



Plastic waste: an overview

20 — Exploratory Data Analytics
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Plastic waste management 2000-2019

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Motivation



By now, we all are probably familiar with these facts:

- Plastic production requires large amounts of fossil fuels, **contributing to greenhouse gas emissions and climate change.**
- Many types of plastic cannot be recycled, leading to them being **disposed of in landfills or incinerated.**
- Plastic takes hundreds of years to decompose and can **harm wildlife and ecosystems** in the meantime, especially marine life.

And for that reason, we see campaigns everywhere, products and all sorts of initiatives but, **did we really reduce plastic consumption or increment recycling** or is it more about feeling better about ourselves?



Let's see!

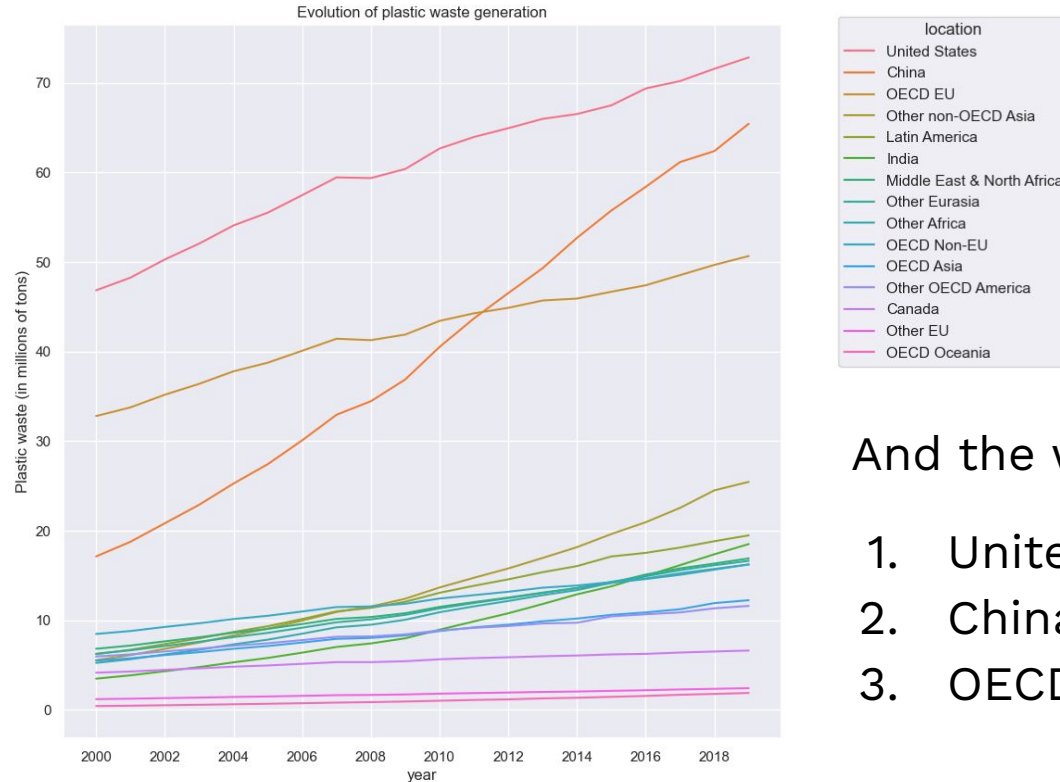


Questions





What are the **top 3 areas** that generate the most plastic waste?



