more than \$85,000 to area non-profits, which the company matched 2:1.

As a result, the company donated \$1 million to the recovery efforts in the communities so many of our employees and suppliers call home.

London and Scottish International

Our FairWild junipers are harvested by hand from a forest in Poland. FairWild certification means those harvesting are properly paid for their junipers, which are harvested in a sustainable manner. Juniper Green was the first gin in the world with this new certification for wild harvested ingredients.

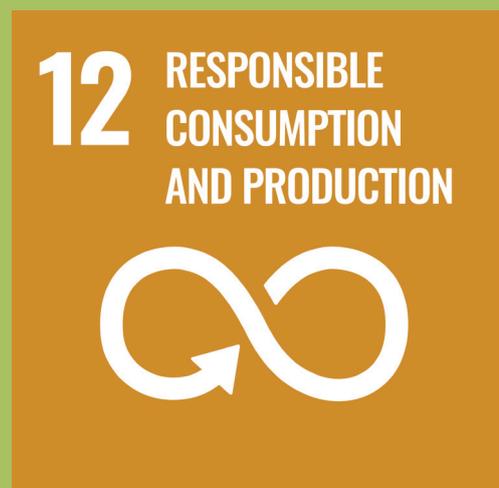
Rathfinny

The Estate has been part of the government Cycle Scheme for a while now to encourage our staff to use bikes to work and we have also added cycle racks for staff and guests. We have opened up a permissive trail through part of our vineyard to encourage walkers to explore new areas in the valley. Where possible and at the earliest stages, Rathfinny have used local contractors and expertise from architects and designers to engineers and maintenance personnel. Seasonal staff within the vineyard are employed from the local area. At full capacity at harvest this will equate to just under 200 added paid workers from the vicinity and during pruning around 40-50 extra staff. Whenever possible we use local and seasonal produce in our two restaurants. We work closely with local business whether that be hotels, local sites of interest e.g. galleries and museums to the local taxi companies.



Chapter 7

Additional Efforts to Reduce, Reuse & Recycle



Chapter 7: Additional Efforts to Reduce, Reuse, & Recycle



Introduction

We cannot stop waste production entirely, but tackling waste saves energy and natural resources, reduces pollution and reduces the need for landfill. The three R's of waste management - reduce, reuse and recycle – all help to cut down on the amount of waste.



This chapter sets out the steps WSTA members are taking to tackle waste and in doing so contributing to UN sustainability Goal 12 targets:

- To achieve the sustainable management and efficient use of natural resources;
- To halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses;
- To reduce substantially waste generation through prevention, reduction, recycling and reuse by 2030.



Accolade

Waste Management and Zero Waste to Landfill - Release liner is an industry-wide, problematic waste stream due to the silicone coating on the PET label backing. For years Accolade's disposal of this waste had alternated between incineration and landfill, depending on the associated costs and so the valuable PET was lost from the supply chain. In collaboration with the raw material supplier, we became aware of a UK based business that could recycle the release liner, if we could supply it in a format that facilitated the economic viability of delivery/collection and processing the waste. Accolade invested in rewind units on each of our bottling labelling stations, which after our engineering and bottling teams 'critical interventions, were eventually able to successfully collect the release liner in compact 'cheeses'. Since commencing this process, more than 230 tonnes of PET label-backing has been recycled and fed back into the supply chain as a raw material. Furthermore, this 'waste' now provides a net revenue rather than an increasing cost.

In relation to Accolade's overall waste management activity, by material weight, we send 83% for recycling, 10.3% for reuse and 6.7% for incineration or anaerobic digestion and 0% to landfill.

Prevention, the objective at the top of the waste hierarchy, has long been a focus at Accolade Wines, some of our most recent initiatives are:

- Corrugated weight reduction project - Implemented in 2018 - 10% reduction in paper weight through use of lower weight fluting paper
- In development – reduced blank size from alternative formats to the standard 6x75cl wrap around pack.
- Dry goods obsolescence control - on track to deliver five consecutive years of dry goods obsolescence reduction both in total obsolescence and percentage of dry goods spend. The materials team manage over 1,500 components annually. Vintage changes and pack refreshes being the most significant drivers of transition within the portfolio.

