## THE OIL MARKET

AND PLASTIC POLLUTION

Plastics are made from petroleum products. The byproducts released during the process of transforming crude oil into gasoline are often used to create the plastic products around us. This is the start of the reasons why plastic production and the oil market are intertwined.

When producers manufacture their plastic products, they can either use virgin plastics or recycled plastics. However, when the oil market is fluctuating and oil prices are low, the cost of creating products from virgin plastics can be even cheaper than what's required to make the same items with recycled plastics. At this point, there is little economic incentive for companies to take the more environmentally-friendly approach - they're actually incentivized to create more plastic waste.



# **QUICK FACTS**



**90% of plastics globally are made from virgin oil and gas feedstocks.** In fact, plastic production makes up about 6% of oil consumption today and that number is expected to grow within the next few years.



It is now a lot cheaper to manufacture natural gas products (eg. plastics) due to developments in hydraulic fracturing in the past few decades. As a result, the cost of plastics has been getting lower and lower.



The amount of oil used in the plastics industry is expected to increase by 3.5–3.8% each year. This is greater than the demand for oil in general, which is expected to grow at 0.5% per year.



American producers of PE plastic are expecting to increase production capacity by up to 75% by 2022. This is due to the growing demand for disposable plastics and growing consumer markets.



An estimated \$50 billion will be invested into new plastic production facilities in the US. This means that production itself is expected to increase by 50% and will triple the amount of plastic exports in the next ten years.



Since demands for gasoline are expected to decline in the future, more plastics will be made from crude oil. **40% of the crude oil that oil companies extract is expected to be converted into petrochemicals** for plastics.

## **NEW SOLUTIONS**

#### **SHIFT TO RECYCLABLES**



To reduce the demand for virgin plastics, organizations and the government can convince corporations to use recycled plastics instead of virgin plastics. This could be implemented through CSR policies, regulations, etc.

#### **EMBRACING ALTERNATIVES**



Even though many plastic alternatives still have their own problems, the research has been promising. If a cheaper and more environmentally friendly plastic alternative is found, corporations can switch to these alternatives instead.

#### **RENEWABLE ENERGIES**



Producing plastics from fossil fuel is only cost effective when supplemented by using oil for energy production. If we shift to renewable energies, we can push the industry to reduce (or eventually even stop) plastic production.

### **DESIGNED BY THE PLASTIC SHIFT**

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