

BY ANTHONY GLADMAN

The first time Absolut ran paper bottles through its production line, the bottles came out black. Getting to this point had taken years of lab testing, prototyping and partnership development. Not to mention the significant investment needed. But in all those years, no one had cottoned on to a simple truth. Paper stains. So the bottles were black.

That production line revelation came in 2024. Three years earlier, the mood around sustainable packaging had been very different.

When I last wrote about it in these pages back in August 2021, things were looking rosy. Silent Pool caused a stir when it released a gin in a FrugalPac paper bottle – becoming the first spirits producer to do so. Pulpex, then working with Diageo on a paper bottle for Johnny Walker, promised a limited release within six months and full-scale production by summer 2022.

Carlsberg was upbeat too, eager to get prototypes of its own Paboco paper bottle, developed in collaboration with Absolut, Coca-Cola and others, into the hands of consumers for testing in the second half of the year. The brewery expected to release its first beers in paper bottles within two years. The development roadmap laid out a shift from the first generation (plastic liner) to the second (fully integrated, plant-based film liners) one or two years after that.

Which, if my maths is correct, would have been around now.

So, are we swigging from paper bottles yet? Mostly, no. Four years later, progress has slowed to a crawl and the FMCG sector as a whole seems to be rolling back on its push for sustainable packaging.

PepsiCo had aimed to halve its use of virgin plastic by 2030, with a 5% reduction slated for 2025. Instead, it actually used 6% more over 2020-2023. That target has now been abandoned, thanks to “circumstances” and the company’s messaging now

Beyond the hype

Revisiting glass alternatives



focuses on “aligning resources with core business priorities”.

Unilever pledged to halve virgin plastic use by 2025 (vs. 2019) with at least 25% recycled content and full recyclability or compostability across all packaging. By 2023 it was clear the company would fall well short of this: virgin plastic was down just 18%; recyclability had reached just 53%; only the recycled content aim, at 22%, looked to be on track. New targets were set – less ambitious, further out – which its CEO described as “intentionally and unashamedly realistic”.

Coca-Cola followed the same pattern, shifting from a “World Without Waste” in 2018 to “complex challenges” and “evolved voluntary environmental goals” in 2024. A commitment to put one quarter of all Coke worldwide (think for a moment how much that is!) into refillable or returnable packaging by 2030 was dropped.

Now the company will focus those efforts only where infrastructure already exists. A realignment the company says is “informed by learnings gathered through decades of work in sustainability”.

The reality check

Absolut still has big dreams for its paper bottle but these days it's careful to talk about them more quietly. “We’re more humble now,” says Louise Werner, its Director of Future Packaging. “Before it was all about having specific goals, giving exact percentages. Now, we don’t want things to come across as greenwashing. This is a breakthrough innovation so we are very careful not to talk about specific figures because it’s not there yet.”

Take the company’s latest announcement for instance: its mostly-paper bottle now has a mostly-paper cap to match. This was developed in collaboration with Blue Ocean Closures, a Swedish start-up that has formed a pioneer community to reduce plastics through fibre packaging innovation. The bottle and cap completed its first trial at an event in May, being put to the test by a community of bartenders. It is progress most definitely, but smaller and more incremental.

The press release still puffs its chest out with “industry first” this and “pioneering” that – it has to, doesn’t it? That’s its job. But if you read carefully you will also see more measured language that matches Werner’s grounded approach. The

cap, which is made of more than 95% FSC-certified fibres, “opens the potential” for reductions of carbon footprint. It will be as recyclable as paper “in markets that have recycling systems in place that can separate paper from other materials”. Absolut has a “long-term ambition” to replace its PE plastic liner with a biobased material so the entire cap will be made of renewable materials, but doesn’t commit to a timeline for this.

“That’s the way we need to communicate now, to be extremely clear,” Werner says. She means clear in what they don’t say, as well as in what they do. For instance, Absolut has life cycle analysis (LCA) figures which explore the impact its paper bottle and paper cap might have in reducing carbon emissions. Werner says they are “super promising” and show “significant reductions” but she won’t share the actual figures. The thing is, Absolut has been burned by over-promising before, so instead she now says: “We’ve been careful from the start to say that this is going to be a long journey. Let’s take these small wins along the way.”

One lesson Absolut has learned is that lab testing and small-scale trials are fine but still leave unanswered questions that only become apparent when a new product bumps up against the realities of global distribution. “We deliver to 98 different markets,” says Werner. “It’s just mind-boggling, the requirements.” The more Absolut ships its paper bottles around the world, the more it will have to withstand different temperatures and humidity levels; the more it will have to comply with differing recycling regulations and infrastructure, and so on. There is no one-size-fits-all answer.

It seems the longer Absolut works on its paper bottle the more it realises what it doesn’t yet know. Shelf-life, for example. Werner says this has become a major challenge but perhaps not in the way you might be thinking. “The challenging part is how the material will act over time. That’s the difficult thing,” Werner says.