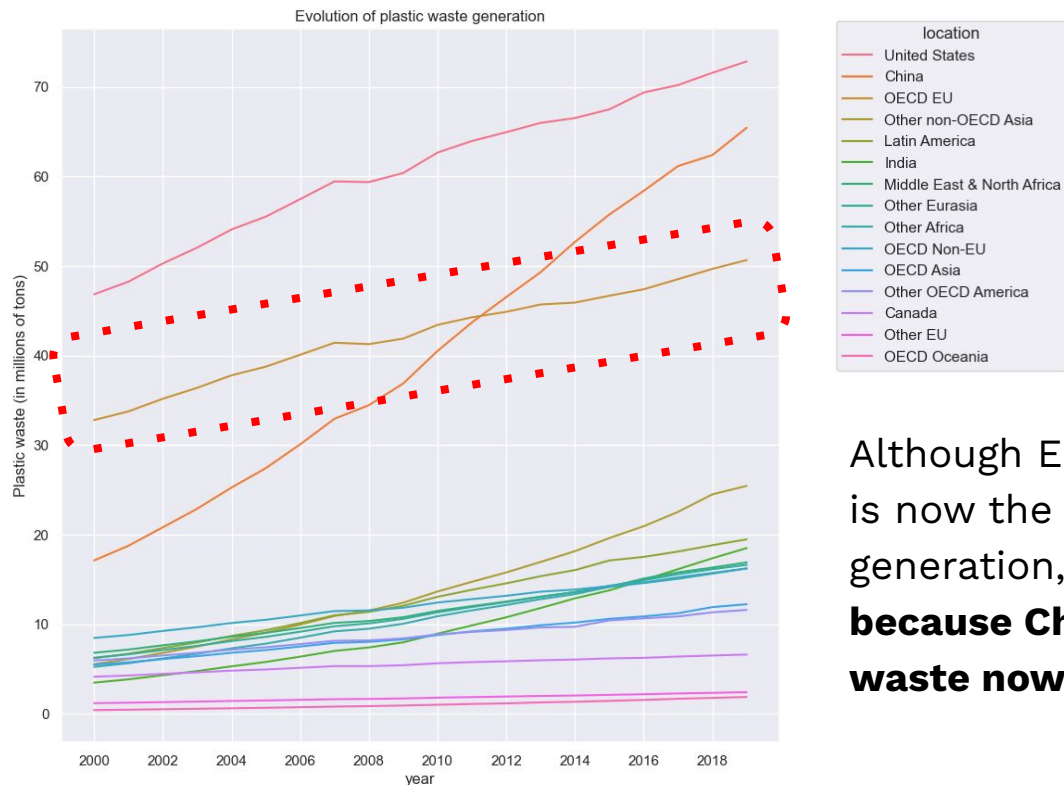
And the winner is...

1. United States
2. China
3. OECD EU (yep, that's us!)

But I've seen that the EU used to be the second producer of waste so...



Did the European Union **reduce its plastic waste** in the last 5 years?

