Japan’s integrated waste

During fiscal year 2016 in Japan, 43.17 million tons of general waste were produced, enough to fill the Tokyo Dome stadium 116 times. This means that each person living in Japan generates an average of 925 grams of garbage per day. The total volume of waste and garbage generated per capita in Japan began to decline from the year 2000 after the approval of a series of laws related to recycling since the second half of the 1990s such as the Law on recycling of packaging and wrappers, the Appliance Recycling Law and the Food Recycling Act. However, it canno be said to be sufficient.

At the root of this problem are the landfills of incombustible garbage. Although the garbage collected by each municipality is incinerated in an oven, there is still a lot of ash that usually weighs around 10% of the waste before it is incinerated. This ash and trash that cannot be incinerated is buried in the landfills of incombustible garbage. There are currently 1,661 landfills for non-combustible garbage in the country with a remaining capacity of some 99,963 million cubic meters. If garbage continues to be generated at the current rate, these dumps will be at their maximum capacity within 20.5 years. The block of the regions of Kantō and Chūbu do not currently have enough landfills of incombustible garbage: Kantō currently translates 12.9% of its waste outside its prefectures, and Chūbu 14.1%. It is also very difficult to designate areas for the construction of new landfills in these regions.

Henceforth, the emergence of new methods for the incineration of garbage and for the use of the resulting ash could help alleviate the problem of garbage. But it will also be necessary for people to change their way of life to generate less waste, as well as a greater promotion of recycling so that the period of use of existing landfills can be extended. The landfills in Japan are overflowing with plastic since China decided to stop importing this type of garbage, a problem that has pushed the Japanese government to adopt a new regulation to contain the excessive use of this material.

Japan is the world's second largest producer of plastic waste per capita after the United States and until recently the largest exporter of this waste to China, and although it has a developed separation and recycling system, in practice it only reuses a small part of the waste. discarded plastic. The Japanese archipelago generated 8.99 million tons of plastic garbage in 2016, of which 1.38 million were exported to other countries for recycling or incineration (80% to China), and another 0.69 million were recycled to domestic level, according to data from the National Institute of Plastic Management. The remaining 6.93 million tons were used for their decomposition into chemical elements, incinerated to generate electricity or disposed of in landfills.

This has made clear the "high dependence" that Japan had on the neighboring country when it comes to dealing with its garbage, as well as "the lack of an effective strategy" to stop the use of plastic. In this context, the Japanese Government has drawn up a plan to cut by 25% the emission of non-recyclable plastic waste by 2030, which includes measures such as promoting the use of biodegradable materials or imposing collection for disposable bags in all establishments (Horio, Shigeto, & Shiga, 2009).

Therefore, they propose more demanding goals such as halving the generation of disposable plastics and cutting exports of them by 2030, something that could only be achieved with a tougher regulation "but also with a radical change in consumer culture from Japan to make it free of plastic. In the Asian country has increased during the last years the volume of waste of this material for its usual use in packaging of fresh foods, and the growing consumption of prepared foods, bottled drinks, coffee to go and cutlery or disposable bags. The Japanese private sector, for its part, has expressed concern about the economic impact of the new Japanese regulation that contemplates expanding the use of biodegradable materials as substitutes for plastic, since they are more expensive.

Reference

Horio, M., Shigeto, S., & Shiga, M. (2009). Evaluation of energy recovery and CO2 reduction potential in Japan through integrated waste and utility management. Waste Management, 29(7), 2195-2202.