

Mexican Recycled Plastic: a Booming Global Market

Click on the content you want
to know more about.

MENU.
Click to return
to this page.

USE OF PLASTICS

RESISTANT MATERIAL

GLOBAL OVERVIEW

THE INDUSTRY

OPPORTUNITY FOR MEXICO

THE PANDEMIC

THE DECISION

REFERENCES

2-SP28-10-073

Publication date: March 14, 2022

Last review: March 14, 2022

USE OF PLASTICS

Incrementally, the world's daily life demands food products with a long shelf life that appear fresh, attractive, and without losing their nutritional properties; at the same time, they need their packaging to be cheap, resistant and long lasting.

There are several styles and necessities in which the use of different plastics is essential. These go from food at an industrial level to food at the retail point of view, going through aspects and economic activities, such as health, housekeeping, electronic devices, and household appliances; plastics are used in the field, in airplanes, construction and several other practical applications in which they play an important role for each person around the globe. The trade of plastics worldwide exceeds one trillion dollars per year (Salomon, 2021).

The signing of the Agreement between Mexico, the United States and Canada (USMCA) can lead to lucrative business between the countries, given that the plastics industry has a strong bearing on said agreement and can thus result in solid opportunities for Mexico in the exporting of recycled plastics (*Ambiente Plástico*, 2020).

Click on the image to meet the world's importers and exporters of plastic waste.

Image: Pepe Ceron Balsas in Unsplash, 2022.



RESISTANT MATERIAL

For time immemorial, due to the needs of a certain era or another, and depending on the level of advancement and development of humanity, man has looked for stronger materials for different uses that represent an advantage or benefit; for centuries, we turned to nature for products such as lacquers, waxes, tar or rubber, among others. Nevertheless, around one hundred years ago, when carbon was no longer used as fuel and the consumption of oil and its by-products increased, the chemical industry started developing and creating synthetic materials (*Plastics Europe*, n./d.).

One of those synthetic materials is plastics. Its use became so prevalent throughout the world that instead of using metal or wood for manufacturing certain products, plastic became the norm; its arrival transformed the course of the planet. New plastics offered a wide array of possibilities for use in the industry, offices and the home, to mention a few examples.

The material known as plastic is currently used on land, water and air (*Atlas del plástico*, 2019). Plastics have expedited global commerce as they enable the use of packaging that is cheaper, long lasting and with better designs to be transported to any part of the world; they add minimal weight to cargo and increase the shelf life of the product they protect.

Image: Jonathan Chng in Unsplash, 2022.



GLOBAL OVERVIEW

The plastics market for exports and imports is truly a multi-million dollar industry and offers a wide array of possibilities. For example, 62% of PET exported by Mexico is used in the United States and China, though they are not the only countries that need recycled plastics, and PET is not the only type of plastic that is recycled (*Ambiente Plástico*, n./d.).

On the other hand, the need for recycled plastics for a second purpose is not dependent only on the two giants of the global economy (China and the United States), as there are other markets that are also eager to use these materials, creating new business opportunities for Mexico.

This list of importers includes Germany, Turkey, Malaysia, Belgium, Italy, and Indonesia, all of whom produce plastic waste but also use recycled plastics (*Opportimes*, 2020).

Images: Icongeek26, Bzzrincantation, Eucalyp in Flaticon, 2022.

To have a better understanding of the material, we must understand what a plastic is:



Word origin (Latin)

Plasticus

From the Greek *plastikos*, meaning “what can be molded”.



Technical term

Polymer

Meaning “formed by many parts”, chemical property that defines it.



Common name

Plastic

It receives this distinction as one of its properties is being malleable, from its manufacturing to its use.

Source. *Atlas del plástico*, n./d..



THE INDUSTRY

In monetary terms, the plastics industry is massive, with estimated profits of around \$654 thousand 380 million dollars (654 billion) (USD) (Bardahl Industria, n./d.). This number includes data such as the fact that one million plastic bottles are purchased every minute, of which 13 million tons end up in the ocean. Twenty percent of the rubbish that the world produces is directly related to daily-use plastic bottles (Greenpeace, n./d.).

