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Plastics are the most used industrial materials by humans. Plastic products can be seen everywhere in the living environment. They are light, cheap and strong, and plastics cannot be replaced at present. However, with the popularity of plastics, plastic waste has become difficult to handle. Many countries use landfills, and more countries choose to incinerate plastics. Incineration of plastic produces carbon dioxide and toxic gases, accelerating the greenhouse effect while burying waste contaminates land and water. In 2015, the annual output of plastics increased nearly 200 times to 381 million tons. In terms of background, this is roughly equivalent to two-thirds of the world's population (Haward, 2018).

How to reduce or deal with plastic waste becomes an important issue, Decomposing plastic should be a good way. Bioscientists use bacteria to break down plastics. Studies have shown that certain bacteria have the ability to break down plastics (Urbanek, Rymowicz, Strzelecki, Kociuba, Franczak & Mirończuk, 2017).

Although handling plastic waste is an important issue, how to reduce plastic products may be more important. There are already many countries that have implemented a policy prohibiting the use of plastic bags. For example, some local jurisdictions in North America, Australia, and the United Kingdom have issued plastic bag bans or charges for plastic bags (Xanthos & Walker, 2017), Luanda is the first country in the world to ban plastics completely. Taiwan began to ban the use of plastic straws in 2019, and paper straws became an alternative. Scientists and companies have jointly developed straws made from corn starch.

Many countries implement plastic waste recycling policies, such as the Dutch recycling program, which shows that the hidden CO 2 reduction price for recycling is 178 € / t CO 2 (Gradus, Nillesen, Dijkgraaf & Van Koppen, 2017). If the waste management infrastructure is not improved, the cumulative amount of plastic waste that can be used to enter the ocean from land could increase to 204.5 million metric tons in 2025 (Jambeck, Geyer, Wilcox, Siegler, Perryman, Andrady & Law, 2015).

These pieces of evidence suggest that recycle and reduce plastic products policies to help reduce the amount of plastic waste, And no additional pollution and cheap

processing costs

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