

GLOBAL DIMENSIONS [1,2]

8.3 BILLION TONNES

of plastic were produced globally between 1950 and 2015

▲

More than **ONE TONNE PER PERSON** living on the planet today

From all the plastic waste the world had ever produced

only 9% has been recycled



12% has been incinerated



79% has been accumulated



In landfills, dumps or the natural environment

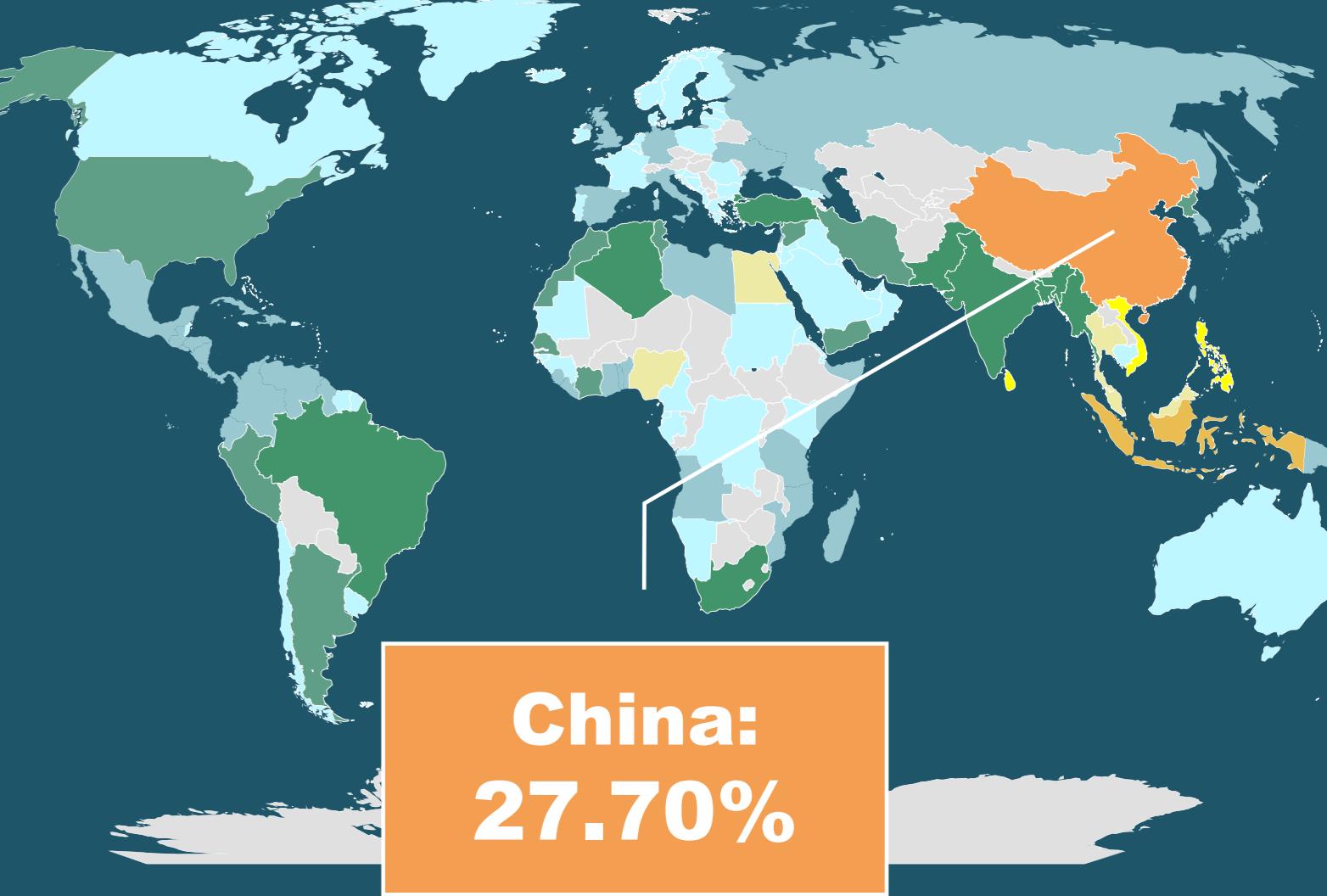
DROWNING IN PLASTIC

CHINA'S DECISIVE ROLE IN A GLOBAL MATTER

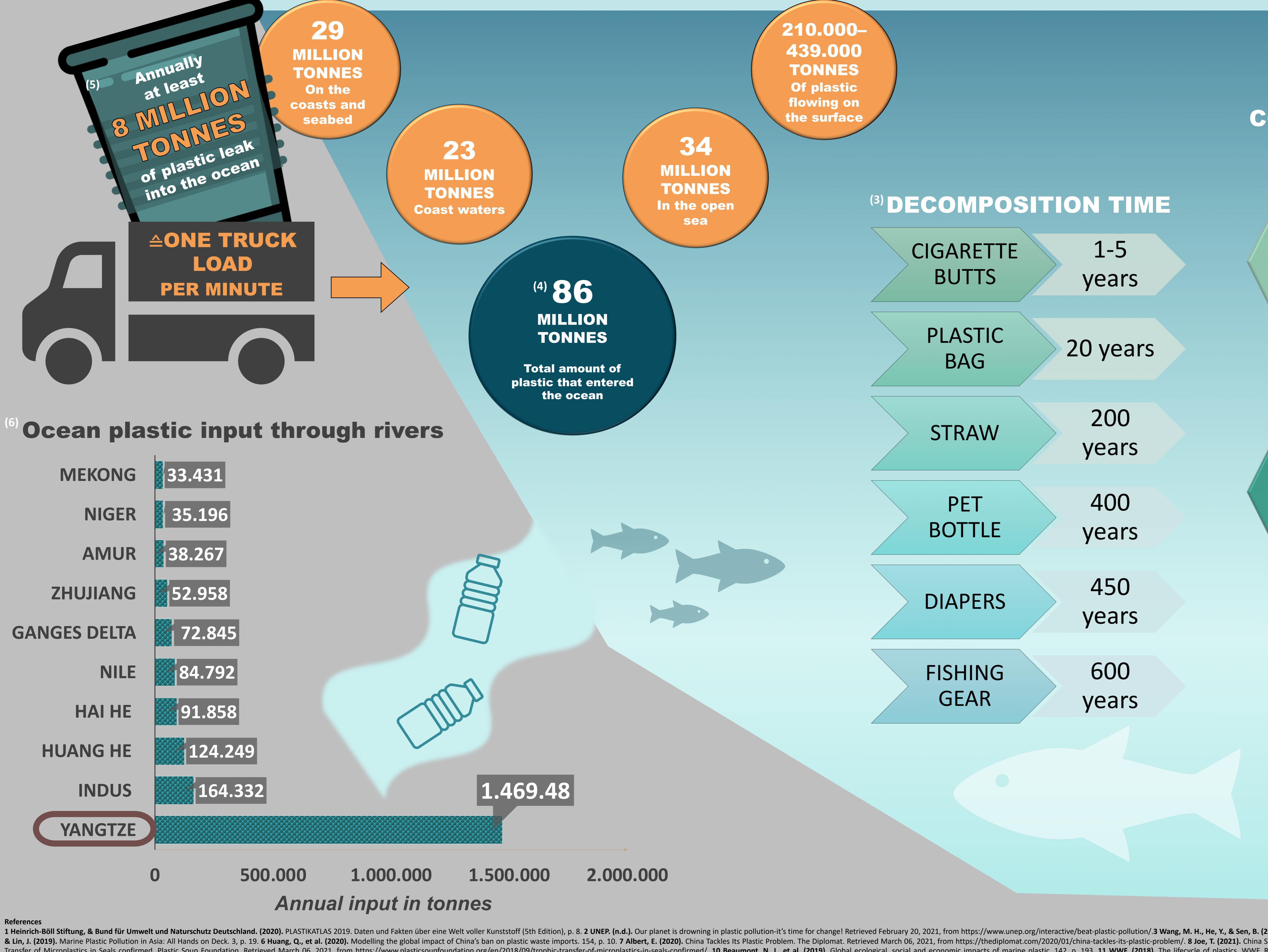
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China is by far not only the most populated country in the world but also largest plastic consumer and producer, contributing **29% of the global thermoplastics and polyurethanes production**. For countries of the Global North, such as UK and USA, China had until recently offered the possibility to dispose of plastic waste and prevent it from being landfilled or incinerated in the countries of origin by importing their shipping-processed plastic waste. Estimates assume that in the last two decades, almost half of the planet's plastic waste has been shipped to China to profit its recycling industry. Especially less valuable plastic is regularly discarded with inadequate management, possibly finding its way into the ocean. Data from 2010 to 2016 indicate, that the import of plastic waste adds 10 to 13% of mass to the domestic plastic waste, that is already poorly managed. Overall, China contributes **1.3 million to 3.5 million tonnes of plastic** to the world's oceans annually. [3,4,5]

⁽¹⁾ Share of global mismanaged plastic waste in 2010



<0.1% <0.5% <1.0% <2.5%
<5.0% <10.0% <15.0% <30.0%



