How the different types of recycling works

Jim Park

Dept. of Civil and Environmental Engineering.

*Corresponding author: Jim Park, Dept. of Civil and Environmental Engineering; E-mail: jpark@wisc.edu

Received date: May 03, 2021; Accepted date: May 17, 2021; Published date: May 27, 2021

Copyright: © 2021 Jim Park. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

The world recycling industry enters a new stage in 2018. After China’s decision to forbid the import of certain solid waste, many nations that relied on the Asian country now have to find alternatives to get rid of their waste. The new Chinese law forbids purchasing 24 types of residues, which can be grouped into four distinct categories: plastics, unsorted paper, slags from certain ore and textile scraps. The measure is part of China National Environmental Protection Plan. As a result, many recycling plants were closed, especially across the provinces of Canton, Zhejiang and Shandong, as well as in coastal regions featuring major ports that are gateways to goods, including waste.

This global recycling market turnover poses a big challenge for plastic waste. In 2016, according to Comtrade, a UN database, China imported 7.35 million tons of plastics; this accounts for 55.3% of the global production. If this includes waste that entered the country through Hong Kong, those numbers round up to 10.2 million tons: nearly 70% of the total.

Every plastic material is potentially recyclable, but, for many countries, recycling is still a challenge. Not all countries are financially capable of investing in cutting-edge recycling technologies. In Brazil, for instance, recycling is mainly supported by investments from private initiatives and follows the recycling market logic:

New recycling models are adopted when companies see a potential for financial returns.

In 2010, the National Solid Waste Policy (PNRS) was put into effect, though with a very poor outcome. A report by the Brazilian Ministry of Environment showed that only 12 Brazilian states complied with the policy by developing their own solid waste plans, and that 60% of Brazilian cities do not have appropriate landfills. In 2015, the Brazilian Ministry of Environment stated again that Brazil still had 3 thousand active garbage dumps.

Today, the country recycles only 3% of its nearly 80 million tons of waste produced, an economic loss of BRL 120 billion a year. The last big Brazilian recycling investment was made in 2013, when the federal government allocated BRL 220 million for this purpose. A rather poor investment compared to company activities. The Coca-Cola Company announced a BRL 1.6 billion subsidy for a five-year program designed to reuse two-thirds of all packaging marketed in Brazil until 2020.