On a global scale, Mexico is the eighth largest plastics manufacturer (Bardahl Industria, n./d.) and this boom is now a worldwide cause for concern for environmentalists and governments that have established measures to curtail the use of plastics, especially those referred to as

Since the creation of plastic by the end of the 19th century, around 8.3 billion tons of polymers have been manufactured, of which:



Source: Plastic Garbage Project, n./d.

“single-use plastics”. Mexico’s plastics industry consists of 12 different activities, however, the manufacturing of flex-

ible-plastic bags and coatings, car parts and bottles are at the top because of the market share they represent (INEGI, 2017). The manufacturers are located in different parts of the country, but five of them concentrate the national production of plastics.

In Mexico’s plastics and rubber industry, the top manufacturers are: 2W Plásticos, SA de CV; Fischer, SA de CV; MAARBEL, Plásticos Alica, SA de CV; Plásticos La Ardilla, SA de CV; Plásticos Tersil, SA de CV; Procesos plásticos inyectados, SA de CV; Productos de plástico Carcal, SA de CV; Thermofluidos, SA de CV y Plastienvases, SA de CV (Directorio de fábricas, s. f.), among others. The billing stemmed from the plastics industry has shown constant growth (Aguirrezabal, 2019).

Image. Freepik In Flaticon, 2022.

OPPORTUNITY FOR MEXICO

It is believed that the boom of plastic recycling in Mexico is the result of China closing the door to plastic waste; by doing this, an opportunity arose to take advantage of this emerging market for those who recycle.

The Mexican plastics and resins market accounts for over \$30 billion dollars (USD) per year, with opportunities to sell plastic equipment, resins, implements, and parts. Mexico produces over 80% of its internal demand of PE (polyethylene), PP (polypropylene), PET and PVC (vinyl polychloride), with two large companies leading the market: Alpek and Braskem/IDESA. In 2017, Mexico produced 4.3 million tons of resins such as PET, PVC and PEHD (high-density polyethylene), with the latter two covering over 50% of this amount (*El Economista*, 2018).

With Mexico being self-sufficient in the manufacturing of PVC and PET (*Forbes*, 2021), it can afford to foray into the global market by exporting recycled plastics. Companies such as Paktec de México, Papeles y Conversiones de México, Plásticos de Ingeniería Mexicanos, Plásticos Reciclados Cadereyta, among others, own the highest share of the market.

Mexico recycles 58% of its PET (polyethylene terephthalate), making it Latin America's top recycler. In addition, 40% of the PET recycled in Mexico is eligible for export (*El Economista*, 2018).

Image: Mali Maeder in Pexels, 2022.



THE PANDEMIC

Covid-19 created a wave of plastics use that represent a hazard for both the economy and nature (United Nations, 2020), as it is either the main or a key ingredient in face-masks, gloves, hand disinfectant bottles, food packages and other home-delivery products that saw an increase in consumption due to lockdown mandates.

From 2019 to 2020, the worldwide sales of disposable facemasks increased from \$800 million dollars (USD) to \$166 billion dollars (USD), according to calculations from the consulting firm Grand View Research. The UNCTAD (United Nations Conference on Trade and Development) acknowledges that these changes in consumer behavior stem from the pandemic.

Image. Cottonbro in Pexels, 2022.



Plastic products that saw an increase due to the pandemic are flooding streets, landfills, and the ocean, as they represent a grave threat for our ecosystem. In fact, the UN (2020) calls for the collaboration between nations and the creation of common policies to stop an issue that already existed but that has increased due to the global emergency which started in 2020.

In Mexico, the industry experienced a 3% increase (*Energía Hoy*, 2020) mainly from the rise in food packaging demand. During 2020, it went from a 7.7 million ton consumption to 8 million tons compared

to the previous year, in Mexico alone. On a global scale, 2019 saw plastics production reach 368 million tons, which represented an increase of 9 million tons compared to 2018 (*Statista*, 2021).



