
CDP Technical Note - Plastics disclosure

CDP Water Security 2023



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About this Technical Note

This technical note introduces CDP's exploratory approach to plastics disclosure, including its alignment to the Ellen MacArthur Foundation's [Global Commitment](#).

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1. Introduction

Plastic pollution harms our ecosystems, economies, and communities. It threatens the function of the world's terrestrial, ocean and freshwater ecosystems, which serve as sanctuaries for biodiversity, vital food sources and major carbon sinks.

Despite the globally accepted scale of the problem and extent of its impacts, many companies are yet to have a strong understanding of how they contribute to the plastic crisis and their exposure to commercial, legal, and reputational risks across their value chains.

In 2023, companies reporting plastics-related data will do so through CDP's Water Security disclosure because:

- ▼ There is a congruence between sectors that are requested to disclose through the CDP Water Security questionnaire and those sectors likely to involve activities that produce or use plastics.
- ▼ Keeping plastics out of the environment is essential to restoring the health of our freshwater and other ecosystems.

On behalf of its data users (investors, purchasing companies, and others), CDP is requesting companies to report on whether they are currently taking actions to reduce the use of plastics, including from virgin content, through the direct elimination of problematic and unnecessary plastics, and adopting reuse models.

CDP's Plastics Module is informed by existing plastics disclosure frameworks, including the Ellen MacArthur Foundation and UN Environment Programme's Global Commitment, providing decision makers with clear, comprehensive, and comparable data on the production, use and disposal of plastics across the global economy.

2023 is an exploratory year and the module will likely have only minor revisions in 2024. As strategies for reducing plastic dependency and increasing circularity mature, CDP will review the data that companies are able to provide and collect feedback from our stakeholders on what is most relevant to driving action and informing decision making.

The plastics questions will be unscored in 2023, and therefore will not impact a company's Water Security score. This is in recognition that many companies are in the early stages of developing their action, accountability, and reporting on plastics.

2. Technical FAQs

Which plastics activities are the focus of CDP's 2023 disclosure?

CDP asks for information from all companies that use, produce, or commercialize plastics, covering the entirety of their value chain, including plastics waste management, reprocessing, and disposal. We do not request information specific to companies whose sole activity is plastics waste management, reprocessing, and disposal.

The module includes *quantitative metrics* for solely for companies with activities relating to the production, use, and commercialization of plastic polymers, goods, and packaging, and the provision of services or goods that use plastic packaging.

The plastics activities for which CDP requests quantitative metrics:

Production of plastic polymers

This activity refers to the conversion of raw materials into plastic polymers (e.g., in the form of resin pellets) through a polymerization or polycondensation process. These raw materials may be fossil-based (e.g., derived from crude oil) or renewable (e.g., derived from sugar cane ethanol). The raw materials also may be either virgin materials or recycled materials.

Production of durable plastic components

This activity refers to the conversion of plastic polymers into plastic components of durable goods. For example, a polypropylene component of a car bumper. This category is only for components that make up other goods.

Note: Durable goods refers to goods whose expected lifetime is greater than three years or that can be used more than once.

Production/commercialization of durable plastic goods (including mixed materials)

This activity refers to the conversion of plastic polymers into durable plastic goods and/or the placing of durable plastic goods into the market (e.g., selling, distributing, marketing). For example, a children's toy made from ABS plastic.

Production/commercialization of plastic packaging

This activity refers to the conversion of plastic polymers into plastic packaging, and/or the placing of plastic packaging into the market (e.g., selling, distributing, marketing). This activity group does not include the production/commercialisation of goods that are packaged in plastic.

Production of goods packaged in plastics

This activity refers to the production of goods, of any kind, that are packaged in plastics; for example, a company that manufactures bars of soap wrapped in LDPE packaging.

Provision/commercialization of services or goods that use plastic packaging (e.g., retail and food services)

This activity refers to the provision of goods and services, of any kind, that involve the use of plastic packaging (not companies that manufacture plastic packaging, goods in plastic packaging, or plastic goods). An example of this is an airline that provides food wrapped in LDPE packaging to its passengers.

Sources: [Plastics Europe](#), [Global Commitment definitions and reporting guidelines](#)

Are mixed materials included in the metric for 'total weight' of plastic packaging or goods?

For mixed materials, companies are requested to provide data on:

- Goods or packaging that consist of at least 50% plastic by weight.
- The weight of the plastic proportion of the goods or packaging only.

For example: A company manufactures cosmetics containers. One container weighs 100g: 60g PET plastic and 40g glass. The company sold 500 containers in the reporting period. It should report $500 \times 60g = 30,000g = 0.03$ metric tonnes. The company also manufactures 50g cosmetics tubes made from 30g bamboo and 20g PET plastic. Because this product is less than 50% plastic by weight, the company is not required to include this product in the reporting of 'total weight'.

