

## **Singapore has a Recycling Problem – Here's How to Solve It**

Despite plenty of talk for two decades or more, recycling rates in Singapore are low and actually declined last year. Recycling can be a misnomer, too, as some “recycled” materials are incinerated or sent overseas. Despite the lack of progress, individuals have a key role to play in driving recycling forward and pushing policymakers to take action faster.

### **Recycling Rates Are Low**

The good news on the recycling front is that the volume of waste generated in Singapore fell by 19 per cent in 2020, compared to 2019. Most of that drop was due to less construction & demolition waste and ferrous metal being generated amidst the pandemic, according to the National Environment Agency (NEA)

The bad news, though, is that the recycling rate decreased “slightly” – some might say massively - from 59 percent in 2019 to 52 percent in 2020. NEA blamed the drop on more packaging waste, low overseas demand for paper recyclables and less paper being collected amidst the pandemic.

Those high-level numbers hide the abysmally low household recycling rate. While companies recycle a lot, even with their rate dropping from 73 percent in 2019 to 68 percent in 2020, the already-low domestic household recycling rate decreased from 17 percent to 13 percent.

### **Recycling is Not Really Recycling**

Even when households do recycle, what happens after items go into a recycling bin may not seem like recycling. While more than 90 percent of construction waste such as cement and ferrous metals is recycled, Eco-Business writer Trang Chu Minh said Singapore disposes of much of its waste through waste-to-energy initiatives and more than 40 percent of waste was incinerated. Moreover, about 34 percent of waste was exported in 2019, the latest data available.

Minister for Sustainability and the Environment Grace Fu reinforced in recent speeches that recycling here for certain types of waste is indeed at low levels. Only four percent of plastic is recycled, for example, and just six percent of the 60,000 tonnes of e-waste disposed of by consumers is recycled. NEA data also shows that 38 percent of paper and cardboard is recycled along with 11 percent of glass.

Minister Fu blamed a lack of “infrastructure and solutions to make plastic recycling economically worthwhile for recycling operators,” as Singapore is a small country producing a small amount of plastic waste. NEA said continued low overseas demand for paper recyclables and COVID-19 trade restrictions also contributed to low recycling of paper.

Waste Management and Recycling Association of Singapore chairman Melissa Tan similarly told Today that the reason for exporting plastic and paper waste and the lack of recycling here is that Singapore lacks the large-scale facilities needed to recycle a substantial amount of materials. And of the 60 tonnes of materials Sembcorp receives from household recycling collections per day, she added, only 50 to 60 percent is suitable for recycling as the remaining is contaminated or not recyclable.

### **How to Solve the Problem**

This depressing data might lead people to think that even trying to recycle is not worth the effort. To the contrary, society will benefit as more people set an example of recycling. Three initiatives are essential.

Education and leading by example are still important. One of the biggest challenges for increasing recycling in Singapore is still the mindset and behaviour of the public, executive director of the Singapore Environment Council Jen Tan told Today. The government and non-profits need to get more creative in teaching people about recycling. And the more people recycle, the more positive role models the community has.

It is clear, though, that education is not enough. It has been tried for decades and recycling rates are low. That lack of success, as well as examples from other countries, shows that two other initiatives are even more important.

Perhaps the most controversial opportunity is enacting legislation. Yet other countries have shown it can be successful. Japan has regulated waste disposal for decades and has high recycling rates. In South Korea, Channel News Asia explained, the government introduced a pricing strategy for household waste called the Volume-based Waste Fee System that requires purchase of plastic bags for waste disposal and allows recyclables to be collected at no charge. Recycling increased dramatically. A programme in Shanghai that mandated recycling and used a combination of fines, surveillance cameras and volunteers resulted in a similar increase in recycling.

Another major opportunity is government investment. New Zealand, with a population even smaller than Singapore and with 70 percent of recyclables exported, offers a model. New Zealand's government recently put more than NZ\$160 million (S\$153 million) towards developing a domestic recycling sector, according to Auckland University of Technology senior lecturer Jeff Seadon. The initiative, which includes upgrading recycling plants and investment to grow processing capacity onshore, is designed to create jobs and help economic recovery from the COVID-19 pandemic. Minister Grace Fu said Singapore is building up local recycling capabilities and pursuing both mechanical and chemical recycling solutions, and doing even more here could build the capacity that is lacking.

The clear message is that Singapore needs to think big. Continuing past decades' efforts and expecting more to happen is not enough. Only by reimagining the future and considering government funding as well as legislating financial incentives for recycling is Singapore likely to be able to achieve the actions it needs to help save the planet.