## The Plastic Industry worldwide and in Palestine

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A world without plastics or synthetic polymers can't be imagined today. The first synthetic plastics was produced in the beginning of the twentieth century, however industrial plastics production started in 1950. Production of plastic materials to day surpasses any other synthetic material with the exception of steel and cement. The share of plastics in municipal solid waste increased from 1% in the 1960 to more than 10% in 2005. Most monomers used today to make plastics such polyethylene (PE) or Polypropylene (PP), or polystyrene (PS) are produced from the petroleum industry and none is biodegradable, they accumulate in the environment and pose great threat and serious concern to humanity and to marine life.

In 2010 approximately 8 Million Metric Ton (MT) of plastic waste entered the marine environment. Global production of polymers and fiber increased from 2 (MT) in 1960 to 380(MT) in 2015 a compound annual growth rate (CAGR) of 8.4% while the total production of polymers and fibers from 1960 – 2015 was estimated to be around 7800 (MT). China alone produces 28%, and 68% of world production of PP. Biodegradable plastics amount to only 4 (MT). Non fiber plastics production is (PE 36%, PP 21%), Polyvinylchloride PVC (12%) followed by polyethylene terphthalate

PET, polyurethane, and polystyrene less than 10% each ,42% of plastics are used in packaging.

Palestine show a fast-growing plastic industry though we import plastics worth 255 million US \$ as reported in the United Nations International Trade Statistics (COMTRADE) in 2018, compared to US \$200 Million imported in 2014. However, we were able to export to the world 66.3 million US \$ worth of plastic materials added to that our export to Israel of plastic product worth 86 million US \$, mostly packaging materials. Three important countries that export plastic materials to Palestine are Turkey. China and south Korea. Turkey alone in 2018 exported plastics worth 25 million \$.

The plastic industry in Palestine is among the largest industry. However, we still manufacture the traditional plastics for packaging. Our country needs to develop this industry and diversify the plastic products to meet the needs of the market such as automobile, electrical appliances, refrigerators, and many other industries.

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