Guidelines for Corporate Plastic Stewardship

Summary for Decision Makers
February 2021
Introduction

Of the nearly 415 million tonnes of plastic produced per year, 12 million tonnes (three percent) end up in the ocean.¹ To better manage natural resources and reduce plastic pollution, businesses are joining governments to make commitments to reduce plastic production and consumption by 19 million tonnes per year by 2040 and increase recycled content in products and packaging by 5.4 million tonnes per year by 2025.²

These Guidelines for Corporate Plastic Stewardship advise companies looking to set and meet ambitious plastic waste reduction leadership commitments based on comprehensive and sustainable plastic stewardship strategies.

The Guidelines set out:

• High-level plastic footprint assessment metrics;
• A mitigation hierarchy illustrating the priority of different footprint and leakage mitigation strategies in a robust plastic stewardship programme;
• How to use plastic credits in the context of plastic stewardship; and,
• Three associated corporate leadership commitments and how they can be achieved

A robust assessment of a company’s total plastic footprint should be the starting point for any plastic waste reduction leadership commitment. Once a footprint is understood, companies can engage in activities to reduce their plastic impact and achieve associated commitments, as shown in the figure below.

Activities undertaken to achieve plastic leadership commitments³

![Diagram showing total footprint, mitigation activities, and leadership commitments]

³Note: Extended producer responsibility can only be counted as a mitigation activity if it can quantifiably be attributed to the company that uses it to compensate for plastic leakage.
1. Principles of a credible corporate plastic stewardship programme

The following principles should be applied at the highest possible level – ideally, company-wide. However, the same principles apply to more limited scopes (a product, market or brand). For ease of readability, this document refers only to the footprint and leakage of a ‘company’. Readers are advised to substitute ‘product’ or ‘brand’ as appropriate.

1. Plastic stewardship requires regular and consistent accounting of plastic use and leakage, which relies on quality data sources.
2. Plastic footprint and leakage mitigation activities should be prioritised using the hierarchy below (see Section 3) and should aim to achieve transformative change.
3. Activities within and beyond the company’s value chain should be accounted for separately and disclosed regularly.
4. Plastic stewardship programmes should strive to achieve full circularity — keeping plastic in use for as long as possible.

Elements of a plastic stewardship journey, baseline year X to year X + 1
2. Measuring plastic pollution: from assessment to accounting

In these Guidelines, both quantitative and qualitative metrics are included. They cover plastic accounting from a life cycle perspective and encompass plastic footprint and circularity.

Metrics for company plastic accounting are classified into categories specifying those that shall be reported to support the commitments in these Guidelines (mandatory), those that should be reported for any wider scope (optional) and those that are not covered by the current state-of-the-art (future).

**Mandatory**

Shall be reported systematically to support the commitments set out in these Guidelines

**Optional**

Should be used (in addition to mandatory metrics) if reporting against more than these commitments

**Future**

Would ideally be reported but are not covered by the current state-of-the-art
The table below classifies different metric types used to report on company plastic accounting, using this categorised approach. Optional and future metrics may become mandatory in a future version of these Guidelines, depending on the evolution of company accounting practices, as well as state-of-the-art methodologies and data.

<table>
<thead>
<tr>
<th>Tier</th>
<th>Description</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory</td>
<td>Shall be used for reporting related to the plastic waste reduction leadership commitments defined in Section 4. These metrics focus on plastic waste generated downstream of a company’s own operations (upstream-downstream &amp; operational-downstream uses).</td>
<td>Plastic waste generated (packaging or product sales volumes)</td>
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<tr>
<td></td>
<td></td>
<td>Recycled &amp; non-recycled content of plastic waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collected waste &amp; waste treatment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mismanaged waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Downstream macroplastic leakage</td>
</tr>
<tr>
<td>Optional</td>
<td>Should be optionally reported for plastic accounting</td>
<td>Total plastic use including upstream, operational &amp; downstream activities (plastics used at a farm, industrial textiles used at a production site)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other associated impacts (carbon footprint)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Material circularity index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plastic use intensity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qualitative claims (plastic pledges, reduction actions, management systems)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Microplastic leakage</td>
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<tr>
<td></td>
<td></td>
<td>Macro- &amp; microplastic leakage in oceans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macro- &amp; microplastic leakage in other environmental compartments</td>
</tr>
<tr>
<td>Future</td>
<td>Should be optionally reported but are not covered by the current state-of-the-art at the time of publication of the Guidelines</td>
<td>Residual leakage after one year (fate)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Impact of plastic leakage</td>
</tr>
</tbody>
</table>

Both primary and secondary data can be used to estimate plastic footprint and circularity metrics. Robust plastic leakage accounting requires reliable data for background calculations, especially for waste management (collection rates, recycling rates) of different polymers in various countries.