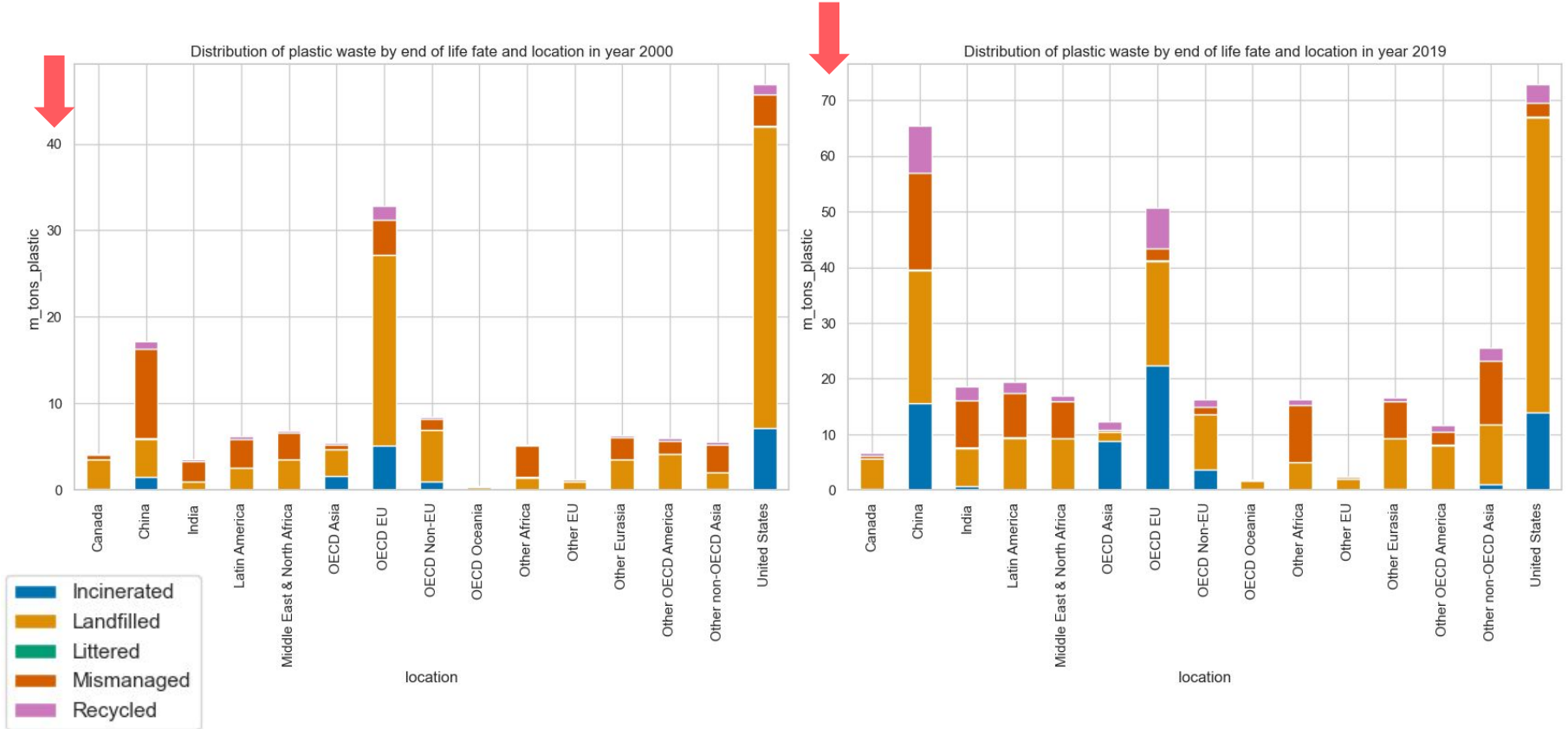


Although EU used to be the second and it is now the third in terms of waste generation, the **reason for it is just because China generates more plastic waste now**. Overall all areas increased.

Alright I see, but surely with so many campaigns most of it is being recycled now...