The types of plastic reported should include fossil-based, bio-based, compostable, biodegradable, and oxo-degradable plastic.

CDP recognizes that reporting the total weight of plastic in mixed materials products may require estimation rather than measurement.

Does CDP ask about single-use plastics?

Packaging is the most prevalent and problematic form of single-use plastics. In line with the Ellen MacArthur Foundation's Global Commitment, we request metrics about packaging, rather than about single-use items as a specific category of plastics.

Included in CDP's definition of plastic packaging is:

- ▼ Plastic packaging in direct contact with the product, holding several units of packaging and/or used for the transport of units of packaging (i.e., primary, secondary, and tertiary plastic packaging).
- ▼ Plastic packaging applied to or offered to accompany any products sold (e.g., plastic shopping bags or plastic cutlery accompanying food).

This would mean, for example, that a pack of disposable cutlery sold independently of food is not considered packaging.

What are the different raw material sources for plastics?

There are two dimensions to the raw material sources for plastics: fossil-based versus renewable, and virgin versus recycled.

Fossil-based versus renewable

Fossil-based content refers to the polymers in a plastic product that are produced from petrochemicals. Renewable content refers to polymers derived from sources that are continually replenished at a rate equal to or greater than the rate of depletion, e.g., sustainably harvested starch or cellulose. Both fossil-based and renewable plastics can be either virgin or recycled.

Virgin versus recycled

Virgin content is the plastic content that has not been previously used or subjected to processing other than for its original production. Virgin plastic content has not been produced from post-industrial or post-consumer recycled material. In contrast, recycled plastics have been produced from post-industrial or post-consumer recycled material. Both virgin and recycled plastics can be derived from fossil-based sources or renewable sources.

What is the difference between 'technically recyclable' and 'recyclable in practice and at scale'?

'Technical recyclability' reflects the technical potential to recycle a product containing plastic, but does not take into account whether the collection, sorting, and recycling of the package happens in practice, at scale, and with reasonable economics (e.g., it could work in a lab or in one (pilot) facility but not be currently economically viable to replicate at scale). Note that some organizations refer to this as 'packaging designed for recycling'.

To assess technical recyclability, various guidelines, tools, and testing methods are available from, for example, the Association of Plastics Recyclers (APR), Plastic Recyclers Europe, European PET Bottle Platform, and Consumer Goods Forum Golden Design Rules. If there are differences between the different guidelines, it is encouraged to use the most geographically relevant one or the strictest one.

'Recyclability in practice and at scale' refers to successful post-consumer collection, sorting, and recycling, which is proven to work in practice and at scale. The test and threshold for assessment is a 30% recycling rate in multiple regions, collectively representing at least 400 million people. A possible alternative, especially relevant for more local players, is to check if a 30% post-consumer recycling rate is achieved in all the markets where a packaging is sold. The Ellen MacArthur Foundation's [Recyclability Assessment Tool](#) is a publicly available, credible tool for assessing whether packaging is recyclable 'in practice and at scale'.

3. How is CDP disclosure aligned with the Ellen MacArthur Foundation's Global Commitment?

CDP's Plastics Module was informed by the Ellen MacArthur Foundation's [Global Commitment](#), and aligned with CDP's approach to disclosure on Climate Change, Forests, and Water Security.

The table below maps CDP's Plastics Module with the information that companies are required to provide as part of the Global Commitment.

CDP Water Security Questionnaire 2023: Plastics Module	Ellen MacArthur Foundation: Global Commitment reporting metrics
(W10.1) Have you mapped where in your value chain plastics are used and/or produced?	No equivalent metric.
(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?	No equivalent metric.
(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.	No equivalent metric.
(W10.4) Do you have plastics-related targets, and if so what type?	The Global Commitment requires companies to set and report progress on several plastics-related targets, including the following:
<ul style="list-style-type: none"> • Column 3: Target metric <ul style="list-style-type: none"> ○ Plastic polymers: Reduce the total weight of virgin content in plastic polymers ○ Plastic packaging: Reduce the total weight of virgin content in plastic packaging ○ Plastic goods: Reduce the total weight of virgin content in plastic goods 	<ul style="list-style-type: none"> • Decreasing virgin plastic use.
<ul style="list-style-type: none"> • Column 3: Target metric <ul style="list-style-type: none"> ○ Plastic packaging: Eliminate problematic and unnecessary plastic packaging 	<ul style="list-style-type: none"> • The elimination of problematic and unnecessary packaging.
<ul style="list-style-type: none"> • Column 3: Target metric <ul style="list-style-type: none"> ○ Plastic polymers: Increase the proportion of post-consumer recycled content in plastic polymers ○ Plastic packaging: Increase the proportion of post-consumer recycled content in plastic packaging ○ Plastic goods: Increase the proportion of post-consumer recycled content in plastic goods 	<ul style="list-style-type: none"> • Increasing the share of post-consumer recycled (PCR) content.