Use of 'The Accolade Standard' Leader Standard Work walks: a weekly hour-long walk by SHEQ and Production Managers, covering a particular production line or area, where opportunities to improve in all five areas i.e. Food Safety & Quality, H&S, Environment, 5S and First & Lasting Impression, are identified, agreed and actioned. The benefits of this way of working are that the relevant 'owners' are there to debate/rebut/agree proposals and so agreed, generally small-scale changes can be implemented almost immediately. Many of these environmental benefits have been within the 'aggregation of marginal gains territory', however most of them have been at little or no additional cost. The actions and photos are recorded in a weekly report and are referenced on the subsequent walk in that area.



Brighton Gin



Concha y Toro

Brighton Gin

Our vegan certification is something we're incredibly proud of - we believe we are the only vegan-registered gin in the UK. This includes not only the liquid being vegan, but the packaging, including the glue to fix the labels and the (locally-sourced!) bottle sealing wax in our signature Brighton Gin green. We use 100% certified organic wheat base spirit, ensuring that Brighton Gin is built on the best quality ethanol, from wheat that has been grown to the best production standards. The bottle containing your Brighton Gin is made at one of the last remaining English Glass manufacturers and is guaranteed to be at least 40% recycled glass, some of which is collected from the Brighton area.

Chapter 7: Additional Efforts to Reduce, Reuse, & Recycle



Concha y Toro

During 2017, Concha y Toro set the long-term goal of eliminating waste disposal to landfill by 2020. In 2018, 97% of the company's waste was reused, composted or recycled.

Since 2018, the company has participated in the elaboration of a Clean Production Agreement for companies that aim to be 'zero waste to landfill' by 2020.

E & J Gallo

We're deeply committed to continuously improving our processes, reducing our carbon footprint and preserving our natural resources. Reuse and recycling are important tools in achieving this. Currently, nearly 175,000 tonnes of glass is diverted from landfill annually, which accounts for over 30% of all recycled glass in California. We've seen an 80% reduction in smog forming materials after Gallo Glass switched to oxygen fired furnaces and a 98% reduction of volatile organic compound (VOC) emissions by our spirits facility. 14 tonnes of plastic and cardboard are recycled at our Central Valley sites annually representing an 87% recycling rate.

Ethimex

It is a topic that is relevant for all distillers, whether fermenting from grain, molasses or potatoes or distilling from neutral alcohol. Everyone familiar with the distilling process knows that the heads and tails (also known as foreshots and feints) are separated from the heart during distillation (the heart is the most prized resulting liquor during distillation).

The heads that appear at the beginning of the distillation contain volatile compounds with low boiling points such as acetaldehyde, acetone, esters and the highly undesirable methanol. The tails that appear at the end of the process typically contain propanol, butanol, amyl - collectively known as fusel oils - and acetic acid.

Being a supplier to the distilling industry for many years, Ethimex noticed that the heads and tails are frequently treated as a waste stream, often with a cost attached to it. Thanks to the connections in the chemical industry, we made the link and managed to turn this situation around 180 degrees.

By teaming up with industrial alcohol recycling plants, Ethimex found a way to give the heads and tails a new life in the shape of recycled low-grade industrial alcohol. After re-distillation, the heads and tails can be processed into everyday products like culinary burning alcohol, fire-lighters, cleaning liquids and windscreen wash to name a few.

To make it easy and attractive we set up a simple operation where heads and tails are bought from the distiller, collected and directly transported to the alcohol recycling facility. All logistics including conformity with excise regulations are taken care of by Ethimex's logistics team.

Thanks to this operation, heads and tails can be turned from a waste stream into a revenue stream. The icing on the cake is that distilleries are reducing their environmental footprint at zero cost.

