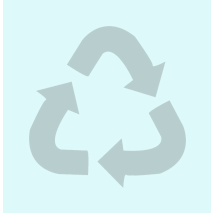




# THE WASTE CHALLENGE

Reducing Waste by  
Rethinking Retail





## The Concept

What if we could reduce the amount of waste being taken to transfer stations, reduce the percentage of that waste that ends up in landfill, and reduce virgin resource use, all without changing our habits?

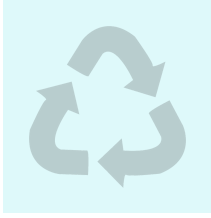
We know from studies that people are willing to preference environmentally conscious products, so long as they offer equal functionality to conventional products. In addition, brands in all areas, from fashion to transportation, are bringing out new retro styled or 'vintaged' products to meet consumer demand. Retailers like Schots Home Emporium and Deus Ex Machina are going from strength to strength offering products that look like they are from another era. Despite this, second-hand, repaired, and upcycled products make up only a small portion of Australia's overall retail landscape. If shoppers are willing to buy sustainable products, and are seeking out retro and vintage looking products, there must be a reason that they are not flocking to the genuine article. There must be needs that are not being met, and I believe that those needs are not reflected in the products themselves, but in the way that they are sold.

If I want to purchase a new dining table, I can walk into one of a dozen or more well recognised retailers in any city in Australia, or shop with many of those same retailers online, and have my table delivered and assembled for me. I have an expectation of the table's finish quality, as well as of its durability, and its ability to meet any relevant safety standards.

If I was to look to spend the same amount on a second-hand table, my journey would be much more difficult. Online marketplaces offer potentially cheaper alternatives, but are harder to search, potentially require greater travel and a means of transportation. Furthermore the quality cannot be assured until the table is viewed in person. Shopping in person is no easier. At the lower end of the market, op-shops and vintage markets offer no way of checking in advance whether they have a table suitable for you. They also offer limited product knowledge from staff, and unknown quality, as there is no differentiation between second-hand, repaired, and recreated products. Stores offering high quality restored furniture tend to only offer specific styles or eras, and are often priced out of reach of the average consumer. I believe that the issues described above capture some of the core reasons more consumers do not shop for reclaimed products.

Now, what if we were to open a store full of reclaimed products? A store that offered all of the benefits and convenience of a conventional retail store. A store with an online presence, as well as a physical presence in an accessible location. A store where products are conveniently and accessibly laid out, and with knowledgeable staff. A store stocked only with products that are as safe, as reliable, as durable, and as functional as their new equivalents, and with consistent pricing across product ranges.

By applying all of the benefits of new product shopping to an outlet that sells only reclaimed products, we eliminate the barriers to buying more environmentally conscious, lower waste products. In doing so, we reduce waste in disposal, landfill, and manufacturing.



## The Waste Challenge

For me, one of the biggest waste challenges that we currently face is the rate of consumption of new goods. Altering our consumption has an effect on a broad range of waste forms, from manufacturing by-product to end-of-life landfill. At present Australia produces 64 mega tonnes of solid waste each year, of which 27 mega tonnes become landfill. 13 of those 64 mega tonnes are municipal solid waste, effectively hard rubbish<sup>1</sup>. Sadly, the majority of those 13 mega tonnes is not likely to be made up of defective or damaged goods (goods no longer suitable for their primary use). A German study found only 8.3% of appliances are purchased to replace defective ones<sup>2</sup>. Worse still, most of those perfectly good items that are disposed of are not recovered. In the USA only 0.1% of furniture that is disposed of is actually recycled<sup>3</sup>. In Australia, where on average we each dispose of 24kg of wooden furniture per year<sup>4</sup>, that would mean only 24 grams are recycled per person, equivalent in weight to a AA battery. Sadly, when things are donated to op-shops or charities, the news is not a great deal better. While Australian op-shops divert around 530,000 tonnes of material from landfill every year<sup>5</sup>, they are not generally set up to repair or recreate the materials donated to them. As a result, a notable amount of those potential resources are disposed of, at a substantial cost to op-shops. Salvo's Stores, for example, spend up to \$6 million a year on disposing of unwanted goods<sup>6</sup>.

