

The Global Recycling Crisis and How Local Governments Can Respond

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Recycling: A Global Crisis

With the dramatic rise of single-use materials around the world, countries responded by developing recycling programs. In the 1980s, the United States began exporting most of its recyclables to China.

Methodology

Based on research and interviews with recycling experts, we created a website which analyzes the problems in the recycling system and suggests some solutions. The website is intended for the general public and is filled with photos, data and links, including examples of successful local responses. See <https://tinyurl.com/recyclingcrisis>.

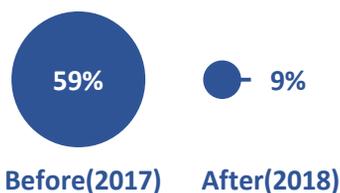
The Plastic Bottle Example

Out of the 50 billion plastic bottles used in the US every year, only 23% of them are recycled. Our website traces a plastic bottle as it goes through many steps from the recycling center, to the recycling firm and the global market, before it is made into other products. At each step emerge problems including contamination, NIMBYism, and lack of consumer education.

Market Change

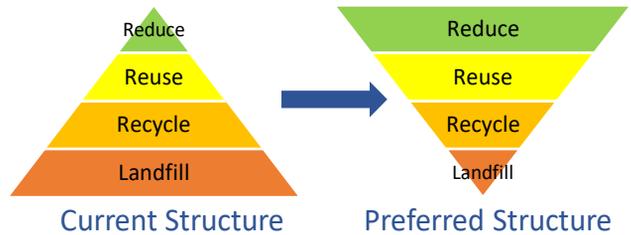
In 2018, China enacted a waste ban, completely disrupting the international recycling trade. With no place to go, US municipalities have accumulated or landfilled recyclables.

Global Waste Imported by China (%)
Financial Times 2018



The crisis created by the waste ban may not be temporary. There is high potential that China will set up its domestic recycling market to address its own recycling needs. In the long run, the US cannot count on China to continue importing waste.

Need to Reverse the Pyramid



While recycling is important, it has not solved the waste problem. Ultimately, reducing and reusing are the best solutions (via the EPA's guidelines). We need to invert the pyramid to make reduction and reuse the priority.

Solutions

• Reduce

Corporate Responsibility. Corporations can play a crucial role in solving the recycling crisis, by reducing waste at its source. For example, Walmart aims at eliminating non-recyclable packaging by 2020.

• Reuse

Create a Domestic Market. With the loss of recycling importers, it becomes crucial to create domestic markets. Colorado, with its *NextCycle* recycling business incubator program, is on the forefront of creating domestic markets.

Corporate Reuse. By reusing materials, corporations can make big difference in eliminating waste. Green Bay Packaging uses recycled paper and cardboards to design and make new packages of high quality.

• Recycle

Limit materials & go back to dual stream. Some municipalities have limited the type of materials allowed in recycling containers, or have returned to the dual-stream system (separating paper/cardboard from plastic/glass/metal). They also offer public education to help consumers adapt to this policy change and reduce contamination.

Recognize Informality. The US has a considerable informal recycling population, not integrated into formal waste management systems. US municipalities can learn from international cases on including marginalized groups in improving recycling.