How do you square the unknown and presumably limited shelf life of a paper bottle against the almost indefinite shelf life of the vodka within? “We don’t even have an expiration date. It’s infinity,” Werner says. This means it’s really important to figure out how long one of these paper bottles can last. And there’s only one way to know for sure: wait and see.



Made from bio-based materials, Blue Ocean's cap's pioneering design reduces the amount of plastic used in packaging by combining a body made of sustainably sourced FSC fibre material with a thin top-seal barrier layer, making it recyclable as paper and ocean biodegradable

Despite all this, the paper bottle remains one of Absolut's priorities, or "key strategic platforms" as Werner puts it. Not least because it feels it's taken development of its glass bottles as far as it can. The company has been reducing the weight of its glass bottles for years and increasing the amount of recycled glass in their make-up but you can only push it so far. Eventually you reach breaking point. Literally.

Werner tells the story of her first visit to the production site in Aarhus, not long after she joined the company in 2019. "Everyone who works there, they've been working there for three generations. Their father worked there, their grandfather worked there. You have so much respect for this, the Aarhus team, and you're a bit intimidated," she says.

Werner was there to deliver the first news of Absolut's plans for a paper bottle and expected to be dismissed as the "silly marketing and innovation person" – perhaps to be laughed at. Instead, they loved the concept. Much better, they said, than the feather glass bottles, which were a terrible idea that

they never wanted to see again. "It really comes to a point with glass where you just have to go a different route," Werner says. "So that's what we did."

The right packaging for the right time

Absolut's not breaking up with glass definitely, you understand; it will always have its time and place. The paper bottle simply stems from a recognition that its time is not *always* and its place is not *everywhere*. Werner wants to offer her customers the choice of the right packaging for the right occasion. Got 30 thirsty friends coming over for drinks tonight? Well then you're in paper bottle town. But buying a bottle just to have some vodka to hand and replacing that bottle only every three or six months? Go for glass.

Then again...what if you could buy that nice glass bottle just once? Better to keep it and refill it, right? Martin Murray's customers certainly think so. Murray is the founder of Dunnet Bay Distillers, makers of Rock Rose Gin among other things. Subscriptions for its Refill Rewards Club is the best-

selling product on his website.

Customers can choose to get a 700 ml plastic refill pouch (plus extra goodies such as tonic water, dried citrus wheels, etc.) either twice a month, monthly or quarterly. They can also post empty pouches back to Murray – no stamp or envelope required – so he can take care of the recycling for them. Incidentally, his second-best seller is individual refill pouches.

Murray says he has about 1,000 subscribers to this scheme, a figure that was bottlenecked (pun intended) by website infrastructure problems. Now that Murray has solved this issue, growth has begun to rise again, with around 20 new members joining each month in mid-2025.

Murray says part of this demand is down to the cost-of-living crisis. "We thought we would lose a lot of subscribers," Murray says. "What actually happened was people probably moved from buying the bottles to the pouch subscription because we'd made it better value for money."

This is good for the bottom line, naturally, but brings with it other bene-

fits. “January and February in the gin industry is two of the worst months but we know we have those orders coming in January and February like clockwork. It gives us a predictable order pattern,” Murray says.

The cost per unit is lower, too. End-to-end the pouches, including the freepost return system, cost Murray £2.73 less than the glass bottle equivalent when you factor in all the associated costs such as freight in, freight out, labour and so on.

And speaking of labour, there’s less of it with the pouches. Murray says he can fill 200 pouches in an hour working on his own. To do the same with glass bottles would have needed the work of two or three people.

The pouches come 20,000 to a pallet which frees up lots of room in the warehouse compared to glass bottles of which you’ll get at most 1,000 on a pallet. They weigh less – Murray can ship two under 2kg and thereby access lower shipping rates – and they are sturdier, so they hold up well in transit. “Our breakages are significantly less with pouches and that’s another big win,” Murray says. When you look at it like

this, why wouldn’t you use them?

“I think at the moment access to equipment for smaller distilleries is really difficult,” Murray says. There’s the cost, of course. Isn’t there always? A pouch-filling machine might offer savings but only if you can stomach a hefty chunk of up-front CAPEX. And even if you can there’s not a huge amount of choice in the market. Murray got his by taking on an ex-demonstration model from a show in Birmingham in early March 2020. “We were the guinea pigs,” he says. “I got sprayed in gin a few times.”

Still, it’s worth persevering.

Refill pouches may be great for direct-to-consumer sales but Murray says the real volume lies elsewhere. “The on-trade is absolutely the best place for refills because you can have a beautiful bottle on the shelf and refill it and all of a sudden your 100 waste bottles are then just a stack of pouches that can go back,” he says.

And this market is also likely to see growth thanks to a regulatory change that took effect on 1 May 2025 which ended the need for bars and restaurants to put new duty stamps on containers at the point of refill.

Trials and press releases

In 2024, half of Calvados brand Avallen’s sales were packed in glass. Its target is to reduce this figure to less than 5%. A further 20% of its sales were in the paper FrugalPac bottles of which the brand was a notable early adopter. The remaining 30% were in bulk formats, which comprised both circular (EcoSpirits) and linear (bag-in-box) alternatives to glass bottles.

