

## Case study

# The case for green glass containers

A WRAP study into the use of green glass bottles with a high recycled content has found that there is little impact on consumer perceptions of wine and spirit products.

## Key facts and findings

- Using green rather than clear glass cuts packaging related CO<sub>2</sub> emissions by 20%.
- The move to green glass should be cost neutral or potentially commercially beneficial.
- It's a simple way for businesses to meet their Courtauld Commitment 2 and/or other packaging targets.
- Increasing recycled content of packaging improves the consumers' opinion of both retailers and products.
- Communication to consumers of the environmental benefits of a shift to green glass is key.
- Bottling gin, white wine and brandy in green glass has a negligible impact on consumers' perception of taste.
- Recycling glass saves energy and CO<sub>2</sub> emissions and reduces mineral extraction.
- Green glass has at least twice the recycled content of clear glass on average in the UK.



## The trialled products:

- McGuigan Estate Chardonnay
- Sainsbury's Scotch Whisky
- Sainsbury's French Brandy
- Sainsbury's Vodka
- Sainsbury's Dry London Gin (focus groups only)
- McGuigan Estate Shiraz Rosé (focus groups only)
- Sainsbury's Australian Shiraz Rosé (focus groups only)

**WRAP partnered with Sainsbury's and Australian Vintage to explore the opportunity for shifting some products currently packaged in flint glass into green glass. Together they developed a shortlist of wine and spirit products for which green samples were prepared and then comprehensively tested using quantitative and qualitative consumer trials, involving 644 interviews and 12 focus groups.**

As a result of the initiative, consumers regarded Sainsbury's more highly, and said they would be more likely to buy products in packaging with a higher recycled content.

## The trial

The samples were a standard emerald green, and for this trial used the same labels and foils as for the original flint bottle. In this sense it was an unforgiving test as no attempt was made to tailor the green colour to the specific product, or to design the labels and foils to suit the new glass colour.

White wine, whisky, brandy and vodka were produced in sufficient quantities such that demand could be satisfied at the two Sainsbury's stores where the trial took place: North Cheam in South West London, and Hazel Grove in Stockport.



In the timescale, gin and rosé could not be produced in sufficient quantities for the quantitative trial but a small number of samples of these products in green were produced for the focus groups.

644 consumers were interviewed in-store and were asked to respond to questions on a maximum of two individual trial products. Consumers were selected who met criteria including having purchased the product in the past six months.

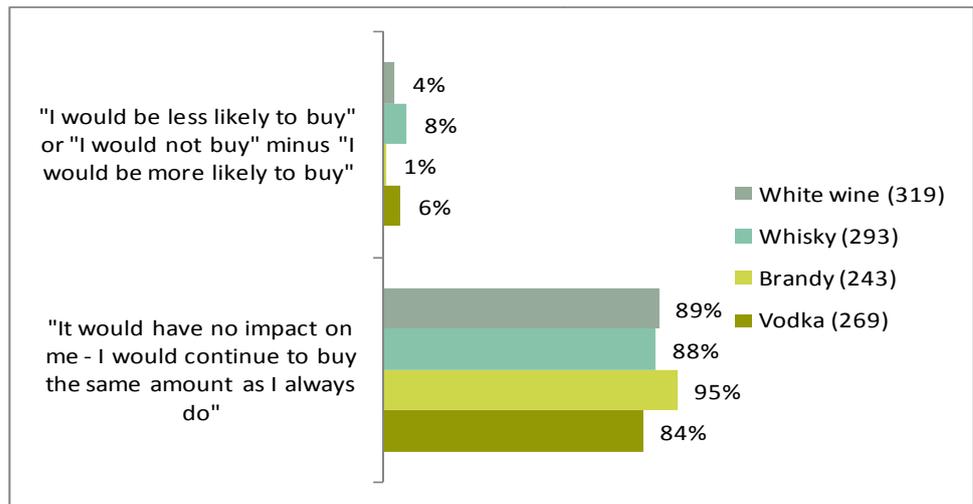


90 consumers attended one of the 12 focus groups that were conducted across the two locations. They provided qualitative feedback on the samples, as well as questions relating to the importance of environmental initiatives and messaging of products' environmental performance.

## The results

Whilst none of the four products in the quantitative trial was rated more highly in terms of taste, quality, appeal and look when bottled in green, the differences scored for some of these factors were negligible. Once consumers were made aware of the environmental benefits of green glass, only 1 in 20 claimed the change in bottle colour would adversely affect their purchasing behaviour.

