GLASS HAS BEEN A TOUCHPOINT OF CELEBRATION, COMMERCE, CULTURE AND SCIENCE FOR OVER TWO THOUSAND YEARS.



An ancient material with a rich cultural heritage, glass is more important to modern life than ever before: versatile and easily innovated, it is a potential enabler of the UN Sustainable Development Goals.

That's why 2022 has been officially declared the <u>UN International Year of Glass</u> – to celebrate the extraordinary benefits of glass for businesses, consumers and our environment alike. This is the <u>perfect opportunity to champion glass</u> and highlight the central role it has played in our society for thousands of years.

EXPLORE THE IYOG 2022 WEBSITE WWW.IYOG2022.ORG

BUT WHY GLASS?



Glass is part of our daily lives. It's an old material whose story has been told many times.

This year, with the International Year of Glass putting glass in the spotlight like never before, it's time to retell the story of this fascinating material and to share the many reasons why glass is the preferred packaging material – now, and for generations to come.

Glass is loved by consumers.

Glass is **naturally** safe and healthy.

Glass protects quality.

Glass can be reused, repurposed and recycled.

Glass supports the Sustainable Development Goals.





UNITED BY OUR SHARED LOVE FOR GLASS

GLASS IS LOVED BY CONSUMERS

GLASS IS A TRUSTED PART OF OUR LIFE



Iconic, stylish, premium, authentic and pure... People 'feel' glass and love glass.

Despite increasing competition from other materials, glass is the only packaging material which can stir an emotional connection, no matter our background. That's because glass is the premium packaging material that transforms any moment, large or small, into a real celebration.

Major moments in our life, from weddings to celebrating a new job, would not be complete without the sound of a cork popping from a champagne bottle, or two bottles "clinking" together to mark the moment.

That's why...

- 86% of us would never celebrate a special occasion without a glass bottle on the table.
- Younger generations see glass as more trendy than other packaging materials.



GLASS SUPPORTS A SUSTAINABLE LIFESTYLE

Consumer concerns around sustainability are on the rise, with more and more of us considering the impact of the products we buy, and expecting businesses to do more to help us make sustainable choices.

Glass can help support an 'intentional living' lifestyle, as a natural, safe and sustainable packaging material with excellent product preservation credentials.

The hidden gem in a carbon-neutral future.

Nature Journal (source)

GLASS IS THE PREFERRED PACKAGING CHOICE OF CONSUMERS



Today, almost 90% of us confirm a strong preference for glass packaging for its prime health, sustainability and lifestyle credentials.

These numbers are only going one way – up.

- Almost 2 in 3 of us (63%) are worried about food contamination, with 22% considering it the most important issue related to packaging when deciding which products to purchase.
- 70% of shoppers prefer to buy products from companies that are seen to be fair and transparent, respectful of the environment, use recyclable packaging and, in the case of food and beverage brands, have low food miles.

In recent years, consumers increasingly want to see more products in glass packaging, such as:





GLASS IS NATURAL

Glass is an inert and natural material that never ceases to protect. It comes from nature, where its raw materials are abundant and sustainably sourced – making it the natural choice for consumers and the environment.

Why?

- Glass is made from raw ingredients that are abundant in nature, such as sand, soda ash, and limestone.
- Sustainably sourced, these materials combine with as much recycled glass as is available to produce new glass.



YOU ARE WHAT YOU EAT

That's why when it comes to our favourite food and drink, we need to look beyond the label. The alchemy of natural ingredients results in a single-layered packaging material. Glass needs no other ingredients, chemicals or plastic linings.

This means:

- No synthetic chemicals in glass that could migrate or interact with food or drink glass avoids unknown or hazardous chemicals of concern.
- No oxidation, product interaction or external influences: Thanks to its inherent properties, glass acts as a secure barrier to keep products safe and extend their shelf life even after it's been opened.
- No limits to its shelf life: as an inert material, glass promises to keep our favourite products safe and fresh, tasting just as good as it was intended.

^{*} Source: Literature report on food packaging materials and their potential impact on food flavor, by Dieter Schrenk MD, PhD Professor of Food Chemistry and Toxicology - Technische Universität Kaiserslautem, Germany. April 2015.

GLASS IS SAFE

At a time of health and environmental crisis, we're placing more emphasis on health and wellbeing than ever – and glass is a packaging we can count on.

Not only is glass packaging considered healthy by consumers, it's recognised as safe by FDA (GRAS) and EU REACH regulations.





- Nearly half of us are concerned about the safety of product packaging for food and hygiene products (Global Data, 2021).
- Glass is considered the safest packaging due to its inertness and use in hygienic and sterile contexts such as cosmetics, fragrances and medical products (InSites, 2019).



For 63% of consumers,

glass is the best packaging to prevent food contamination and protect health*.



