



US recycling: Green targets - Taking charge of recycling

Ellen R Delisio | Nov 20, 2015

The lack of a coherent approach to recycling across the US is being tackled by businesses, which want to recycle more and need more recycled raw materials

The hodgepodge that is the US recycling landscape is being overhauled by corporate groups needing reliable and plentiful sources of recycled materials.

“Recycling is very much alive and well in the US because demand for the recycled materials has never been higher,” says Keefe Harrison, executive director of the Recycling Partnership, based in New Hampshire. “Recycling has a strong future with companies who are keeping an eye on material scarcity. We see a trend for companies to first shore up recycling within their four walls and then look outside their company buildings to assess how best they can improve community programmes.”

US recycling rates lag behind those of most industrialised countries largely because of a lack of uniform policies and limited, outdated infrastructure. There are no national recycling targets. For the most part, recycling is handled at the state level, with primary responsibility assumed by cities and municipalities, which often work in a vacuum.

“It’s fragmented,” says Paul Gardner, a recycling consultant. “There’s a lack of capital ... There are cities next to each other with completely different approaches. There is a lack of recognition that recycling is part of another supply chain. There also are some places where garbage fees are very low, so people don’t care about recycling.”

American communities recycled and composted around 35% of municipal solid waste in 2013, diverting 87m tonnes to recovery, according to the US Environmental Protection Agency (EPA). The average American generates 4.4 pounds of trash per day, resulting in about 254m tonnes of trash across the US each year, notes the EPA.

At the federal level, the EPA is increasingly concerned about the large amount of food in the country’s waste stream. “More food reaches landfills and incinerators than any other single material in our everyday trash,” says the EPA. In 2013 alone, Americans generated more than 37m tonnes of food waste, with only 5% diverted from landfills and incinerators for composting. At the retail and consumer levels, food loss and waste totals \$162bn, the US Department of Agriculture (USDA) estimates. “There’s great potential for all of us to help reduce, recover, and recycle wasted food,” according to an EPA spokesperson.

The EPA and USDA have set a goal of reducing food waste and loss by 50% by 2030. This domestic goal aligns with a similar target in the new UN Sustainable Development Goals.

“As part of the effort, the federal government is working with charitable organisations, faith-based organisations, the private sector and local, state and tribal governments to reduce food loss and waste in order to improve overall food security and conserve our nation’s natural resources,” says the EPA.

Local differences

Local recycling policies vary widely; 32 out of the 50 states require companies to take responsibility for discarded electronics, batteries, mobile phones and other products. Legislators in the state of Rhode Island recently introduced a bill that would require companies to recycle at least 80% of packaging by 2020.

“There are about 9,000 kerbside recycling programmes in the US, which is good, but they are all different,” says Conrad MacKerron, senior vice-president of As You Sow, which uses shareholder advocacy and coalition-building to encourage socially responsible behaviour by corporations. The group has challenged Coca-Cola, PepsiCo and Nestlé Waters to

endorse higher recycling rates and adopt policies to meet them. “The collection rate for packaging is about 51%, and for bottles, cans and polyethylene terephthalate (PET) plastic, only about 30% is being recycled and there is great demand for it,” says MacKerron. “We know that recycled aluminium cans are incredibly efficient, but 60% are just going into landfills.”

While some companies support end of production recycling, many are reluctant to take on the total cost of disposing of items, MacKerron notes, especially if not all companies participate. “They want it to be fair,” he says.

Consumer interest in recycling is also high, because many people think it the most practical thing they can do for the environment, MacKerron says. “Often they are dismayed when they find out a lot of items put in bins could be recycled, but there is no market for it.” As part of its work, As You Sow has drafted proposals for shareholders to present to companies, asking them to adopt more aggressive recycling policies.

But some corporations, tired of waiting for changes at the government level, have begun to take action. “The last few years I’ve seen more attention by retailers and consumer brands to recycling than in the past 20 years,” says Paul Gardner.

Joining forces

Realising the difficulty of making large-scale improvements on their own, companies have banded together to improve and expand recycling programmes. The Closed Loop Fund, founded in 2014, which includes Walmart, PepsiCo, Unilever and Alcoa, among other companies, offers interest-free loans to municipalities and small businesses to upgrade and launch recycling programmes. At the end of 10 years, the lenders get the loan principle back. Other private as well as some public funds also go into some of the projects.

By 2025, Closed Loop is aiming to eliminate more than 50m tonnes of greenhouse gas emissions, divert more than 20m cumulative tonnes of waste from landfills and create more than 20,000 jobs across the US.

“There are a number of companies that want to take responsibility for recycling and spur innovation in recycling in the US,” says Bridget Croke, Closed Loop’s vice-president for partnerships. “We’re looking to see if we can solve key recycling bottlenecks.”

The bottlenecks have included low participation rates, outdated infrastructure and consumer confusion over what can be recycled. “We have to remove the barriers and make it as easy as possible, by having single stream recycling at as many homes as possible,” says Croke. “We want to make it the lower barrier choice for people.”

Closed Loop is also spurring innovation, as loan recipients work on systems to recycle materials that have been going to landfill, she says. “The next big thing is designing things so they can be easily recycled. Companies are starting to look more at the whole process.”

Among the first projects to receive a loan is a regional plastic recovery facility (PRF) in Baltimore, Maryland, which will be able to process plastics in recycling categories 3 to 7 – ones that usually wind up in landfills. This will make it more economical for cities and materials recovery facilities (MRFs) to sell a wide range of plastics back into the market. The new plant could divert more than 650,000 tonnes of plastics from landfill, according to Closed Loop.