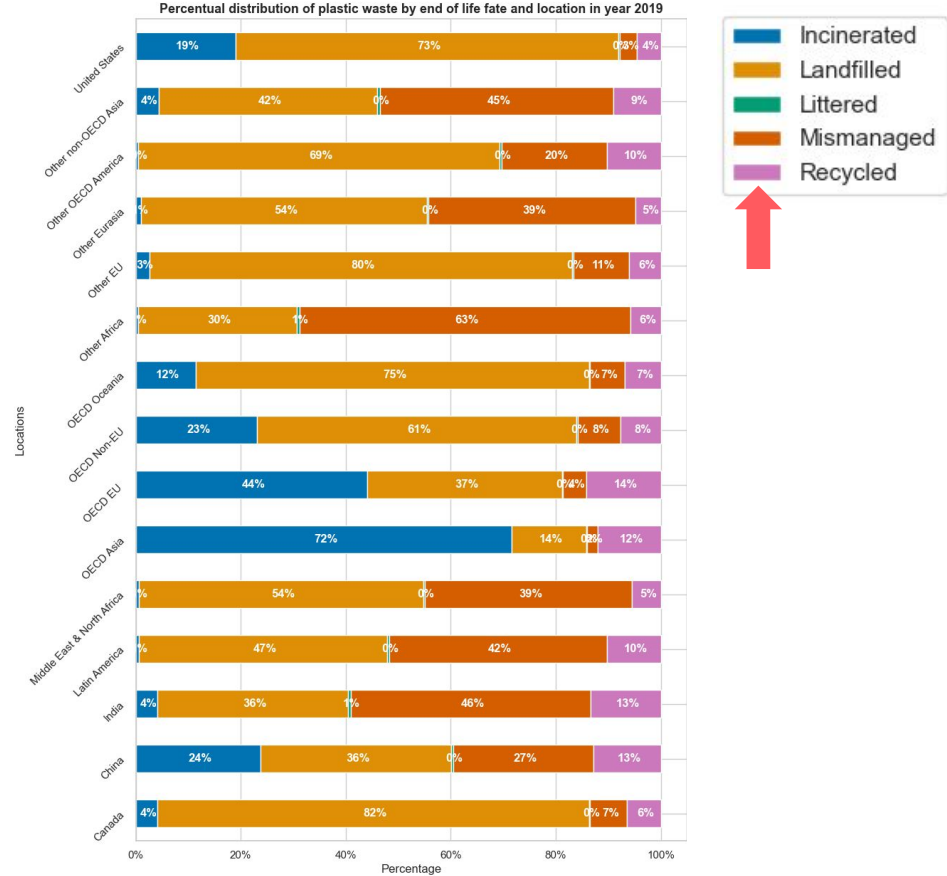
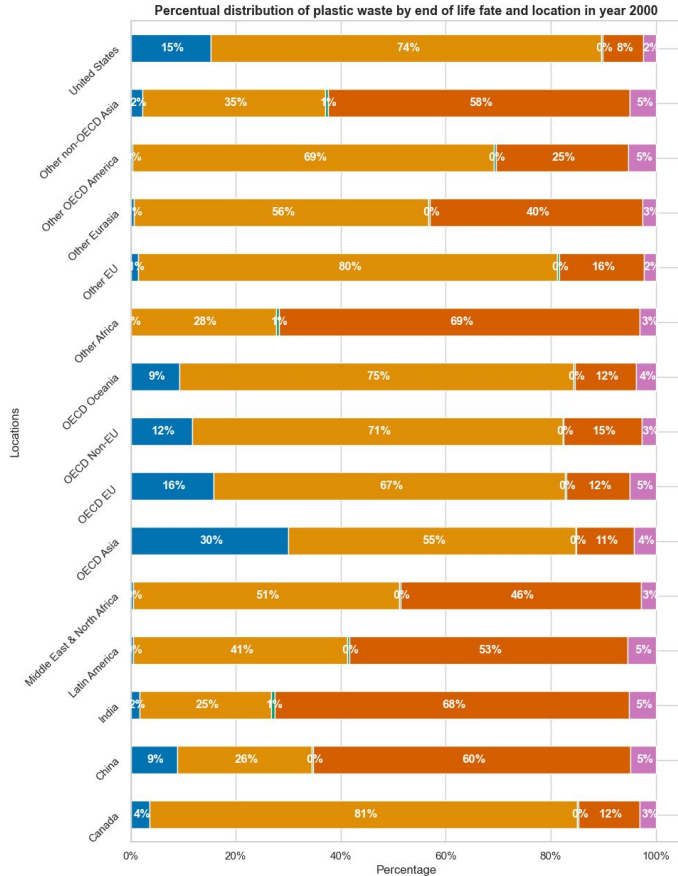
How much all used plastic is **mismanaged**? What about **landfill**?



Wait, what?



Which % of all used plastic was actually **recycled** over the last 20y?