Avallen makes 90% of its sales to on-premises accounts. Its co-founder Stephanie Jordan says that for the past five years the brand has been doing a lot of “heavy lifting” to educate people in the trade about sustainability, including sustainable packaging.

Jordan says larger brands tend to focus on training to their brand alone. “Maybe they’ll send in someone to train about the future of cocktails or they’ll do something about bloody minimalist garnishes and Japanese glassware.” In contrast, Avallen encourages a more holistic approach with its eight-point guide to sustainable bar operations.

This covers bulk solutions, banking choices, building menus with at least 30% vegan options, staff diversity and

Got 30 thirsty friends coming over for drinks tonight? Well then you’re in paper bottle town





Dunnet Bay's plastic refill pouch with minimal weight and a freepost return system



Avallen, a Certified B Corporation, produces its climate positive¹ Calvados across glass (50%), paper FrugalPac (20%) and bulk (30% in 2024) packs

“drinking the rainbow” with independent brands stocked alongside mainstream brands. “We’ll touch on how to learn the Avallen brand and its purpose,” says Jordan. “But ultimately our training session is taking you through practical, easy to implement immediate solutions that will literally step change your business to be more sustainable.”

“Most things are press releases and trials,” Jordan says. “The Johnny Walker paper bottle trial was a press release four years ago. Didn’t happen for three years.” Her frustration around this particular example comes from the fact that she wants the project to succeed. She once worked at Diageo, where she became Tanqueray’s first female global brand ambassador.

Her Avallen co-founder, Tim Etherington-Judge worked there too. Her husband still does. Still, she is annoyed when press releases come and go while tangible data and genuine scalability seem lacking.

She cites a press release from 2024

that trumpeted a trial of 200 units in the Johnny Walker Experience in Edinburgh and notes there has been no news since. “How did the trial go? Are you going to roll it out? What percentage of glass bottles will you eliminate from XYZ market?”

For bulk packaging, Jordan predicts that the bag-in-box will be more successful than circular EcoSpirits bulk format because venues already understand single-use disposal. Her example here is Sapling, which makes 80% of its UK sales in the bag-in-box format; the market accepts it because it's simple. “You get it, you use it, and you throw it out,” she says. “That is way easier for people to grasp than a circular item that someone has to pick up.”

You can almost see the image of a beer keg forming in her mind here. “They can do it for beer. They can't seem to do it for spirits,” she says.

Sometimes it feels like Jordan has really had it with glass bottles. “It's something we've been doing for a hundred years,” she says. “It's redundant.” Bulk distribution existed for centuries through barrels and amphoras, she points out. Glass bottles are a relatively recent phenomenon, only emerging in significant volume with the industrial revolution.

Yet the trade seems wedded to the glass bottle despite it not making sense. “It's heavy, it's fragile, it's high carbon.” It's clear Jordan is exasperated by industry resistance to adopting bulk delivery once more, despite operational advantages being “a lot more than marginal gains.”

And yet, she says, the UK in particular is ripe for the kind of step-change she would like to see. Rather than a fragmented patchwork of small, individual operators, the UK has national pub groups with hundreds, even thousands of outlets. This means scalability is much stronger. A single buyer might make decisions that are felt across 400 or more venues. But at the moment, Jordan says, many of these buyers act more like gatekeepers.



“Buyers don't quite understand their power.” Just one switch to bulk formats means substantial savings – both carbon and money

“I feel buyers don't quite understand their power,” she says. All it takes is for one such buyer to move away from single-use glass and into bulk formats over three litres and the savings would be substantial. She means carbon *and* money.

“Maybe the domino effect would inspire other venues to do the same,” says Jordan, “because I am winning on price, I am winning on staff time, which equates to price, I am winning on cost of waste, again price, it makes so much sense.” And yet, she says, the resistance remains.

“It's like they have the key but it's in their pocket and no one told them it was in their pocket.”

Look beyond the easy answers

Perhaps what is needed is a desire to look beyond easy answers. Perhaps it's time to trot out the bus metaphor so often applied to politics: look not at the destination but the direction of travel.

Murray's success at Dunnet Bay owes much to this mindset. Were it not for such vision he probably would not have given the pouches a punt. “At the start we acknowledged that this isn't the perfect solution but by doing this we would be on the path towards that solution,” he says. “Is it perfect yet? No, it's still not perfect but we'll keep working towards it.”

And the same goes for Absolut, still working incrementally towards something that once would have seemed impossible: a paper bottle, for goodness sake! It seems completely mad, until you flip your way of looking at it.

And yes, those bottles stained black when they ran on the conveyor belts – which would be no good at all when they reached the shelves. But was that really such a big problem?

No. They just had to use a clean conveyor belt.



Sapling makes 80% of its UK sales of its climate positive vodka in a bar-friendly bag-in-box format. Check-out their Tree Tracker at saplingspirits.com

Sources

1. Ecochain Technologies B.V.
2. ClimatePartner GmbH