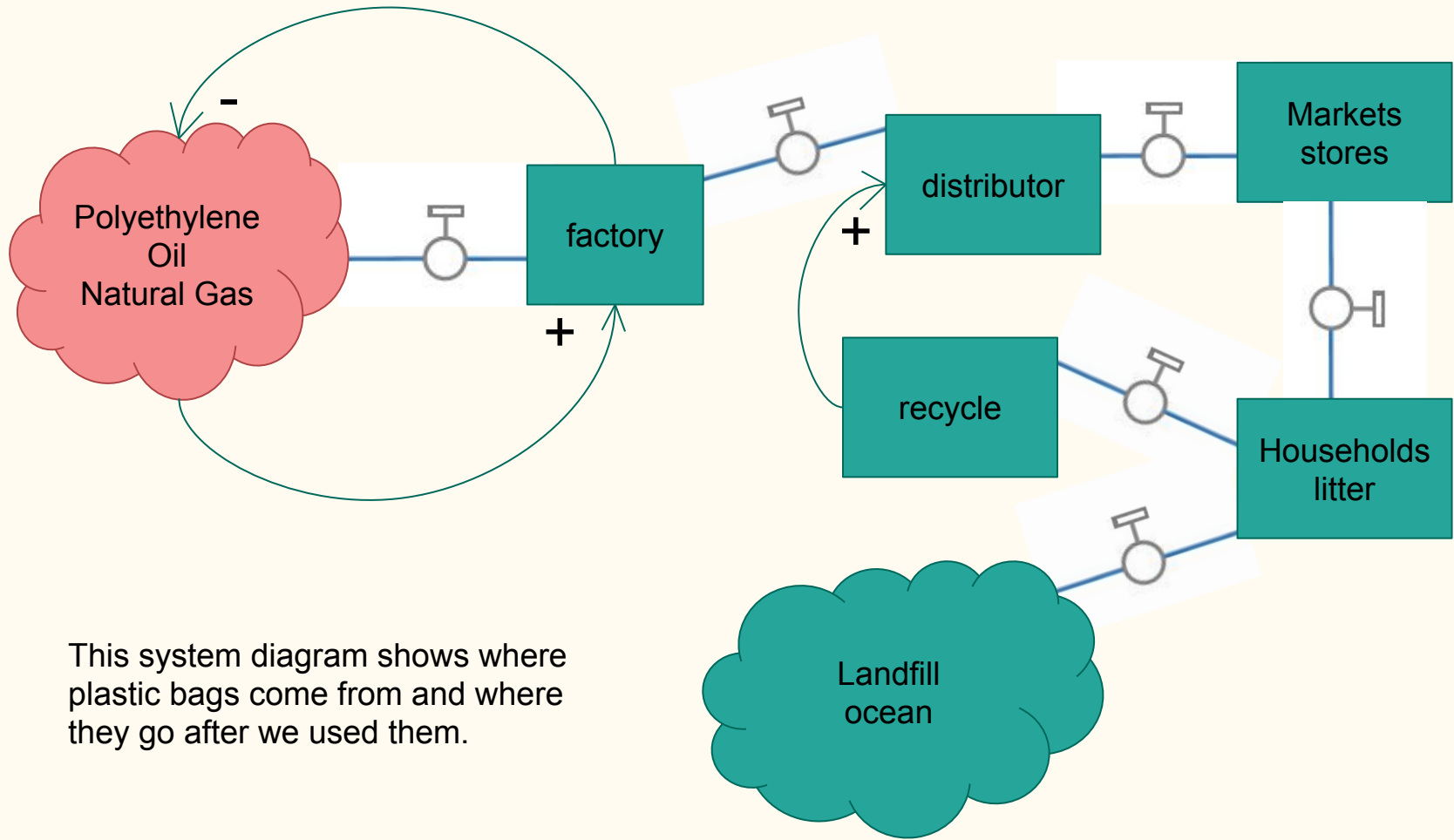


# SYSTEM: NYC PLASTIC BAGS

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This system diagram shows where plastic bags come from and where they go after we used them.

# The Plastic Bag

Made out of polyethylene



This material is not biodegradable and can harm not only the environment but also wild life

Any hunting mammal can easily mistake the size, shape, and texture of the plastic bag for a meal and find its airway is cut off. Needless deaths from plastic bags are increasing every year.

The environmental balance of the waterways is being thrown off by the rate of plastic bags finding their way into the mouths and intestinal tracts of sea mammals.

# Problem with Plastic Bags

## 1. Harm the environment

- a. Ends up in oceans causing the endangering of different species



## 2. Polythene is a finite resource and depletes the earth of its natural resources



# Where Do Plastic Bags End Up?



- In trees or other places as litter
  - Litter is not biodegradable, where it lands it tends to stay for long period of time. Eventually bags are ripped to shreds from high winds or other factors. It doesn't disappear but instead is spread in smaller amounts throughout the area. This can cause more problems as these smaller pieces are carried away through storm drains and often end up in the waterways.
- Landfills
- Recycled Into Other Things
  - Many of the plastic bags that are recycled in the U.S. end up as composite lumber, according to the Georgia Recycling Coalition.
  - Recycled plastic bags can be melted down and used to create new batches of plastic bags. This process is much more efficient than making the bags from scratch and gentler on the environment.
  - A portion of your recycled bags may end up in the nanotechnology field, according to the PBS NewsHour website

# INTERVENTION

## 1. USE PAPER BAGS (?)

Supermarkets, pharmacies, and the fruit/food carts provide plastic bags due to their low cost

Some supermarkets provide paper bags, but many people still prefer plastic bags because paper bags are **not waterproof** and **comparatively fragile**.

Since paper bags are a lot heavier, it actually takes **more energy** to recycle paper



# INTERVENTION

## 2. REUSABLE BAGS

Although many supermarkets sell **beautifully designed** reusable bags **by the checkout counter**, many people still use plastic bags either because

- They are in a rush
- They don't want to spend money
- They just didn't think about it

Sometimes when seeing a customer purchasing only a few items, a cashier would ask to remind the customer if he/she really needs plastic bags



# INTERVENTION

## 2. REUSABLE BAGS

- Apply the Starbucks discount policy
  - Bring your own shopping bag to get a discount
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- This is much more motivating
  - but out of inconvenience, (or sometimes people forget) many people would still use plastic bags





# INTERVENTION

## 3. Plastic Bag Fee

- **Most effective**

Ever since the plastic bag fee policy was applied in my hometown Taiwan and in the cities I've lived in mainland China, reusable bags have become an essential necessity.

Most people (ranging in different ages) bring their own shopping bags around.



# Sources

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