
Plastics: from apogee to controversy

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**Electronic version**URL: <http://journals.openedition.org/factsreports/5055>

ISSN: 1867-8521

Publisher

Institut Veolia

Printed version

Date of publication: 1 March 2019

Number of pages: 4-5

ISSN: 1867-139X

Electronic reference

Fanny Arnaud, « Plastics: from apogee to controversy », *Field Actions Science Reports* [Online], Special Issue 19 | 2019, Online since 01 March 2019, connection on 16 October 2019. URL : <http://journals.openedition.org/factsreports/5055>

1. PLASTICS: FROM APOGEE TO CONTROVERSY



A century after plastic was invented, its properties – being lightweight, strong and cheap – have swept it into every corner of our throwaway society, from food to health, automotive to fashion. The amount of plastic produced worldwide has grown exponentially, from 1.5 million metric tons in 1950 to 335 million metric tons in 2016. It has also created wealth, with plastics accounting for over 1.5 million jobs in Europe and contributing €27.5 billion to European public finances.

Initially a symbol of modernity, in recent years plastic has undergone a rapid and far-reaching re-examination of its role in our lives around the world. Latest scientific estimates are that the world's oceans contain 150 million metric tons of plastic waste, of which 62% is packaging. This planet-wide pollution imperils an essential common good that is at the center of our global system. The oceans are a vast reserve of fish resources, a carbon sink and a source of oxygen production; they produce 50% of our oxygen and absorb a third of all CO₂ produced on earth, and over 3 billion people depend on marine and coastal biodiversity for their livelihoods.

Why this change of fortune?

As early as the 1970s, scientists were already flagging concerns about the adverse impacts on marine environments of small plastic waste particles: ingestion by animals, strangulation, obstruction and so on. Despite these early warnings, the issue remained little known until the discovery of ocean gyres – systems of circulating currents where high volumes of plastic waste accumulate – raised awareness on a far wider scale.

At the same time as scientists took an increasing interest in studying the impact of plastic pollution on human health and the environment, a number of NGOs such as WWF and the Ellen MacArthur Foundation took up the issue, seeking to alert the public and governments to the dangers posed by plastic pollution.

Unlike other worldwide environmental problems, such as greenhouse gas emissions, plastic pollution is visible. Images on social and mainstream media of marine animals strangled or trapped by plastic waste have catalyzed the recent wave of emotionally driven mass mobilization.

Recently, this mobilization has led to questions being raised about industries' license to operate, with fingers being pointed at plastic packaging and products on the market. Recent plastic attacks on a number of supermarkets in the United Kingdom and in France are good illustrations of how this grassroots movement seeks to alert consumers to excessive packaging and place pressure on industries. Everywhere, from oil and gas to food to fashion (60% of clothes are made from plastics), these challenges are driving manufacturers into overly hasty undertakings about using plastic more virtuously.

At the same time, governments too are grappling with the issue and regulating to ban certain products, such as the European Commission's proposed ban on single-use plastic products, and to promote recycling. Worldwide, there are enormous disparities in recycling between developed economies with good infrastructure, and developing economies, in Southeast Asia especially, where inadequate infrastructure means that most waste ends its life in nature or the sea. As Kabadiwalla Connect explains, the informal sector plays a fundamental role in recovering waste in cities in developing economies. Worldwide, less than 2% of plastic used is recycled in a closed loop, a figure that illustrates how much remains to be accomplished.

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