Wall-e

Walmart has partnered with several organisations to help US consumers recycle used electronics. In 2013, the company initiated a smartphone trade-in system at more than 3,600 US stores and Sam's Clubs. Working with CExchange, the programme offers an immediate credit from \$50 to \$300 for more than 100 smartphones, and Walmart projects it will keep hundreds of thousands of smartphones out of landfills annually. The company has also launched a tablet trade-in

programme. Customers looking to trade in electronics such as MP3 players, video games, cameras and laptops can use the "gadgets to gift cards" programme. After a series of online questions to assess the value of their device, they can ship it for free to CExchange and receive an e-Walmart gift card based on the value of their item.

Walmart, which has a goal of using 3bn pounds of recycled plastic in its packaging and products by 2020, became a lead investor in Closed Loop in 2014, according to Kevin Gardner, Walmart's senior director for global responsibility communications. "We realise that to create a true systems change in recycling, it's critical for Walmart and other leading global companies and brands to come together and find a national solution to divert waste from landfills," he says.

Using more recycled plastic also ties in with the company goal of having zero waste in its supply chain by 2025. "Today we are diverting 82.4% of our waste materials in the US and 68% internationally from going to the landfill," Gardner says. Walmart also has programmes that allow consumers to recycle electronics, including tablets and smartphones, and recycling programmes in several countries where it operates.

Executives at PepsiCo, which had a recycling programme involving collection containers in public places, wanted to do more, and signed up with Closed Fund after talking with colleagues at Walmart, according to Tim Carey, senior director of sustainability for PepsiCo North America and Quaker Foods. "We realised a lot of municipal and local areas did not have access to recycling, but that's a hard thing to do as an individual company," Carey says.

Supply and demand

PepsiCo is the largest buyer of bottle-grade post-consumer recycled PET in the US and is able to make bottles out of 100% post-consumer recycled content, but it can never get enough material to do that, Carey says. "If we could get more PET into the recycling stream, that would make it easier. If the technology and profitability of MRFs can improve so they are more profitable in recovering materials, more private companies will come in."

Reducing the weight of containers and designing packaging that is entirely recyclable also keeps PepsiCo's researchers busy. The company has pledged to create partnerships to raise the recycling rates for US drinks containers to 50% by 2018. One of the groups it is working with is As You Sow.

Corporations have also thrown their support behind the Recycling Partnership, which seeks companies to fund recycling efforts in communities. The aim is to provide better recycling opportunities for 10m households by 2025, according to Harrison. Four communities have been selected so far, and residents are scheduled to receive larger-sized recycling bins. "We measure the recycling rates of our community partners and expect a strong programme will have at least 450 pounds of recycled materials per household per year," he says. "Many companies look to recycled feedstock to make new consumer goods."

National policy

While the US has no national recycling targets or goals, the Environmental Protection Agency produces an annual report – "Advancing Sustainable Materials Management: Facts and Figures" – which includes information on municipal solid waste (MSW) generation, recycling and disposal. It helps to explain the state of recycling in the US and identify key sectors with opportunities for improved recycling rates. The agency also hosts several competitions, including the Food Recovery Challenge, which asks businesses and organisations to improve their sustainable food management practices and report their results and the Federal Green Challenge (FGC), which allows federal offices or facilities to reduce the federal government's environmental impact.

In 2014, FGC participants diverted more than 390,000 tonnes of MSW and construction and demolition waste from landfills, sent 457 tonnes of end-of-life electronics to third party recyclers, and avoided purchasing 15,000 tonnes of paper. The Electronics Challenge asks manufacturers and retailers to commit to sending 100% of used electronics

collected for reuse and recycling to third-party certified recyclers; and to increasing the amount of used electronics collected. The Challenge also requires participants to maintain transparency by publicly reporting their collection programmes and recycling data.

The first four cities were selected through an assessment of need, opportunity for growth, and the ability to create strong systems-solutions that would continue to deliver more good recyclables, Harrison explains. "Since then, we've utilised public-private partnerships to improve recycling at the local level by providing grants, technical support and educational programming to make recycling programmes more accessible and more efficient by reducing contamination," he says.

Other companies that struck out on their own continue to refine their programmes. As part of his work with the now defunct Recycling Reinvented, Paul Gardner helped Nestlé Waters increase its recycling rate for plastic bottles. Nestlé Waters has a goal of improving PET bottle recycling rates to 60% by 2018; only 31% of PET bottles were recycled in the US in 2013, according to the EPA, a rate that ranks the US seventh worldwide. Nestlé Waters North America also has reduced its packaging by nearly 60% over the past 20 years, according to Jane Lazgin, Nestlé spokeswoman.

"We have increased the recycled content in certain of our bottles, which helps to draw attention to the importance of recycling, create demand for recycled content and support the market," Lazgin says. In July, Nestlé launched Resource Natural Spring Water in 100% recycled plastic (rPET) bottles.

By the end of 2016, Nestlé Waters expects to expand its use of recycled content in its Arrowhead PET single-serve bottles. "This will increase Arrowhead's use of recycled content by 38% and achieve our goal to include up to 50% rPET in our Arrowhead single-serve size rPET bottles," Lazgin adds. "As recycling rates in the US increase, and more recycled plastic comes back into the market, we anticipate using more and more recycled content in our packaging. We have seen that rPET can be cost competitive with virgin plastic and in the future we believe that this will become more commonplace."

To accelerate that shift, recycling needs more attention, according to As You Sow's Conrad MacKerron. "You don't have a lot of environmental groups tackling recycling. You have to get it higher on the radar of companies and it's a matter of companies developing alliances with peers. Companies are going to have to answer the question of where the responsibility is and they have to decide before there is a crisis. Just having a conversation about it is not the answer."