On being told of the higher recycled content of green glass, 61% thought more highly of Sainsbury's as a result of the initiative with only 9% saying their opinion had not changed. 56% said they would be more likely to buy a product with a high recycled content in its packaging with only 13% claiming that this would not impact their purchasing behaviour.



Feedback from the focus groups helped to explain why consumer perceptions were not generally impacted by a change in glass colour, and also the subtle differences between each product category:

- With brandy, the change in glass colour was not spontaneously seen. Consumers associated the darker colour with some premium products, and considered the label to be more important.
- White wine purchasing decisions are driven by a knowledge of the grape, brand (including own label), tasting notes and region, and there is generally no need to see the product. Furthermore, white wine comes in a range of green bottles and therefore consumers were generally not concerned by the sample used in this trial.
- A minority of whisky drinkers use the colour of the product in their purchasing decision. However, in the quantitative trial, the main reason why whisky scored lower than brandy appears to have been the lack of foil covering the unfilled neck of the bottle.
- Vodka consumers look for clarity and purity of taste. Flint glass promotes this image and as a result the green glass product performed poorly.



- Gin performed especially well in all the focus groups, with consumers offering spontaneous praise. There is a precedent for gin in green glass and consumers stated their perception that it improved taste.
- Opinions on rosé were divided. For those that see rosé as a separate product, the colour of the wine is a fundamental part of their purchasing decision and 'pinkness' is a deciding factor. For regular wine drinkers, the information on the label is the prime consideration.
- The quantitative trial found that most consumers are concerned by environmental issues and make efforts to purchase accordingly. Only 8% said they made no efforts or did not care. However consumers were uncertain around the benefits of the shift to green glass, suggesting that communication and education are important.
- Closing the loop in consumers' minds is important; they put glass bottles out for recycling but can do more by buying products in green glass with a high recycled content and help retailers reduce their environmental impacts.

*If a wine or spirit producer currently bottling in clear glass shifted half of their bottles to green, they could meet their Courtauld 2 packaging target by this action alone.*

### Conclusions and recommendations

- Gin and white wine in green glass could experience increased sales if the purpose for the shift is properly communicated and consumers are educated on the environmental benefits.
- Brandy and other coloured spirits (including whisky and liqueurs) may experience improved consumer perceptions in green glass if foil is used to mask the empty neck of the bottle.
- Vodka and rosé require more research to mitigate the negative perceptions of green glass i.e. suitable labelling using appropriate colours (such as blue for vodka and pink for rosé) may mitigate the negative perceptions of green glass. These may be reduced to such an extent that there is a net overall benefit to be had by a retailer from a well-communicated initiative shifting its own-label wine and spirit lines to green glass.
- Improved consumer perceptions could be realised by designing labels to complement the green glass.

- Consumers need to be informed and motivated on the benefits of glass recycling, using tangible examples of the CO<sub>2</sub> savings realised by using green glass.
- Communication should be inclusive by offering consumers a way to help industry reduce its environmental impacts.



### Summary of consumer trials

	<i>Green Glass impact on category conventions</i>	<i>Green Glass impact on decision making</i>	<i>Impact on trade</i>
Gin	Takes advantage of conventions	Boosts quality and taste perceptions	Positive
White Wine	None	Minimal	None
Brandy	None	Minimal	None
Whisky	Minor	Minor impact on quality and taste perception	Minimal
Vodka	Significant	Minor impact on quality and taste perception	Negative
Rosé Wine	Significant	Significant impact on taste perception	Negative

While steps have been taken to ensure its accuracy, WRAP cannot accept responsibility or help liable to any person for any loss or damage arising out of or in connection with this information being inaccurate, incomplete or misleading. For more detail, please refer to our Terms & Conditions on our website: [www.wrap.org.uk](http://www.wrap.org.uk).

---

**Waste & Resources  
Action Programme**

The Old Academy  
21 Horse Fair  
Banbury, Oxon  
OX16 0AH

Tel: 01295 819 900  
Fax: 01295 819 911  
E-mail: [info@wrap.org.uk](mailto:info@wrap.org.uk)

Helpline freephone  
0808 100 2040

[www.wrap.org.uk/goinggreen](http://www.wrap.org.uk/goinggreen)