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4 See the full document for a full list of metrics used in corporate plastic accounting.
5 See the full document for information on publicly available waste management data that can be used to support plastic footprint accounting.
3. Plastic footprint and leakage mitigation activities

After calculating a plastic footprint, the next step on the plastic stewardship journey is to identify and implement mitigation activities.

The mitigation hierarchy
The most effective way to reduce plastic footprint and leakage is to start as high up in the value chain as possible. The figure below illustrates how companies should prioritise implementing strategies to reduce total plastic use and the potential for waste through product redesign, then, where plastic use cannot be eliminated, use recycled material to replace virgin input, and, as a final priority, ensure that plastic waste that cannot be eliminated is properly managed.

Hierarchy of plastic footprint and leakage mitigation activities

There are almost always social, environmental and/or economic tradeoffs between the activities described in the plastic footprint and leakage mitigation hierarchy. These tradeoffs can be assessed by applying science-based methodologies to assess the entire life cycle of a product or piece of packaging and its environmental and social impacts. Companies should identify and prioritise the most beneficial actions, wherever they may sit in the hierarchy. Furthermore, implementation strategies should incorporate appropriate safeguards and mitigate any potential adverse impacts.
Potential leakage mitigation activities: Beyond value chain investments

A wide variety of approaches to mitigate plastic footprint and leakage within the value chain are currently being explored (see, for example, the Ellen MacArthur Foundation’s work in this area). After implementing activities to reduce the footprint within the value chain, a company will still have unavoidable plastic waste leakage. Companies can invest beyond their value chains – in efforts from which they will receive no direct benefit, in plastic credit projects or in extended producer responsibility schemes – to compensate for the plastic pollution that they cannot yet prevent.

A plastic credit is a transferable unit representing a specific quantity of plastic pollution removed from the environment and/or put into the circular economy (i.e. collected and/or recycled) in excess of what would have happened in the absence of the credit-generating activity (i.e. business as usual). Plastic credits reduce the amount of plastic in the environment (or that which would have ended up in the environment) and increase the circularity of plastics through funding waste collection and/or recycling activities.

Where a company uses plastic credits to take responsibility for plastic leakage that is out of its control, it should carefully consider the following:

- Use of the term ‘net’ in any summary statement(s) to convey that the total achievement did not occur within the company’s value chain.
- Matching the plastic credit’s material type and region, and, ideally, timeframe of collection/recycling and post-recycling use to that of the leaked plastic’s impact.

To be credibly used to compensate for a company’s unavoidable plastic waste, plastic credits should adhere to the following principles:

- Real
- Measurable
- Additional
- Independently audited
- Unique (not double counted)
- Transparent
- Conservative

Extended producer responsibility (EPR) schemes enable companies to contribute to developing and enhancing waste collection and management infrastructure for the products they place on the market. Such systems are implemented through legislation and/or producer responsibility organisations.

EPR contributions should only be used to mitigate a company’s leakage if the impact of that company’s contribution is:

1. Quantified in terms of tonnes of waste collected and/or recycled beyond what would have happened without EPR;
2. Directly attributable to an individual company (with no possibility of double counting).

These same criteria apply to any other company-supported plastic collection efforts, such as those that are part of employee or local community engagement activities.
4. Plastic waste reduction leadership commitments and claims

Companies can demonstrate circular economy leadership through setting, achieving and communicating robust commitments around plastic use and management, while at the same time addressing plastic pollution. The following are three core plastic stewardship commitments covering different levels of ambition. Achievement of any of these commitments may involve product or packaging redesign, increases in use of recycled content, and implementation of collection and recycling activities.

Note: For a case study and figures illustrating the commitments in this section, see the Guidelines for Corporate Plastic Stewardship full report.

