

A close bond with fossil fuel

With the ban on single-use plastics set to kick in from Jan. 1, *The Hindu* looks at their toxic connection with crude oil

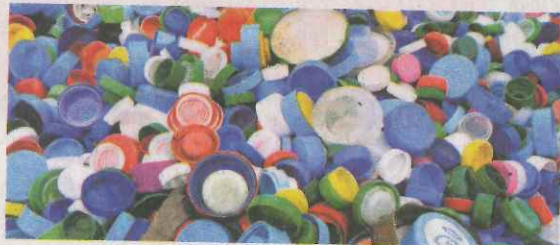
SPECIAL CORRESPONDENT
CHENNAI



Rising crude oil prices are a cause of worry not just to motorists and fuel dealers, they also matter to plastics manufacturers, who depend on polypropylene that you get when naphtha, a byproduct, is cracked. When naphtha is cracked you get a lot of gases and when a catalyst is added, polymerisation happens.



Natural gas is yet another source for the base that forms plastic's raw material. Tamil Nadu, which is all set for a ban on single-use plastics from January 1, 2019, consumes around seven lakh tonnes of polymers per annum, sourced mostly from western India where a majority of manufacturers are located, explained industry sources.



The State has had plastic manufacturing units from the 1960s. The industry saw some growth between 1970 and 1980 and from the 1990s, it expanded at a faster clip. Each year, the industry grows at about 12%-13%. There are two kinds of plastics - commodity plastics, from which most commonly used items are manufactured, and engineering plastics used for producing car components, non-conducting switches and many household appliances. These have a long and extended usage, explained Tamil Nadu Plastics Manufacturers Association's B. Swaminathan.



There are around 8,000 manufacturing units and 2,000 recycling units in the State. Though Chennai and Puducherry used to be hubs earlier, the units have spread across the geography of Tamil Nadu and manufacturers meet local demands. "It is an industry where your investment can be as low as ₹1 lakh. Simply put, manufacturing units just heat the granules - the raw material - that begin to flow and take the shape of the mould. They don't add anything to the material," Mr. Swaminathan said.



Once the ban takes effect, banks and various funding institutions would be sitting on non-performing assets to the tune of ₹2,000 crore, he estimated, besides loans advanced to employees.

DAY 2



Countdown to plastics ban

SIDELIGHTS

Mostly recyclable

The Central Pollution Control Board has estimated that around 25,940 tonnes per day of plastic waste is generated in India. Out of the total plastic waste, around 94% comprises thermoplastic content such as PET, LDPE, HDPE and PVC, which is recyclable. The remaining includes other kinds of plastics such as sheet moulding compound, fiber reinforced plastic, multi-layered and thermocol, which cannot be recycled.

No alternative

Plastic bags that are used to line garbage bins have not been banned since no alternative is available for these bags for now.

Compostable bags

An alternative to petro-based plastic carry bags/films has been introduced, i.e. compostable (100% bio-based) carry bags/films conforming to IS/ISO: 17088. The Plastic Waste Management Rules 2016 also encourage the use of compostable carry bags and products by waiving the minimum thickness criteria of 50 microns.

For details on the ban, please go to:
<https://www.thehindu.com/news/cities/chennai/towards-a-plastics-free-tamil-nadu/article25650261.ece>