Did you know:

Every week, the average person ingests up to one credit card worth of plastic from food, water, or the air?



ELEVATING OUR EVERYDAY WITH A PREMIUM PRODUCT EXPERIENCE

GLASS PROTECTS QUALITY

GLASS IS TRUSTWORTHY AND VALUED



The special moments in life are often made up by sharing a meal, toasting with a drink or treating ourselves or someone we love to a quality product. With glass, we mark the moments that matter most.

Quality products deserve to be packaged in quality material that not only reflects their value but adds to it. That's why products in glass stand out on the shelves.



How?

- Product quality suffers when vitamins, minerals, taste, flavour and the bubbles in sparkling drinks leak out of food packaging.
- A packaging that can keep all this inside keeps the quality of the product as intended – so you can enjoy your favourite products for longer.
- Because of its natural and inert qualities, glass can be trusted to shield and protect any food, beverage, perfume, or medicine cutting back on product waste and keeping the quality as originally intended.
- 65% of consumers choose products in glass because of the **taste preservation and quality credentials** (InSites, 2017).

A MATERIAL THAT INSPIRES



Packaging holds the key to our hearts. Glass feels premium, looks premium and stands out on shelves against products packaged in alternative materials.

Imagine how much the value of wine would diminish if it was packaged in a plastic bottle or carton box? Glass is pure quality, crafted to perfection.



72% of us are influenced by packaging design when selecting which products to buy (WGSN).



 More than 7 in 10 consumers find glass packaging to be one of the highest quality containers available on the market (Newton Market Research).



• 91% of people who drink wine, spirits and beer consider glass as their preferred packaging for preserving the taste of alcoholic beverages (Newton Market Research).



 And wine makers agree that glass bottles are the best option for preserving the flavour of wine for several years.

EVOKING OUR CREATIVITY



It's not just about excellent technical properties – glass packaging ignites creativity.

Each bottle comes with its own personality.

Glass can be moulded into almost any shape, colour and texture imaginable, helping to build a unique and authentic brand that reflects the excellence of the product inside. Adjusting the size, the neck, the body or the bottom, glass can transform from a Bordeaux wine bottle into a perfume bottle or even a jam jar.

With an endless cycle of glass recycling, that's exactly what happens.





CONTRIBUTING TO AN ENDLESS CYCLE OF GLASS

GLASS CAN BE REUSED, REPURPOSED AND RECYCLED

THE WORLD WE LIVE IN IS CHANGING....



Across the globe, we're becoming increasingly mindful of our impact, starting with the products we buy.

- Two-thirds of UK consumers say it's important that brands have recyclable packaging, and one-third have even turned down a purchase due to unsustainable packaging (Drapers, 2021).
- On average, we analyse 3.8 elements when choosing a product and recyclable packaging is a top
 priority (Kantar, 2020).
- In the cosmetics market, over 50% of consumers say that sustainability is a key factor when making a
 purchase, and 56% look for recyclable packaging (Wella Company, 2021).

GLASS IS ENDLESSLY RECYCLABLE



Glass protects the world's resources. It is a 100% recyclable material with huge benefits for brands and consumers. The same glass container can be recycled indefinitely in a bottle-to-bottle loop, without ever losing its intrinsic properties – as a material that doesn't lose quality in recycling.

It can take as little as a month for a recycled glass bottle to be back on the shelves, and glass recycling is on the rise:



Increase in glass recycling in 15 years in the FII



Bottles are collected for recycling in Europe — the highest in the world



Recycled content in an average bottle in the FU



Extensive networks of kerbside and neighbourhood collection systems in place (and rising!)

GLASS CAN BE REUSED AND REFILLED



Glass bottles and jars can also be reused and refilled – making glass the leading reusable option for food and beverage consumers around the world.

- Glass bottles can be refilled up to 50 times before being recycled into a new bottle at the end of their lives

 closing the loop on a complete circular economy.
- Refillable glass containers fully protect a product's goodness and integrity – because glass is an inert and durable safe material that's perfectly suited to reuse.
- Refillable bottles can be a good solution for local regional markets with short distances to cover from farm to fork, or grain to glass. Depending on the scenarios, reusable glass has the lowest footprint of any beverage packaging option in local markets.
- It combines perfectly with recyclable glass bottle solutions to pack products throughout the world before being endlessly recycled.

- More than 45% of global beer is consumed in refillable glass bottles that adds up to more than 160 bn servings!
- In Europe, beer represents the largest market for refillable containers, accounting for 41% of all refillables.
- In Europe, refillable glass accounts for 21% of beer and cider, carbonates and bottled water - the three leading product categories packing in refillable bottles. That's the highest percentage of any other consumer packaging system.