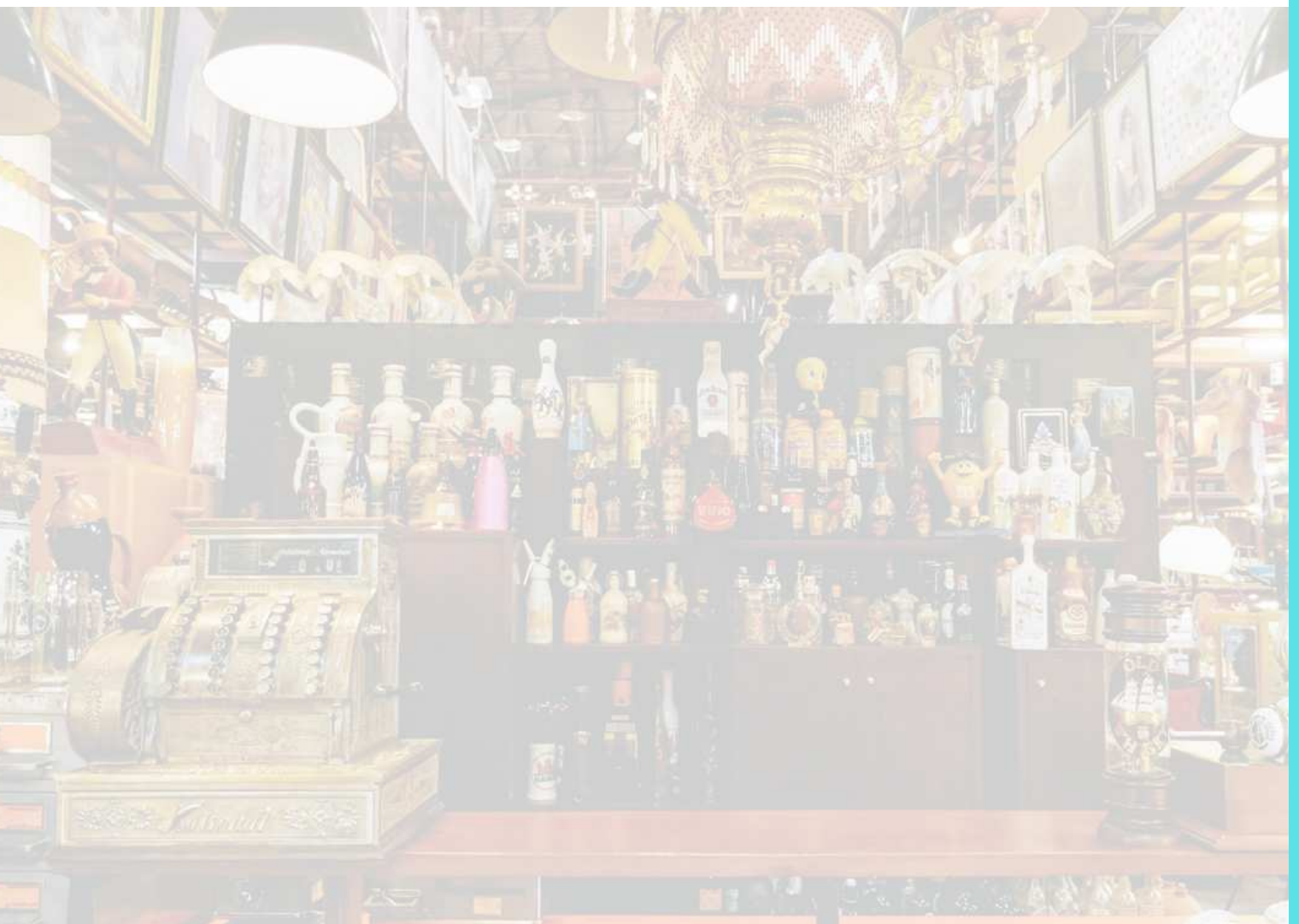
Sales of second-hand and reclaimed goods make up a small portion of the current retail market in Australia. Of the \$260 billion we currently spend on retail each year<sup>7</sup>, around \$34 billion is spent on used goods<sup>8</sup> (13%). While the benefits of improving that percentage are obvious, we know that changing people's behaviour is challenging. Even if we spend the time educating individuals on the benefits of change, and they understand and agree with that reasoning, few will manage to permanently change their behaviour. We are creatures of habit, so I suggest, why not work with consumers' existing habits, rather than against them?

