

# Description: Global Plastics Data Tracker

The tracker was developed via a rapid assessment in the run up to INC-5 – the analysts therefore welcome users to improve the sources and provide feedback to [helena.dickinson@unsw.edu.au](mailto:helena.dickinson@unsw.edu.au) or [e.northrop@unsw.edu.au](mailto:e.northrop@unsw.edu.au).

The United Nations Environment Assembly Resolution 14 ([UNEA-5.2/Res 14](#)), adopted in March 2022, calls for a "comprehensive approach that addresses the full life cycle of plastic." However, a persistent lack of data to inform indicators of progress has hindered the global and national decision-making needed to mitigate plastic pollution, encourage sustainable practices, and support circular economy initiatives.

Access to robust plastics data will be critical to the success of the fifth and final round of negotiations for the [global plastic treaty](#), happening in Busan, South Korea in November 2024.

Comprehensive data is needed to promote transparency and accountability.

The Tracker shows that OECD countries typically report more plastics data than non-OECD countries - on average OECD countries reported against 80% of the 15 categories, whilst non-OECD countries on average reported against 37% of the categories (with the majority of data reported by non-OECD countries being trade data).

Data on 'Plastics Waste Trade' is the most comprehensively reported (with approx. 80% of countries assessed reporting at least partial data for plastics waste imports/exports). The categories with the least published data were plastics production and consumption, with less than 20% of countries publishing data for these categories.

No country currently annually publishes plastics data across all metrics in the supply chain, and many do not report against any of the metrics.

Without national data and/or data systems being in place – this data gap will:

- Impact a country's ability to establish realistic yet ambitious goals for reduction and improved management through national action plans<sup>1</sup> that are in line with the ambitions of the global treaty;
- Impact a country's ability to monitor the implementation of those commitments. As countries implement measures to reduce plastic pollution, they require reliable methodologies to track temporal changes and assess the impact of their interventions. The lack of such systems not only hinders national efforts but also complicates the aggregation of global progress and the evaluation of collective achievements against agreed global goals;
- Pose challenges for verification measures, including any potential market mechanisms. The absence of reliable and comparable data makes it difficult to verify progress claims or ensure the integrity of any trading schemes or offset programs that might be implemented as part of the global effort to combat plastic pollution.

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<sup>1</sup> [UNEA-5.2/Res 14, paragraph 3\(d\)](#)

- Limit the ability to timely and transparently report on progress<sup>2</sup> within their national jurisdiction in a representative and coherent manner; and
- Undermine efforts to aggregate global progress<sup>3</sup> against global goals to eliminate and/or phase out;
- Undermine the ability to assess the effectiveness of the instrument.<sup>4</sup>

### Global Plastics Data tracker

Currently national-level plastics data is not easily accessible via a single platform. This makes it hard to identify where there are gaps in global reporting of plastics data.

The Global Plastics Data tracker provides easy access to the sources of individual data points for each country, across the whole supply-chain.

The metrics we have focussed on are the same as those published in our “Plastics Data Checklist” – these categories align with the treaty’s expected scope of addressing the full lifecycle of plastics.

- Data on the **production and consumption** of plastics are essential to quantify plastic flows, understand the scale of plastic use and identify areas for reduction.
- **Trade** data helps track the transboundary movement of plastics, which is crucial for understanding global distribution patterns.
- **Waste generation, treatment, and trade** data are critical for evaluating current management practices and identifying areas for improvement.

The Tracker refers only to Government published data and statistics for all aspects of the supply-chain. The rationale for only reviewing Government data is due to the need for Governments to be responsible for their countries data to ensure it is routinely reported and follows a standardised methodology.

The private sector (including academic and consultancy organisations) hold valuable plastics data and governments are encouraged to assess this data and underpinning methodologies to inform Government publications of plastics data.

Each data point has been assigned a “Data score” which indicates how suitable the data is for informing annual flows of plastic in the country. The highest data scores are assigned to the data points that report plastic-specific data and are reported annually. Lower data scores are given to data points that do not publish plastic-specific data, and/or have published data infrequently.

A full breakdown of the data score descriptions is listed below.