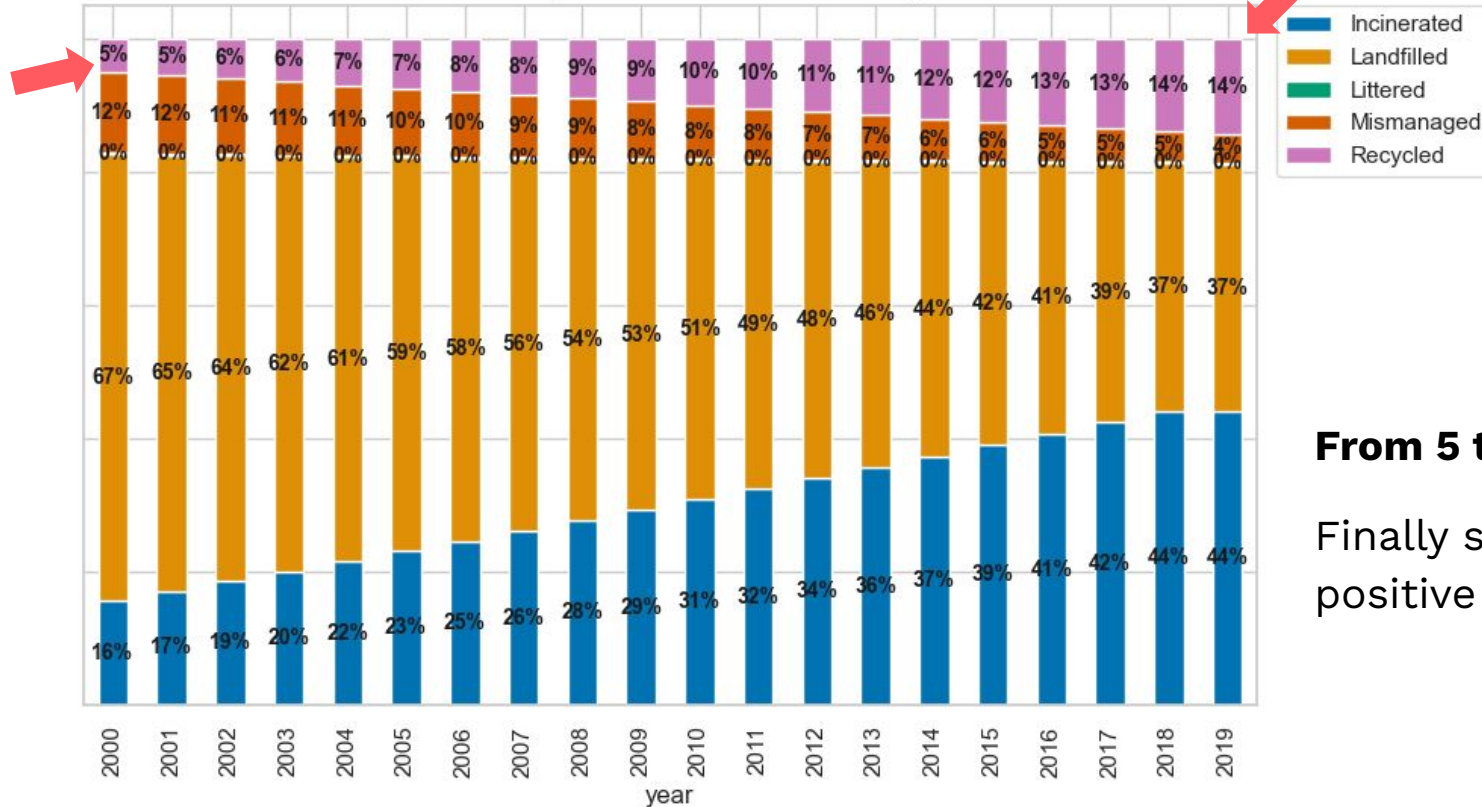


Oh, I see... What about the EU?



How did the **% of recycled plastics improve in the EU** in the last 20y?

Evolution of the distribution of plastic waste in OECD European Union countries



From 5 to 14%!