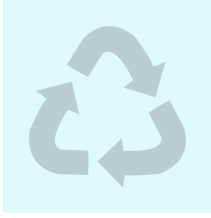
Greater sales of reclaimed goods will result in reduction of waste, from production to end-of-life landfill. Surely the simplest way to drive consumers to spend a greater percentage of their shopping budget on reclaimed goods, is to make these goods indistinguishable from those they already buy? There are a great number of creators around Australia making repaired, restored and reclaimed products, from furniture and lighting to apparel and even electronics. These goods meet all of the same needs and expectations as a new product at a comparable price-point. What is missing is the retail element, and this is where we can apply Design Process with the greatest effect. Wholefoods stores are a great indicator of how this can work, with their success prompting major supermarket chains in the USA to incorporate bulk wholefoods into their ranges<sup>9</sup>. Likewise, Saver's stores in Australia, being a for-profit secondhand goods chain, have a far more conventional approach to their retailing, from paid staff to in-store audio advertising, size and style sorted clothing to weekend trading hours. As a result, they have a huge following, and have had a big impact on traditional op-shops. On a global scale, Savers now operates over 300 stores, with 22,000 employees, and they manage to reuse or recycle over 95% of the goods donated to them<sup>10</sup>.



Using these lessons, I believe that providing a retail environment for reclaimed goods, that replicates all of the positive aspects of traditional retailing, can have a huge impact on waste generation and use here in Victoria, as well as around Australia and globally. Imagine a large retail space or department store with knowledgeable staff, open 7 days a week, with a vast variety of products. Every product type, whether it be beds or backpacks, offers a good variety of products to meet consumers' needs and budgets. Products are displayed in an organised and accessible manner, clearly priced and described. Every item in store comes with a quality guarantee, and meets all applicable Australian standards. Most importantly, every item described above is made from used materials in some manner, the majority of them made right here in Australia.

This is not a concept that happens overnight, but it is certainly one that is attainable and scalable. Perhaps it starts as a boutique and scales up in stages to a larger retailer, then to a department store style complex. In 2015, Sweden opened the world's first recycling mall, ReTuna, which within 2 years had a SEK 10.2 million turnover<sup>11</sup> (\$1.5 million AUD). While their model is a little different to the one being proposed here, there is no reason that Victoria couldn't eventually host something of comparable size. As well as working with the many wonderful creatives already working on product in this area, a partnership with the likes of Renew Australia<sup>12</sup> could also help kick-start the concept. Renew Australia is currently working in Docklands, Maribyrnong and Geelong to revitalise wasted retail spaces by offering them rent free to creatives. It could be a perfect partner for finding a viable central retail space for this venture.





## Impact Statement

### Problem

We produce 64 mega tonnes of solid waste every year in Australia, including an average of 24 kg per person of timber furniture waste, of which only a fraction is reclaimed. The more of this waste that we can reuse, the more we will both reduce the valuable resources that end up in landfill, and the quantity of virgin materials used and wasted in the manufacture of new goods.

Creating excellent products from waste materials is an important objective, however if there isn't a market for these goods, they remain waste. Consumers are willing to purchase and even spend extra on environmentally conscious products, so long as they meet all of those consumer's needs, yet such products remain only a small portion of the overall Australian retail landscape. This indicates that consumer's needs are currently not being met. The problem is not with the goods themselves, but rather the manner in which they are sold at present, which does not meet consumer's needs. This gives consumers the false impression that the goods themselves may not meet their needs.

