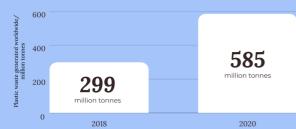
## COVID-19: A VIRAL PANDEMIC

How and why did the COVID-19 pandemic exacerbate plastic pollution worldwide and in SG through 2020?

Worldwide plastic waste generated per year increased by almost 50% from 2018 to 2020



Ocean Plastic Pollution

was predicted to increase by **8 million tonnes** in 2020 (as of 2016)



Actual increase in 2020 was 13 million tonnes.

Causes of PLASTIC POLLUTION from COVID-19

## COVID-19 collapsed plastic waste disposal methods.

30-40%
Reduction in demand of recycled

References: https://docs.google.com/document/d/1MtPDgGgownD8vTJJ3Mv58vLfbWoN8tg6H3RRP1CJk68/edit?usp=sharing



Lack of market for recycled plastics led to the suspension of recycling programmes and sharp declines in global recycling rates.

## COVID-19 caused a huge spike in global plastic waste.

Discarding of plastic Personal Protective Equipment (PPE):



3.4 Billion

discarded daily due to COVID-19 in 2020.

2.2 Billion 🌂

with similar geographical proportions as discarded face masks.

And from 2020 to 2025, the daily wastage of 5.6 billion PPEs is predicted to increase by a shocking

20%1

## Recycling |

**Team name:** PPE (Plastic Pandemic Experts) **Team Members:** Yeo Jun Seng Erasmus **School:** Hwa Chong Institution (College)

Reduction in the plastic recycling rate amid increased plastic waste generation may lead to mismanagement and leakage into aquatic ecosystems.

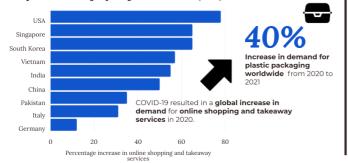
Incineration Existing incineration capacities are breached by an increase in plastic waste due to the COVID-19 pandemic.

> USA EUROPE Developing Countries

tpd

4.9
tpd
Incineration Capacity Peak Plastic War

Spike in the usage of Single-use Plastics (SUP):



Amidst the concerns of cross-contamination by reusing plastic bags and containers, many countries like the US, the UK and Thailand have temporarily revoked or deferred SUP bans.

Similar trends to Thailand have been observed worldwide

Thailand
30% Growth in SUP
production

COVID-19
exacerbated
domestic
plastic waste
generation in
Singapore.

Despite a 7% decrease in plastic waste due to industrial inactivity, 2020 statistics show a

jarring increase in domestic consumption of plastic, casting gloomy outlooks for mismanaged waste and plastic pollution in

Singapore.

2,000 During the circuit breaker, there was a 73% increase in delivery and 18% increase in takeaway services.

1,000

500

EXTRA

**1334** tonnes

Of **plastic waste** produced during the circuit breaker