Hallgarten

Whilst the back-end administration was assessed as 'low impact' it was felt that the business could make a difference by ensuring that every opportunity was taken to 'design-in' energy and waste reducing systems into our planned office refurbishment.

We have since invested significantly in leading technology to reduce emissions, pollution and waste at our central HQ in Luton. Whilst many capital investments have generated long term savings, some have simply been about doing the right thing and to develop as an environmentally responsible operator.

The finished building is a great modern space to work. Everyone takes for granted the many efficient systems such as LED low energy lighting throughout with automatic switching when office spaces are unoccupied, efficient heat exchange climate control systems, waterless toilet systems, heat insulating glass and blinds, low toner and energy printing systems on all floors.



JF Hillebrand



JF Hillebrand



Chapter 7: Additional Efforts to Reduce, Reuse, & Recycle



J F Hillebrand

As a logistics provider for bulk wine, we recognise the importance of our role in promoting the long-term sustainability of our products; striving for a balanced improvement in the economic, environmental and social performance of the flexitanks.

To aid us in this pursuit:

- we co-develop the films we purchase
- we have our own certified manufacturing facilities in China and South Africa, and
- we manage the design, production, global supply and recycling of flexitanks

So how do we provide sustainable solutions:

Circular Design: Ensuring that all materials and ancillaries we produce are easy to recover, reuse, refurbish or recycle. With an in-house design team and our own manufacturing facilities, we are able to advance and ensure the sustainability of our products.

Materials: 99.80% of our flexitanks and ancillaries are recyclable including the flexitank LLDPE film, the container lining, the elbow and the backing plates.

Product: Proprietary in-house design of our valve and elbow configurations means we are able to discharge 99.8% of the product leaving minimal waste.

Logistics: Technical and operational experts in every area where flexitanks are loaded or unloaded to manage the recovery, refurbishment and reuse of bulkhead equipment- 60% global recovery rate in 2018.

Traceability: Full traceability of the flexitank material from the time the flexitanks are designed and manufactured with unique serial numbers until the time they are recovered and recycled after delivery. Depending upon the product transported (full visibility in our system), the volume and the geographical location, our technical team will be able to determine the best method of recycling or recovery.

Landfill and pure incineration are not considered responsible forms of recycling. As a leading flexitank manufacturer, we actively campaign to stop the landfilling of used flexitanks within the industry we operate to promote a sustainable supply chain future. Collaboration is key to providing sustainable solutions for flexitanks; collaboration across our network of offices, with our customers and with their customers to make a tangible change.

Recovery/recycling methods:

- mechanical recycling – remanufacturing into new plastic products (90% of used wine flexitanks imported into the UK and 75% of used flexitanks used for global wine shipments are mechanically recycled)
- thermal recovery – recovery of energy from used plastics generating heat and electricity and;
- chemical recycling – break down of plastics into their basis chemical constituents to convert to new plastics or fuels

In 2022, new UK regulations will impose a tax on plastics packaging with less than a 30% recycled content. In response, we are prioritising our research and development teams to create a solution for incorporating recycled content into our flexitanks without compromising on the integrity of the design.

The London Distillery Company

Currently our focus lies within the areas of reduction and recycling – and with a 95% recycling rate within the distillery we were proud to be awarded a Gold Recycling Standard by ‘first mile’. We also have an emphasis on reusability for local key accounts through a BIB (10 litre bag-in-box) scheme, resulting in customers being able to refill bottles on-shelf; thereby saving on bottles, corks, labels, cartons and cases usage.

All of our packaging (with the exception of part of the closure) is recyclable, and as we invest in bespoke bottling we will focus on reducing the weight of the glass by 30%.



The London Distillery Company - Matilda



The London Distillery Company





The WSTA represents over 300 companies producing, importing, exporting, transporting and selling wines and spirits in the United Kingdom.

We campaign for a vibrant and sustainable wine and spirit industry, helping to build a future in which alcohol is produced, sold and enjoyed responsibly.



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