Description	Data score
<i>All categories:</i> Data published annually (split by plastics)	*****
<i>All categories:</i> Irregular publication of data (split by plastics) <i>Consumption only:</i> Plastics production data not split by virgin/recycled content	****
<i>All categories:</i> Data published annually (not split by plastics) <i>All categories:</i> Data not published since the end of 2018, but was previously published annually (split by plastics)	***

<sup>2</sup> UNEA-5.2/Res 14, paragraph 3(f)

<sup>3</sup> UNEA-5.2/Res 14, paragraph 3(g)

<sup>4</sup> UNEA-5.2/Res 14, paragraph 3(h)

<i>All categories:</i> Irregular publication of data (not split by plastics)	
<i>All categories:</i> One off publication (split by plastics)	
<i>All categories:</i> Plastics data published annually, but not provided in tonnage format	**
<i>All categories:</i> One off publication (composition only)	
<i>All categories:</i> One off publication (not split by plastics)	
<i>All categories:</i> One off regional publication	*
Not found	

### Key takeaways from the Plastics Data Tracker

OECD countries (of which there are 38 members) at a minimum annually report the amount of plastics that they produce and the amount that is incinerated, landfilled or sent for recycling. Most non-OECD countries do not seem to have structured plastics data that is routinely reported.

Many countries are in the process of developing their plastics data. These efforts are often driven by the need to better understand plastic flows, comply with international standards, and meet environmental goals. For example, Indonesia is developing a [National Plastic Action Partnership](#) and is exploring the development of a digital tracking system for waste data. In Ghana, the Government have also acknowledged the need for more/improved data in their [National Solid Waste Management Strategy](#), which includes plans for baseline data collection, waste characterization studies in major cities, and implementing waste tracking software in municipalities.

Countries that do not routinely report plastic data often face challenges such as limited political will to support, limited resources, lack of infrastructure, or political instability. Specific issues and limitations that contribute to a lack of plastics data include:

- **Inconsistent Definitions and Metrics:** For example, Vietnam and Thailand measure recycling rates differently, with Vietnam including informal sector collection while Thailand only counts formal recycling facilities, making regional comparisons difficult.
- **Hidden data (informal activities):** In India, an estimated 1.5-4 million informal waste pickers collect 15-20% of municipal waste, but there is no standardized way to capture their data, leading to underestimation of recycling rates.
- **Fragmented Data Collection (no centralised reporting):** The Philippines demonstrates this challenge, where each municipality collects different metrics with no standardized reporting format. For instance, Metro Manila measures waste in volume while other regions use weight, making it difficult for the national government to aggregate data. Similarly, in Brazil, different states use varying systems - São Paulo has detailed EPR reporting while rural states have minimal data collection, resulting in an incomplete national picture.

### Implications for INC-5

Whilst the Global Plastics Data Tracker evidences that significant progress is required to fill data gaps, the tracker also shows that governments with varied infrastructure and resources do actively report plastics data – for example, India and Vietnam report against approx. 65% of the data categories and Samoa and Mauritius report against 60% of the data categories. This indicates that through using data collection strategies, methodologies (proxies and samples) and digital systems, it is possible for countries to report data, providing they receive the appropriate support to do so (e.g., capacity building and knowledge sharing).

It is therefore critical that the Global Plastics Pollution Treaty creates pathways to improve data collection over time, recognising countries have different starting points and capacities, and supported by new and additional and accessible support will be critical to the long-term success of the regime.

#### Transparency and Reporting

**Setting of realistic yet ambitious goals through national action plans:** Plastic data provides policymakers with the information needed to make informed decisions about plastic management strategies, regulations, investments and targets.

**Supply chain transparency and optimisation of systems:** Plastic data allows for the optimisation of plastic management by providing insights into plastic generation patterns and disposal methods. Efficient plastic management can lead to cost savings through reduced waste disposal costs, increased recycling revenues, and improved operational efficiency.

**Extended Producer Responsibility (EPR):** Data is required to implement EPR for plastic packaging in order to set baselines and targets, inform cost structures, and tracks program performance.

**Monitoring and Evaluation:** Plastics data supports transparent reporting and meaningful evaluation. Baseline and future plastics data is needed to assess progress against targets and enables improvements to be identified.

In addition, plastic data helps countries and organisations comply with environmental regulations and international agreements related to waste management and reporting, beyond the Global Plastics Pollution Treaty.

#### Innovation, Research and Capacity Building

**Funding for research and partnerships with Research Institutions:** Plastic data identifies key issues across the lifecycle of plastics, guides research focus, and helps evaluate the effectiveness of solutions aiming to reduce plastic waste.

**Capacity building and infrastructure requirements:** Data helps inform what skills a country need to mitigate harmful impacts of plastic waste. E.g., more recycling infrastructure.

#### Education and Communication

**The public:** Plastics data can be used to educate the public about waste generation and management practices, fostering greater awareness and participation in waste reduction efforts.

**Governments:** Governments can easily assess how advanced their plastic data reporting is compared to other similar countries. Governments can identify countries that have more advanced plastics data reporting and identify how systems could be improved. In addition, because the tracker provides easy access to where countries report data, countries can quickly observe how other countries are calculating and presenting their plastics data.