CONSEQUENCES

MARINE LIFE [11]

100.000 MARINE MAMMALS die every year as a result of plastic pollution

CLIMATE [12]

In terms of CO₂ emissions

Recycling **1 MILLION TONNES OF PLASTIC**
≈ Taking **1 MILLION CARS off the road**

HEALTH [9]

Trophic transfer: Ingestion of microplastics by a marine species, plastic potentially enters the food chain
→ **Exposure to chemicals**

ECONOMY [10]

Costs of up to **\$264 BILLION Dollars** in reduced environmental value due to plastic pollution

(2) Business-As-Usual Scenario BY 2050

Global share of global oil consumption
+14 %

In 2018 China's central government has implemented an **import waste ban**, which has lowered the plastic imports by 99%. Additionally, the country has revealed a plan to reduce its single-use plastic across all towns and cities by 2022, which began already in 2021 with a ban in every major city. In the future, China's new plastic regulations could lead to a reduction in plastic waste, as well as an improvement in the recycling of its own plastic waste, thus diminishing its share of plastic in the ocean. Given the important role its recycling industry plays for the waste management of other countries and its ban on waste imports, illegal plastic disposals and ocean littering might even increase. At the same time, it can also provide food for thought in the handling of plastic and its subsequent disposal in large parts of the world, as the global dumping ground of China is no longer available. In addition, global cooperation will be necessary in the future to strive for an overall reduction in plastic production and a more stable recycling industry.

[5,6,7,8]