

Why are major beverage companies refusing to use a 90% recycled can?

Marc Gunther | Oct. 30, 2014



US-based aluminum producer Novelis has perfected an 90% recycled drink can, but the big global beverage makers are not using it. Photo: Justin Sullivan/Getty Images

Imagine an infinitely recyclable product that performs as well as the alternative, costs less to make, and is unquestionably better for the environment. You would bet on its success, wouldn't you?

Novelis, the world's largest recycler of aluminum, has made that bet. Since 2012 the Atlanta, Georgia-based company has invested half a billion dollars in recycling by building, among other things, the world's biggest aluminum recycling plant. This \$260m high-tech marvel officially opened earlier this month in Nachterstedt, Germany.

Novelis uses the facility to produce materials for its "evercan", a beverage container made of 90% recycled aluminum.

As an infinitely recyclable metal, aluminum is a poster child for shifting from a linear take-make-waste model of industrial production to a circular model in which everything, at the end of its useful life, is made into something else.

On its website Novelis endorses the circular economy, stating that it is moving its "whole business model" toward a closed loop. "We are embracing an entirely new way of thinking and operating, in order to radically transform our company – and, in the process, lead the way in our industry."

But Novelis is having trouble finding followers. None of the world's major beverage companies have adopted the evercan. So far, the product has just one customer: Red Hare Brewing Co., a small craft brewer based in Marietta, Georgia.

Conrad McKerron, a senior vice president at the nonprofit [As You Sow](#), who has worked on beverage packaging issues for years, says recycled packaging is "absolutely where we need to be going, in terms of resource efficiency." About Novelis, he says: "They've made public commitments, and they've staked out a leadership position ... [I]t's now up to Coke and Pepsi".

Of recycling and rhetoric

Why the beverage companies aren't buying is unclear, especially given their rhetoric about recycling. Coca-Cola, for example, touts its intention to "leverage our significant scale and resources to contribute meaningfully to the 'circular economy', in which materials are used and reused to constantly rebuild natural and social capital".

PepsiCo, meanwhile, proclaims that it strives for what it calls "the five Rs": "reduce, recycle, use renewable sources, remove environmentally sensitive materials and promote the reuse of packaging in the entire process of packaging selection, design and procurement".

AB InBev, producer of Budweiser beers, is similarly effusive, stating that "we continuously raise the bar by reducing the amount of material we use, recycling everything we can, integrating the use of recycled inputs into our packaging and

ensuring that our packaging is recyclable whenever possible”.

A firsthand look at aluminum recycling

Recently, I traveled to Germany to tour the Novelis recycling plant and lead a forum with experts on the circular economy. [Disclosure: Novelis paid my travel expenses and a moderating fee.]

At the Nachterstedt plant, bales of crushed cans trucked in from all over Central and Eastern Europe, dirtied with paints and coatings, go into one end. The scrap is then shredded into little pieces, purified, melted down and cast into 25-ton ingots.

These ingots are then shipped to a nearby plant and rolled into sheets. Some are sold to big global packaging companies, such as Rexam and Ball, which manufacture cans to meet the specifications set by the beverage brands. Others go to the auto and electronics industries. (Here’s a video about the evercan, with an endorsement from Jonathan Porritt, a respected environmentalist and advisor to Novelis.)

It turns out that Novelis, which booked \$9.8bn in revenue last year, is selling plenty of recycled aluminum to the auto industry. Driven largely by fuel-efficiency regulations, automakers including Ford, Jaguar Land Rover, Audi and BMW are all substituting lighter-weight aluminum for steel. By opting for recycled aluminum they can reduce not only the greenhouse gas emissions they cause directly, but also the “embedded carbon” in their vehicles: the amount of heat-trapping gas pollution created by production of the materials used in each new truck or car.

Many aluminum customers – notably Ford – are also becoming suppliers, selling the scrap left over from manufacturing back to Novelis for reprocessing. You can see the circular economy taking hold.

