Business (/category/business)

Closing the take, make, waste loop

Textiles industry urges govt to help patch up the near \$3b recycling plant gap.

Supporting Audio

Pessimism is an easy attitude to adopt when looking at the state of the world.

Bernadette Casey

Humans are producing 100 billion units of clothing each year, all the while consuming more from

the planet quicker than the Earth can regenerate annually. This year, 'Earth Overshoot Day' was July 29; in 2020, it was August 22.

The clothing and textile industry, of which the fashion sector alone is worth US\$2.5 trillion (\$3.6t), is a global giant built on an ethos of 'take, make, waste' – a linear business model the industry is not alone in having adopted.

In little-wee New Zealand, Kiwis buy more than \$4 billion in clothes a year, only for each person to throw 44kg, or nearly 221,000 tonnes, of perfectly reusable t-shirts and jeans, scraps of organic and synthetic fibres, and other materials into landfills.

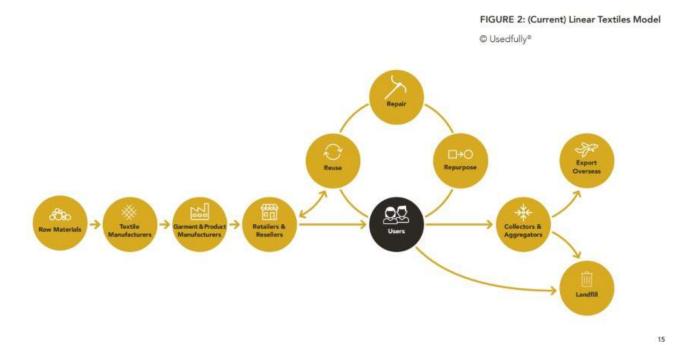
And if the textiles don't end up in rubbish dumps immediately, op-shops burgeoning at the seams try to cram the donations in. Later the items are bagged up and exported to the Pacific where new bodies reuse the charity.

New Zealand in 2019 was the third-most wasteful country in the OECD per capita, and had the lowest rate of recycling.

The country faces a recycling infrastructure gap of between \$2.1b and \$2.6b, according to the Ministry for the Environment, and \$900 million is needed to fund operations over the next 10 years.

Textile waste made up about 5% of landfills in 2019, from 0.5% more than half a century ago. But textiles comprise anywhere between 5% and 9%, depending on current estimates that are limited by available data.

Auckland Council projects textiles will make up 14% of rubbish dumps by 2040. The waste source emits 397 million kilograms of carbon dioxide annually.



Within reach

Clothing and fabrics, organic and synthetics, that still have life in them beyond their first use – this is the textile waste the people behind Usedfully believes can be repurposed and reused.

The membership-based, textile reuse programme enables organisations to support closing the loop for clothing and textiles in New Zealand.

Based on feedback from more than 200 industry stakeholders, Usedfully has recommended six actions to government, including co-investing in crucial processing plants and infrastructure, mandating a product stewardship levy on all textiles brought to market, and banning all textiles from landfills.

The report builds on Usedfully's earlier work in proving recycled plastics can be created from polyester clothing, that textile fibres can be converted into products used for building roads, and that a handheld scanner can test, validate and report on the composition of textiles and fibres at a fraction of the cost of lab testing.

"We know there is a desire for change within the industry and we've proven the technology and systems to enable significant reductions in textile waste and emissions are within reach," Usedfully co-founder Bernadette Casey says.

"What's needed now is for the government to join with industry to lead a coordinated, strategic approach to implementing meaningful, practical solutions at scale."

'We know there is a desire for change within the industry and we've proven the technology and systems to enable significant reductions in textile waste and emissions are within reach.'

Usedfully believes a product stewardship levy can help fund the infrastructure gap.

Product stewardship, or extended producer responsibility, is the idea that businesses selling products are responsible for taking them back at the end of their life, and recycling or putting them to use for another purpose.

The leading textiles example is France's 13-year-old scheme, overseen by Refashion – the only organisation accredited by the French public authorities to cover the obligations of clothing, linen and footwear producers, distributors and importers.

Some 5000 companies are charged fees based on the amount of textiles they bring to market, with discounts made on more sustainable materials. That income funds mostly sorting operations, although awareness and education campaigns and R&D are funded.

France diverted 18% of textiles from landfills in 2009, the scheme's first year. Less than a decade later, the amount diverted had doubled.