M
E
N
U

CIC



Plastics, depending on their purpose, can be classified as “single use”, which is the case of most packages. China and the United States are the main users of “single use” plastics in the world, mainly following the Covid-19 pandemic; they are also the countries that throw more plastic into the ocean, according to continuous studies performed since 2010 (*Statista*, 2018).

Before the pandemic, but even more so following this worldwide contingency, the plastics industry, aware of its polluting footprint, is prioritizing recycling in the manufacturing of new plastics, as well as reusing the existing ones. With this stance and operating procedure, a parallel industry has emerged: recyclers.

Image. Sigmund in Unsplash, 2022.



Currently, plastic waste has become a new business model in an emerging industry in Mexico, to the point that it is now exporting recycled plastic to nations that need it (*El Economista*, 2018).

THE DECISION

After analyzing the plastics market in Mexico:

- Does Mexico have the infrastructure to export to the rest of the world?
- Can the Mexican plastics industry be considered competitive locally and globally?
- What role has Covid-19 played in the plastics industry, the economy and the environment?
- Which types of plastics do the world's importers require?
- Are there any restrictions for exporting recycled plastics? Which are they?
- Are there special provisions that regulate the trading of recycled plastics in any commercial treaty signed by Mexico?
- How do they affect or harm Mexico?

REFERENCES

Aguirrezabal, Ismene. (2019). Estudios de mercados y otros documentos de comercio exterior. ICEX.

<https://www.icex.es/icex/es/navegacion-principal/todos-nuestros-servicios/informacion-de-mercados/estudios-de-mercados-y-otros-documentos-de-comercio-exterior/DOC2019826983.html>.

Ambiente Plástico. (s/f).

<https://www.ambienteplastico.com/>

Atlas del plástico. (2019). <https://mx.boell.org/sites/default/files/2020-12/Plastic%20Atlas%202019%20cambio.pdf>.

Asociación Nacional de Industrias del Plástico (s/f), AC. <https://anipac.org.mx/>.

Bardahl Industria. (s/f). <https://www.bardahlindustria.com/la-industria-del-plastico-en-mexico-y-en-el-mundo/>.

Directorio de Plantas de Reciclaje en México. (s/f). <https://es.enfreycling.com/directory/plastic-plant/Mexico>.

El Economista. (2018). <https://www.eleconomista.com.mx/empresas/Industria-del-reciclaje-de-plasticos-esta-en-auge-en-Mexico-20181029-0115.html>.

Energía hoy. (2020). <https://energiahoy.com/2020/12/23/industria-del-plastico-en-mexico-crecio-3-gracias-a-covid-19/>.

Forbes. (2021). <https://www.forbes.com.mx/mexico-es-autosuficiente-en-produccion-de-pvc-anipac/>.

INEGI. (2014). Perfil de fabricación de productos de plástico. http://internet.contenidos.inegi.org.mx/contenidos/Productos/prod_serv/contenidos/espanol/bvinegi/productos/nueva_estruc/702825092894.pdf.

INEGI. <https://www.inegi.org.mx/app/buscador/default.html?q=plasticos#tabMCcollapse-Indicadores>.

Infinitia Research. (s/f). Materiales plásticos: tipos, composición y usos. <https://www.infinitiaresearch.com/noticias/materiales-plasticos-tipos-composicion-usos/>

ONU. (2020). <https://news.un.org/es/story/2020/07/1478011>.

Opportimes. (s/f). <https://www.opportimes.com/>

Plastics Technology México. (2020). <https://www.pt-mexico.com/noticias/post/t-mec-fortalece-cooperacion-y-crecimiento-continuos-del-sector-plastico>

Plastics Europe. (s/f). Historia del plástico. <https://legacy.plasticseurope.org/es/about-plastics/what-are-plastics/history>

Salomon Us. (3 de marzo de 2021). El comercio mundial de plásticos. UNCTAD. <https://unctad.org/es/news/el-comercio-mundial-de-plasticos-es-un-40-mayor-de-lo-que-se-pensaba-segun-un-estudio>

Statista. (s/f). <https://es.statista.com/>.