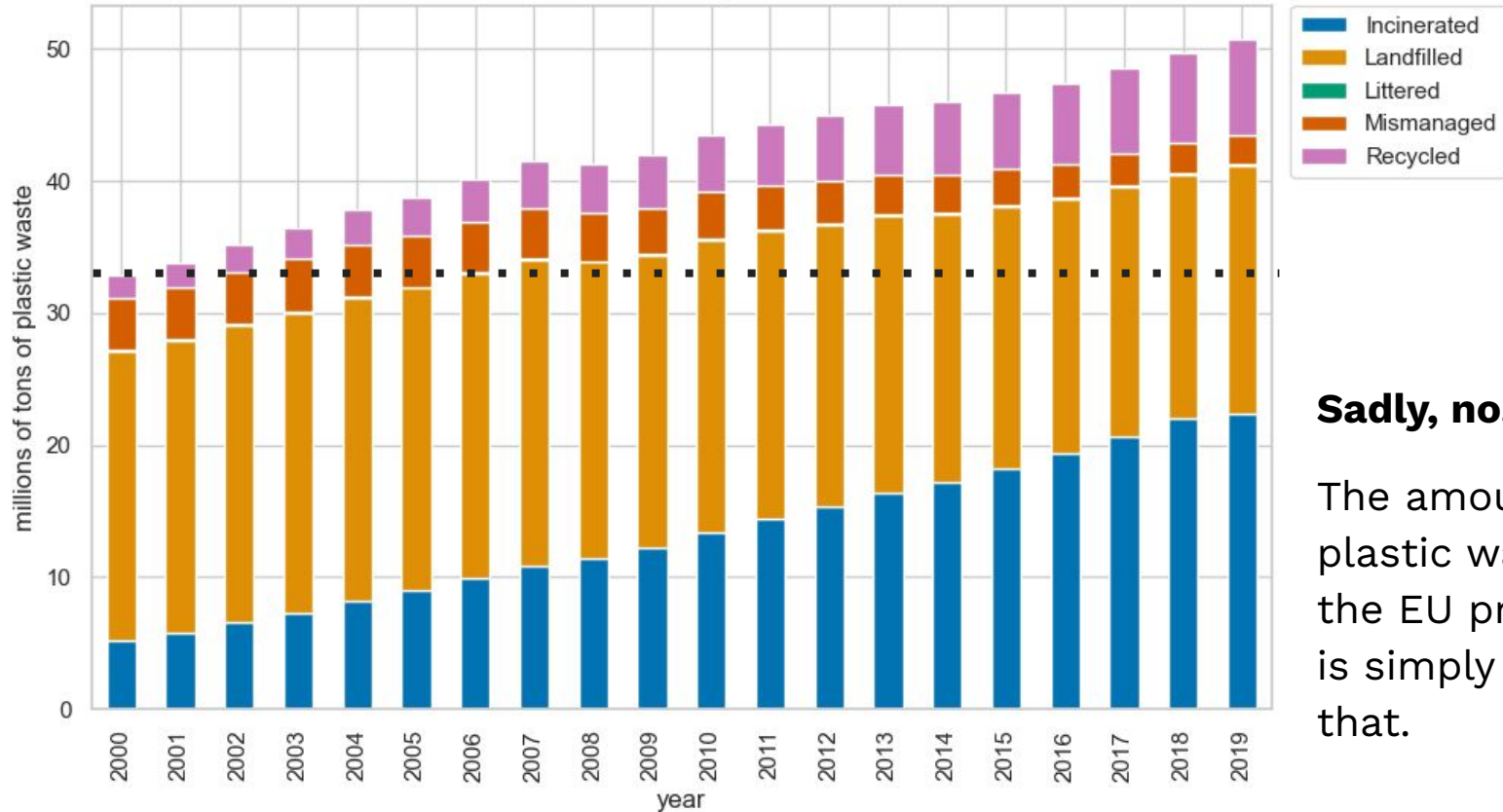
Finally something
positive

Good news! So...



Does that **compensate for the bigger waste?**

EU evolution of the plastic waste



Sadly, no.

The amount of plastic waste that the EU produces now is simply too high for that.



Conclusions



Here are some **silver linings**:

🥤 The amount of **mismanaged plastic waste** (main reason of ocean plastic pollution) **has greatly decreased in the last 20 years.**

🥤 The EU is leading in terms of **recycling with a 14% of all plastic waste.**

And a **conclusion**:

🥤 It's not that much about recycling individually, as many plastics cannot be recycled, but about **reducing consumption as a whole.**



Sources

Sources:

**OECD (Organisation for Economic
Co-operation and Development):**

🔗 Plastic waste by region and end-of-life
fate ([link](#))





The
End