Last year, €34.5m (\$58m) was collected in eco-fees on more than 517,000 tonnes of marketed items. Some 204,000 tonnes were collected by the not-for-profit Refashion, of which more than three-quarters was sorted, mostly in France. The 48,000-tonne shortfall was sent to contracted and non-contracted operators, with the remaining 5% share deemed waste.

Of the 204,000 tonnes collected, 99.6% was reused or recycled. Refashion aims for 95% of the tonnages sorted to be reused or recycled and that a maximum of 2% is not recovered.



From left: Usedfully co-founder Deborah Crowe, Labour MP Angie Warren-Clark, and Usedfully co-founders Bernadette Casey and Peter Thompson.

Ever-hopeful

Casey is optimistic, saying competing brands have come together to collaborate on what solutions are needed. Usedfully is holding a hui with government and industry representatives in September.

"They know that no individual brand or organisation can solve it and they understand that together they can go further and faster. So there's an immense amount of goodwill and it's an industry that understands the issues and is front-footing it.

"They are really willing and they're almost nudging government, going: 'come on!' They're bringing it to government, so I find that really optimistic," Casey says.

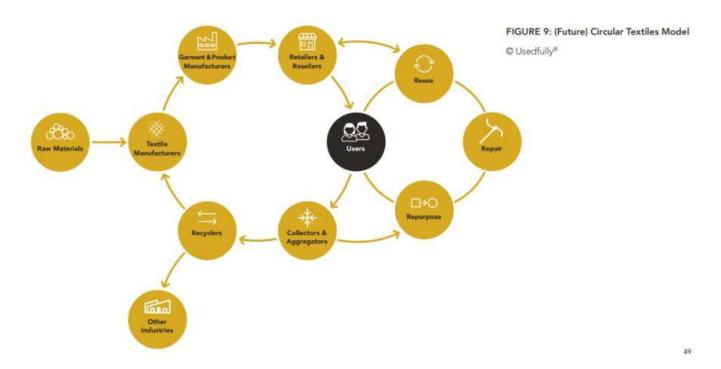
"We can see the system, we can see the potential; we've proven it all; the economics look good. And if we do transition into this system, there's enormous space for hope. So I feel really, really optimistic,"

Usedfully co-founder Peter Thompson says collaboration gives him hope too.

"When you look at circularity and circular economics, it's now starting to become mainstream in discussion and industry. And I'd like to think everyone understands now that wasting resources and polluting the environment ... these are the issues that are of our time.

"And now we've got a sort of willing and educated population, a government that realises it's got to set these targets and take some quite strong leadership ... It's ever-hopeful but it doesn't mean

there's not a hell of a lot of work to do."



End of the line

Barkers and Max group managing director Jamie Whiting says the clothing industry – his brands included – has no line of sight over what consumers end up doing with the items they purchase.

It's a reason why Whiting, a member of Usedfully's steering committee, is involved. The managing director, who took over the revered Barkers brand in 2010 and snapped up its women's equivalent, Max, in late 2018, is focused on "the top of the funnel" – sourcing better materials, making better products.

"It's going away from the fast fashion cycles of churn and burn. That's the bit we're controlling at the moment but we're very interested in end-of-life and what happens when someone's finished with the product."

Whiting finds it 'crazy' that perfectly good textiles end up in landfills. But a textiles processing plant, he says, can unveil more opportunities to achieve circularity.

'It's going away from the fast fashion cycles of churn and burn.'

Getting a pilot up and running will be critical to shoring up the system's business case for change.

Whiting says retailers such as Barkers and Max could piggyback off the plant with programmes that recoup customers' items, such as incentivising consumers to trade in their old wares and upgrade at the same time.

Retailers could then sell those items on to a processing factory (part of a new industry of employers), which could return the textiles to their raw, virgin forms for repurposing into new products.

One such example that Usedfully has already tested is bitumen pellets, which improve the

performance of asphalt concrete. Those pellets could then be onsold to an end user.

Whiting says product stewardship programmes can create additional customer transactions beyond the swipe of an eftpos machine.

"They're the bits we're quite interested in investigating and trying to help solve and that's what we said from the day that we got involved with the Usedfully programme – we'd be happy to be part of a system that actually creates this circularity.

"But, at the moment, to your point, pretty much once the customer buys it [and] until the next time they come back to our store, that's the end of the cycle."



Higg CEO Jason Kibbey.

Fertile ground

Usedfully's work has advisory board member Jason Kibbey hopeful too.