### Action

Consumers trust conventional retail practices, and therefore, they trust products sold in this manner. Just as goods sold through a discount store are perceived as inferior quality to goods sold through a reputable chain, goods sold through conventional second-hand retailers are considered inferior due to the retail experience. By applying a conventional retail mindset and model to the retailing of reclaimed goods, these perception issues can be removed, greatly improving the ability of such products to access a far greater percentage of consumers.

There are already makers and creatives working across a broad range of industries producing quality products from reclaimed materials that meet all of the average consumer's needs. By bringing these products together under one roof in the manner described, it will be possible to create a space that is functionally indiscernible from large conventional retailers.





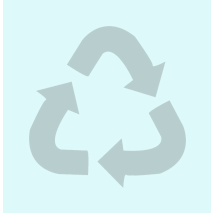


## Impact

If we can remove the barriers to shopping for reclaimed products by altering consumers' perceptions through meeting their retail needs, we can have a huge impact on waste. For every reclaimed product that is sold, its weight in materials is saved from landfill, and a new equivalent product does not need to be made.

While this concept applies to almost all physical goods, I will use the example of furniture to give a sense of the scale of the potential impact. The 24kg of wooden furniture that we each dispose of every year on average is the equivalent of 800,000 couches, 1.65 million dining tables, or 6.85 million chairs a year. If this proposed solution changed our consumption of new goods by even 10%, then that would be the equivalent of 80,000 couches not ending up in landfill (and 80,000 additional ones not needing to be made). In addition to reducing waste, this will also have a positive effect on employment. Given that the reclaiming of goods would predominantly happen in Australia, imagine the impact that employing people to reclaim the equivalent of 685,000 chairs could have on employment in Victoria or Australia, especially on employment of those recently displaced from manual labour roles.





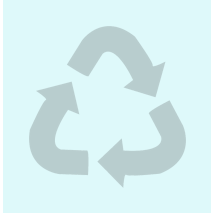
## The Implementation

As wonderful as it would be, establishing a retail presence like the one described above won't happen overnight. Starting at a large retail or department store scale would require a substantial investment, with hundreds of thousands of dollars in rent, along with a large fitout and a great number of staff. More importantly, you could not instantly scale up suppliers to be able to cater for the product turnover required for such a large space to prosper. Many of the makers in this field are sole traders or small teams, and the demand that a large retail presence could create would likely strain their abilities, potentially jeopardising their work quality, finances, or enjoyment in their work.

Instead, I believe we need to start with a much smaller scale implementation, perhaps a store of around 200m<sup>2</sup>. This would be large enough to showcase a broad range of creators and product types, but small enough to be manned by one person in quieter times. Such a space could still meet the majority of consumers' identified needs, and could help to validate store design decisions. It could allow suppliers to test their works in a dedicated space and begin to grow their production volume.

Once the concept has been trialled in this format, and a core collection of suppliers have been trialled and approved, the move could be made to a larger space could be undertaken. This could take place in stages, perhaps stepping up towards a Harvey Normans size space in a few measured steps. Initial steps would require financial assistance, whether through local, state or federal government, or through the private sector, however the business should eventually be able to make its own way upwards as it proves its value to the community. As the store grows, it will have greater power to work with larger partners, such as working alongside the charity sector to reduce the volume of their donations that end up in landfill, or offering skills training through the store. Once a sustainable scale has been reached in one location, the business will have built an identity strong enough to allow it to launch offshoots within Victoria or elsewhere in Australia, working up towards a network of stores filled with products that are better than new.





## The Conclusion

Consumer goods generate a huge volume of waste each year within Victoria, nationally, and around the world, yet they are underrepresented in waste reduction efforts. Shoppers are willing to buy more sustainable products, and even pay a little more for them if needed, but they are not willing to compromise their needs to buy them. By offering sustainable, reclaimed, waste reducing products in a format that meets all of the needs of the consumer, we can remove the existing barriers consumers face in shopping for reclaimed goods. In doing that, we can have a huge impact on waste from both ends of a product's lifecycle.



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