“It’s interesting to watch our customers,” Phil Martens, CEO of Novelis, told me. “In some areas, we are a bit ahead of them and in some others they are pulling us.” In the car industry, he says, “The tipping point has happened”.

But the automotive sector will only account for 9% of his firm’s revenues in FY2014. 62% of its business is aluminum cans.

Why, I wondered, aren’t the big beverage companies buying?

Supply, demand and dependence

The beer companies were no help. AB InBev declined to talk about aluminum recycling for this article. So did MillerCoors.

The soft drink giants were a bit more forthcoming. Tim Carey, senior director of sustainability at PepsiCo, said: “I love that Novelis is pushing the envelope. 90% is a nice improvement”. But decisions about packaging are ultimately up to his procurement executives, Carey said, who tell him Novelis is charging a premium for its aluminum. Novelis says that’s not so.

Coca-Cola provided a bit more insight, saying through a spokesperson that “We source our aluminum can sheet from various suppliers, many of whom offer can sheet that includes recycled content. Use of the Novelis ‘Evercan’ requires the Company to restrict our supply to only Novelis material”.

In other words, committing to more recycled aluminum would mean committing to Novelis – and no company wants to be dependent on a single supplier, even if that supplier is willing to sign long-term agreements, as Novelis says it is.

A model for the circular economy

No one I spoke with disputed the economic and environmental benefits of aluminum recycling. Processing used aluminum requires about 90% less energy and generates 90% fewer carbon emissions than making new aluminum out of

bauxite. It also costs a lot less (although Novelis wouldn't say how much).

Nor does anyone disagree that the evercan, with its minimum of 90% recycled content, is an environmentally superior package to the typical aluminum can.

Further, unlike PET plastic bottles, aluminum cans can be recycled again and again with no loss of quality. So not surprisingly, aluminum is recycled at much higher rates than PET. In North America beverage cans contain an average of about 68% recycled aluminum, according to the Aluminum Association. PET bottles contain much less recycled material – 10% or so for the big beverage companies – partly because the textile industry buys large quantities of used PET.

It seems, then, that for the circular economy to take hold, a good product isn't enough. Several other things need to change as well, including business models and relationships with suppliers and customers.

Expanding the impact of recycling

No one should shed any tears for Novelis. Unlike its rival Alcoa, Novelis no longer owns bauxite mines or primary processing facilities. So strictly in business terms, Novelis should be able to recoup its investment in recycling facilities by lowering its costs.

But Novelis needs to increase the supply of recycled cans to feed plants like the one in Nachterstedt. That means consumers have to recycle more. The influence and marketing clout of a big beverage company would surely help.

Indeed, a few years ago Alcoa tried to get the aluminum industry, beverage companies and waste haulers behind a marketing campaign to drive up all kinds of recycling. But only a handful of companies – Novelis and New Belgium among them – agreed to provide financial support. The effort fell flat.

At first glance Coca-Cola would seem like the most obvious major evercan customer, since the firm has pledged to increase recycling of bottles and cans and use more recycled and renewable content in packaging. But the company and its bottlers focus on PET, not aluminum. The Coca-Cola system (which includes the Atlanta-based drinks company and bottlers around the world) has made major investments in bottle-to-bottle recycling technology for PET, as well as introducing "plantbottle", a PET container made from sugar cane and sugar cane waste. Drinks in PET plastic account for about 60% of its global sales.

Scott Vitters, who leads Coke's sustainable packaging efforts, told me by phone that PET bottles have one obvious advantage over cans: they are resealable and thus extremely convenient for on-the-go customers. "Glass, metal, fountain and PET all meet different consumers' needs", Vitters said. Of course, some aluminum bottles are resealable as well.

Where does this leave Novelis with its big investments in recycling? John Gardner, the company's chief sustainability officer, said by email: "We will shortly announce a second US craft beer customer. We are also in advanced talks with a major global brand".

As things currently stand, however, lots of aluminum cans – as much as \$2bn worth a year – continue to wind up in landfills. That's an obvious waste. It means that energy and carbon emissions are needlessly generated to make more cans out of primary aluminum.

The problem is simple. The solution, not so much.