"What gives me hope is to see how many more people are engaging earnestly and with real hearts on these hard social and environmental issues. We may not always agree about what the right way to engage in [is], or whether this methodology is better than that methodology.

"But, ultimately, I think we all know that if we're earnestly trying to understand where we are and improve it, we will leave [behind] a better world. But we do need to speed that up."

Kibbey, an experienced environmental advocate, has worked in the sustainable fashion realm for the past decade, first by running a sustainable underwear company he later sold and, more recently, through a trade association helping to reduce the apparel and footwear sector's impact.

As chief executive of tech company Higg, Kibbey now runs the platform that helped the Sustainable Apparel Coalition measure those value chains.

Sustainability now mainstream

He says only 20 to 30 companies around the world even had teams looking into sustainability when he was working for the coalition as its first employee.

Now, sustainability has become "incredibly mainstream".

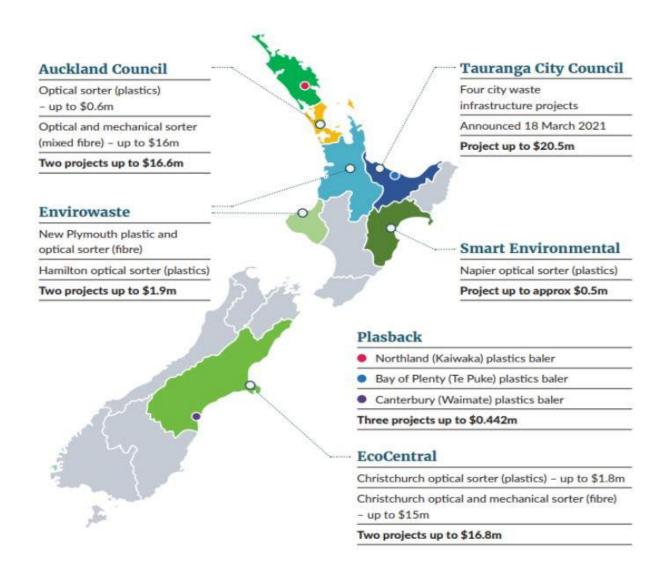
"We literally work with thousands and thousands of people tasked with improving sustainability at the brand level, at a retailer level and factory level, all in the apparel and footwear industry."

Scale has been, and still is, the roadblock to effecting change.

But Kibbey says New Zealand is "fertile ground" for transformation, "in a way that I don't see happening in other parts of the world.

"I see the opportunity of a small-enough scale, where the stakeholders know each other, where the government is willing to actually dig in, and where there's actually also a real financial challenge. I mean, New Zealand is a set of islands. What do you do with the waste that emerges? You can't easily just send it to China...

"There's a lot more business interest in making things and dealing with things within New Zealand, and not always going abroad to solve problems. That's a really impressive spirit."



Location of Covid-19 response and recovery fund investments in resource recovery infrastructure (as of June 1, 2021).

Source: Ministry for the Environment.

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The Ministry for the Environment (MfE) is considering Usedfully's report and recommendations, a spokesperson says. But, "at this point, MfE does not necessarily endorse or support the report conclusions in any way".

The government has committed more than \$350,000 to support textile waste solutions over the past two years. That funding has supported, for example, Usedfully's work to identify pathways and potential obstacles to improve circularity and stewardship, with a pilot, voluntary scheme on the cards.

"This, along with other projects the ministry is funding, align with the government's strategic direction away from a take-make-dispose culture, towards a low-carbon circular economy through shared responsibility," the spokesperson says.

Several cross-cutting policies and initiatives to reduce waste and emissions, including for plastics and organics, are in train.

In August, the ministry released its <u>programme of work to reduce waste</u> (https://environment.govt.nz/assets/publications/Waste-reduction-work-programme-final.pdf). While textiles are not mentioned, the government has identified 15 investment-ready solutions to divert and process recyclable or recoverable products, including fibre.

The government's plastics innovation fund, launched in June 2020 and of which \$50m from the waste disposal levy will be invested over four years, will provide another chance at researching plastics and textiles. Expressions of interest in the fund open in November 2021.

The Ministry of Business, Innovation and Employment's endeavour fund in 2018 awarded \$12.5m to The Institute of Environmental Science and Research to study the impact of microplastics (such as beads, fibres and fragments from textiles) on New Zealand's environment.

"The government encourages industry to continue to look at opportunities to improve circularity and stewardship and towards reducing emissions in the industry, to become involved in public consultation, and apply for funding to support innovative solutions," the MfE spokesperson says.

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Journalist

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