**Net Zero Plastic Leakage** means that an equivalent to the total weight of plastic put into a market is permanently removed from the environment. A company can achieve Net Zero Plastic Leakage through a combination of collection activities both within and beyond that company’s value chain, with any residual plastic leaked compensated for by retiring an equivalent amount of Waste Collection Credits.⁶

**Net 100% Recycled at End-of-Life** means that an equivalent to the total weight of plastic put into a market is recycled. A company can achieve Net 100% Recycled at End-of-Life through a combination of collection and recycling activities both within and beyond its value chain. To achieve this claim, a company should first attain Net Zero Plastic Leakage. Next, it should retire Waste Recycling Credits equivalent to the number of Waste Collection Credits used to achieve Net Zero Plastic Leakage to ensure that amount of plastic is recycled. Finally, it should compensate for any plastic collected but not recycled (i.e. that which is converted to energy or ends up in a landfill) by retiring an equivalent amount of Waste Recycling Credits.

**Net Circular Plastic** means that a product is composed of 100 percent recycled content and that the used plastic — or an equivalent amount of the same material type, compensated for through the retirement of plastic credits — is recycled.⁷ Net 100% Recycled at End-of-Life represents the outflow side of Net Circular Plastic.

⁶ Fulfilment of the commitments set out in this document is depicted through references to the Plastic Credit types ‘Waste Collection Credits’ (WCCs) and ‘Waste Collection Credits’ (WRCs), which are generated under the Plastic Waste Reduction Standard. However, any credible credit representing additional waste properly removed from the environment or recycled (respectively) could be used in place of WCCs or WRCs (respectively).

⁷ Note that the World Business Council for Sustainable Development’s Circular Transition Indicator methodology suggests that sustainably grown renewable materials can be included in a circular system as renewable inflows and biodegradable outflows. Inclusion of bio-based materials will be considered in a future version of these Guidelines.
How to make claims about these (and related) commitments

If commitments and claims about plastic stewardship are not explicit, clear and independently verifiable, they represent reputational risk to the company making the commitment. Transparency about at least the following elements is crucial to credibly demonstrating and communicating leadership:

- Accounting methods — explanation of the approaches used to calculate a company’s plastic footprint and the plastic credits it uses (if any)
- Scope of compensation — description of what the claim covers (e.g. mass or full environmental impact of plastic, plastic inputs and/or outputs)
- Double counting — any instances of plastic credits, EPR impacts, or other beyond value chain investments used, should be clearly (and solely) attributable to the company
- Plastic credits — explanation of the role of plastic credits in overall plastic stewardship strategy; assurance that plastic credits represent plastic that would not have been removed from the environment in a business-as-usual scenario

About these Guidelines

This document was developed by the following organizations:

3R Initiative, named for its objectives of reducing plastic waste, recovering plastic from the environment and increasing recycling rates, aims to: (1) catalyse responsible design, use and recovery of packaging materials; (2) support companies in reducing their plastic waste footprints and mitigating potential leakage into the environment; and, (3) stimulate the development of new plastic recovery and recycling projects around the world.

EA - Environmental Action is a mission driven research consultancy based in Switzerland and a member of the European Network of Ecodesign Centres (ENEC). EA is leading the development of plastic footprint methodologies and plastic waste management databases. More information can be found at www.e-a.earth.

South Pole is a leading advisor and provider of global climate services, with over 400 experts in 18 offices globally. South Pole helps private and public organisations and companies reduce their impact on the climate while mitigating risk and creating value. South Pole is a science-based company and its expertise covers project finance, data collection, and climate risk analysis, as well as the development of environmental commodities, such as measures for better plastic management, carbon neutral products and renewable energy credits.
South Pole has mobilised climate financing to over 700 projects that reduce greenhouse gas emissions in areas such as renewable energy, energy efficiency and sustainable land use.

Quantis guides top organizations to define, shape and implement intelligent environmental sustainability solutions. In a nutshell, our creative geeks take the latest science and make it actionable. We deliver resilient strategies, robust metrics, useful tools, and credible communications. With offices in the US, France, Switzerland, Germany, and Italy, and clients around the world, Quantis is a key partner in inspiring sustainable change on a global scale. (Re)discover Quantis at www.quantis-intl.com.

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