

Eunice Chan
Professor Kennedy
Sustainable Systems
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Research Statement and Systems Map

(1) Define and Identify System

I have been aware of the overconsumption of single-use plastic bags in New York City. Plastic bags are considered cheap and an endless resource. It would sometimes appear to be odd when you insist that you do not need a bag to the cashier. Some would even bag your purchases despite your suggestion. The plastic bags, however, do not last long and takes a significant amount of energy and materials (i.e. petroleum and other unsustainable materials). They are seldom recycled or reused and cause pollution in both the land and marine ecosystems. I believe one of the main reasons is the lack of government control.

(2) Observation and Data Collection

Key Variables: users, short life, single-use, pollution, wildlife, material

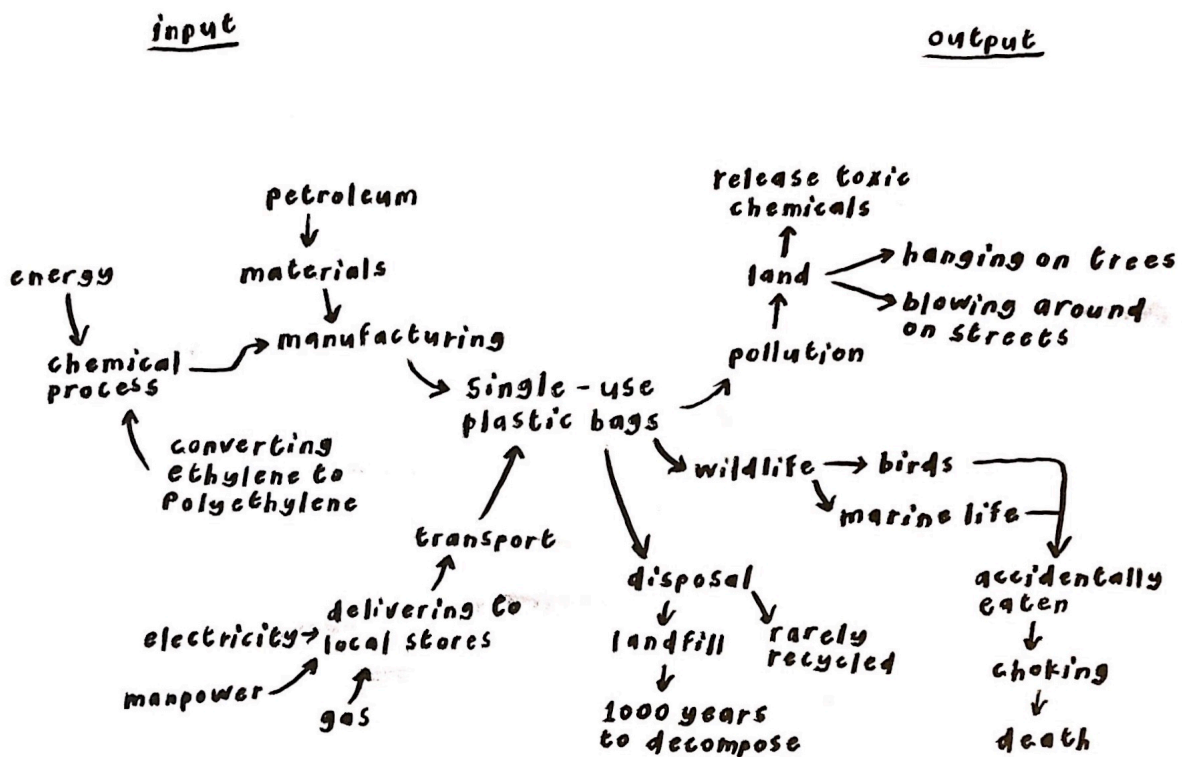
Observed Environmental Impacts: The lightweight nature of single-use plastic bags makes them airborne, often found hanging from tree branches and clogging city drains. Oftentimes they would also be accidentally eaten by wildlife, including birds, fishes and sea turtles.

Other data: The single-use plastic bags are especially difficult to recycle since most municipal recycling plants refuse to take them as they clog equipment.¹ They are also difficult to be reused

¹ Parker, Laura. "New York State to Ban Plastic Bags-here's Why." National Geographic. April 04, 2019. Accessed May 03, 2019. <https://www.nationalgeographic.com/environment/2019/03/new-york-state-plastic-bag-ban-explained/>.

due to their filmy characteristic. According to the New York State Department of Environmental Conservation, New York City alone uses more than 10 billion single-use plastic bags a year², mostly ending up in the landfill and take almost a century to decompose.

(3) System Analysis and Map



The use and production of single-use plastic bags in general is not an environmentally friendly process. Although they make shopping convenient, these plastic bags are harmful to the environment and has to be eliminated from our consumption practices to fully reduce thus

² Parker, Laura. "New York State to Ban Plastic Bags-here's Why." National Geographic. April 04, 2019. Accessed May 03, 2019. <https://www.nationalgeographic.com/environment/2019/03/new-york-state-plastic-bag-ban-explained/>.

eradicate its harm, which not only affects human beings, but also other species who are killed by them.

Bibliography

Works cited:

Parker, Laura. "New York State to Ban Plastic Bags-here's Why." National Geographic. April 04, 2019. Accessed May 03, 2019. <https://www.nationalgeographic.com/environment/2019/03/new-york-state-plastic-bag-ban-explained/>.