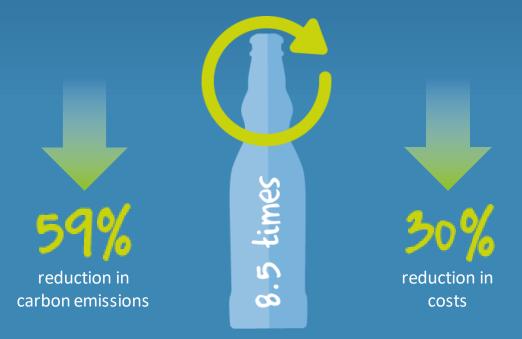


WHY THIS MATTERS



In a circular economy, the benefits of recycling, repurposing and reusing glass are countless. More recycled content used in production translates directly into fewer raw materials needed, less energy consumed, and less CO₂ emitted.

What's more, the glass packaging industry has set a goal to achieve a 90% recycling rate by encouraging consumers, brands and the entire supply chain to recycle through industry initiatives.



- Each tonne of recycled glass used in manufacturing saves approximately 580 kg of CO₂, 1.2 tonnes of raw materials, and a 20% reduction in air pollution and 50% reduction in water pollution (FEVE).
- A reusable system with a 90% return rate, where glass containers are reused at least 8.5 times, means a 59% reduction in carbon emissions and a 30% reduction in costs (Rethink Plastic).



MINIMISING ENVIRONMENTAL IMPACT, MAXIMISING SOCIAL IMPACT

GLASS SUPPORTS THE SUSTAINABLE DEVELOPMENT GOALS

GLASS PACKAGING...



... is environmentally friendly

... reduces food waste

... enables local employment through its production footprints

... aims for climate neutrality

Sustainable packaging is circular by nature, minimises impact to the environment, maximises social impacts and makes economic sense. But not every packaging material can make the same claims to sustainability. Understanding the differences between materials empowers you to make more sustainable choices, aligned with the Sustainable Development Goals.





12 RESPONSIBLE CONSUMPTION AND PRODUCTION



GLASS' UNIQUE QUALITIES





Unlike a number of alternative packaging materials, glass packaging:



Minimises water use



Avoids plastic pollution (littering)



Avoids unknown or hazardous chemicals of concern



Ensures sustainable sourcing



Is recoverable and endlessly recyclable



Does not harm biodiversity

BUILDING A CIRCULAR ECONOMY THAT WORKS FOR ALL



BECAUSE GLASS IS...

ENVIRONMENTALLY FRIENDLY

Circular and permanent by nature – endlessly recycled, locally produced and sourced, safe for nature and without leaching any hazardous chemicals into the product.

Glass is way ahead of other packaging solutions when it comes to reusable bottles that can be refilled.

REDUCING FOOD WASTE

Essential for storage, transport and sales of products – avoiding food waste by keeping products good for longer than any other material.

43% of consumers consider glass the best packaging solution to avoid food littering and food packaging waste (InSites Survey 2020).

ECONOMICALLY BENEFICIAL

Produced on every continent and serving essential sectors like food, beverages, pharmaceuticals, as well as perfumery and cosmetics, while providing local skilled jobs throughout the world.

Each plant in Europe provides nearly 300 direct jobs for local workers.

SETTING OUT ON A CONSTANT PUSH TOWARDS CLIMATE NEUTRALITY, FOR AN EVEN GREENER PACKAGING



Each year, the industry continuously invests in decarbonisation, energy efficiencies and plant upgrades in an effort to reach climate neutrality. While glass production continues to grow, it is already today 30% lighter, 70% less energy-intensive and emits 50% less CO₂ than fifty years ago.

For every 10% increase in recycled glass content, CO₂ emissions decrease by 5%.

These numbers are expected to improve as the industry sets out to:

- Move away from fossil fuels to renewable energy sources, such as hydrogen, biomass and green electricity
- Reduce the use of virgin raw materials, by increasing the recycling rate from 78% to 90% of glass in Europe by 2030.
- Look for new ways to make glass bottles lighter to lower transport emissions.
- Reduce and decrease the overall environmental impact of glass packaging by reusing glass bottles and containers.



CELEBRATING GLASS IN ALL ITS FORMS



This is the moment to celebrate the pivotal role that glass has played and will continue to play in the lives of consumers, brands and retailers around the world – to honour the past, present, and future of this iconic material, and reflect on how it's driving progress towards UN sustainability goals.

Glass is one of the top packaging choices for safeguarding our planet.

Glass is a trusted and proven choice for those seeking wellness.

Glass is a key resource for achieving a thriving, circular and climate neutral society.



GLASS. CHOOSE TOMORROW, TODAY.

JOIN US IN CELEBRATING THE INTERNATIONAL

YEAR OF GLASS.

Explore the Hallmark manifesto