<ul style="list-style-type: none"> Column 3: Target metric <ul style="list-style-type: none"> Plastic packaging: Increase the proportion of plastic packaging that is recyclable in practice and at scale Plastic packaging: Increase the proportion of plastic packaging that is reusable Plastic packaging: Increase the proportion of plastic packaging that is compostable 	<ul style="list-style-type: none"> Ensuring 100% of plastic packaging is reusable, recyclable, or compostable (RRC).
<ul style="list-style-type: none"> Column 3: Target metric <ul style="list-style-type: none"> Plastic packaging: Increase the proportion of plastic packaging that is reusable Plastic goods: Eliminate single-use plastic goods 	<ul style="list-style-type: none"> Moving from single use towards reuse models.
(W10.5) Indicate whether your organization engages in the following activities.	Signatories are preassigned one of the following activity categories by the Ellen MacArthur Foundation before reporting:
<ul style="list-style-type: none"> Row 1: Production of plastic polymers 	<ul style="list-style-type: none"> Raw material producers - non compostable Raw material producers - compostable plastics
<ul style="list-style-type: none"> Row 4: Production / commercialization of plastic packaging 	<ul style="list-style-type: none"> Packaging producers
<ul style="list-style-type: none"> Row 5: Production of goods packaged in plastics Row 6: Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services) 	<ul style="list-style-type: none"> Packaged goods, retailers & producers
(W10.6) Provide the total weight of plastic polymers sold and indicate the raw material content.	Section: (Raw material producers) Portfolio, plastic weight and sourcing
<ul style="list-style-type: none"> Column 1: Total weight of plastic polymers sold during the reporting year (Metric tonnes) 	(Raw material producers - non-compostable plastics) <ul style="list-style-type: none"> Question 11.1 (in 2022): Provide the total weight of plastics sold (metric tonnes) (Raw material producers - compostable plastics) <ul style="list-style-type: none"> Question 14.1 (in 2022): Provide the total weight of plastic sold (metric tonnes)
<ul style="list-style-type: none"> Column 4: % virgin renewable content 	(Raw material producers - compostable plastics) <ul style="list-style-type: none"> Question 14.4 (in 2022): Provide the percentage of renewable content, and the percentage of renewable content from responsibly managed sources, in plastics sold

<ul style="list-style-type: none"> Column 5: % post-industrial recycled content Column 6: % post-consumer recycled content 	<p>(Raw material producers - non-compostable plastics)</p> <ul style="list-style-type: none"> Question 11.4 (in 2022): Provide details of the source of plastics sold (percentage of total plastic weight and/or metrics tonnes) <ul style="list-style-type: none"> Percentage pre-consumer recycled content Percentage post-consumer recycled content
(W10.7) Provide the total weight of plastic durable goods/components sold and indicate the raw material content.	No equivalent metric.
(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.	Section: Plastic packaging weight, portfolio and sourcing
<ul style="list-style-type: none"> Column 1: Total weight of plastic packaging sold / used during the reporting year (Metric tonnes) 	<ul style="list-style-type: none"> Question 4.1 (in 2022): Provide the total weight of your plastic packaging over the reporting period
<ul style="list-style-type: none"> Column 3: % virgin fossil-based content Column 4: % virgin renewable content Column 5: % post-industrial recycled content Column 6: % post-consumer recycled content 	<ul style="list-style-type: none"> Question 4.4 (in 2022): Provide details of the source of the plastic in your packaging <ul style="list-style-type: none"> Percentage virgin fossil-based content Percentage virgin renewable content Percentage pre-consumer recycled content Percentage post-consumer recycled content
(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.	Section: Plastic packaging weight, portfolio and sourcing
<ul style="list-style-type: none"> Column 2: % of plastic packaging that is reusable 	<ul style="list-style-type: none"> Question 4.5 (in 2022): Provide the percentage of plastic packaging which was reusable, recyclable or compostable over the reporting period (for % reusable)
<ul style="list-style-type: none"> Column 4: % of plastic packaging that is recyclable in practice at scale 	<ul style="list-style-type: none"> Question 4.5 (in 2022): Provide the percentage of plastic packaging which was reusable, recyclable or compostable over the reporting period (for % recyclable)