PRI Principles for Responsible Investment

UN environment programme finance initiative | United Nations Global Compact

An investor initiative in partnership with UNEP Finance Initiative and UN Global Compact

A GUIDE TO INVESTOR ENGAGEMENT ON PLASTIC PACKAGING:

WASTE MANAGEMENT

In collaboration with:

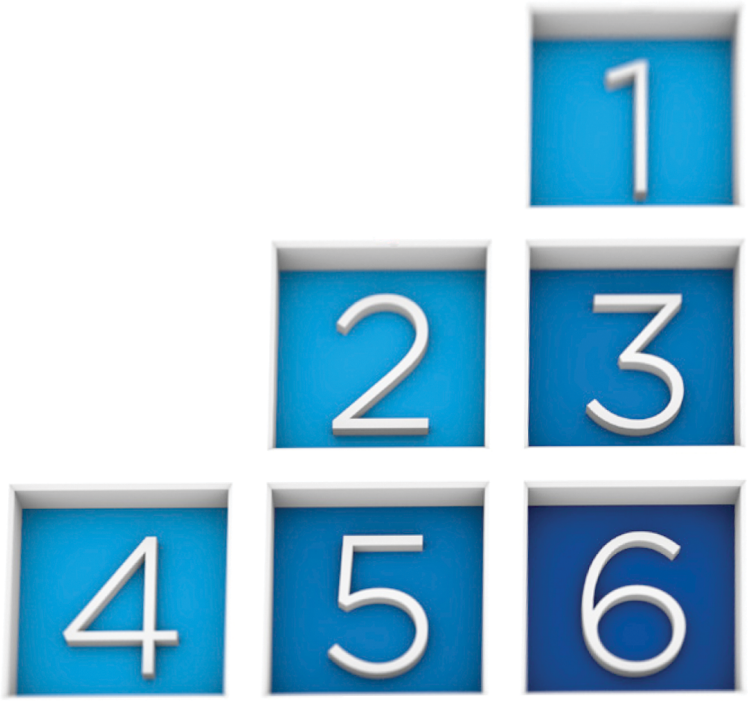
ELLEN MACARTHUR FOUNDATION

THE SIX PRINCIPLES

PREAMBLE TO THE PRINCIPLES

As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, we commit to the following:

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the Principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the Principles.
6. We will each report on our activities and progress towards implementing the Principles.



PRI's MISSION

We believe that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system will reward long-term, responsible investment and benefit the environment and society as a whole.

The PRI will work to achieve this sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulation.

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ACKNOWLEDGEMENTS

The PRI would like to thank the Plastics Investor Working Group and the Ellen MacArthur Foundation for their expertise and contributions to this guide.

The Ellen MacArthur Foundation, a UK-based charity, develops and promotes the idea of a circular economy in order to tackle some of the biggest challenges of our time, such as climate change, biodiversity loss, and pollution. We work with, and inspire, business, academia, policymakers, and institutions to mobilise systems solutions at scale, globally. In a circular economy, business models, products, and materials are designed to increase use and reuse, creating an economy in which nothing becomes waste and everything has value. Increasingly built on renewable materials, and underpinned by a shift to renewable energy, a circular economy is distributed, diverse, and inclusive.

For more information, visit: ellenmacarthurfoundation.org.

HOW TO USE THIS GUIDE

This guide aims to equip investors with the information they need to constructively engage with companies in the plastic packaging value chain on the issue of plastic waste and pollution, focusing on the waste management sector. It aims to support investors and other stakeholders to eliminate the production and use of all problematic or unnecessary plastics in packaging; innovate to ensure that all remaining plastics are reusable, recyclable or compostable; and circulate materials to keep plastics in the economy and out of the environment.[1]

It includes:

- an overview of the sector's characteristics related to the use of plastic packaging, waste and pollution, including the business and investment risks and opportunities, and the issues relevant to investors engaging with waste management companies;
- practical guidance for investor engagement – based on the common vision of a circular economy for plastics as part of the Ellen MacArthur Foundation's New Plastics Economy Global Commitment , including:
  - a set of questions focused on governance, risk management and reporting, performance and impact;
  - a table to help investors understand where a company falls on the spectrum of actions required to address plastic waste and pollution (beginner, intermediate or advanced), focused on the period between now and 2025;
- some best practice examples;
- a glossary of key terms.

ABOUT THIS PROJECT

In 2019, the PRI published the Plastics Landscape Series, consisting of three reports and an online interactive data tool. These mapped out the plastics value chain, identified the risks and opportunities the plastics industry poses for investors, and outlined relevant legislation and policy in different geographies.

In 2020, the Plastics Investor Working Group[3], with input from the Ellen MacArthur Foundation, initiated a follow-up project to develop guidance for investors engaging with companies in the plastics packaging value chain across four sectors: petrochemicals, manufacturing (of containers and packaging), fast-moving consumer goods and waste management.

While investors can also address plastic pollution using other stewardship strategies, such as shareholder resolutions, voting and policy engagement, these actions are beyond the scope of this project. The PRI may consider them in the future.

1 For definitions of these terms and others used in this guide, see Glossary.

2 See Appendix for further detail on the Global Commitment, including its expectations for the waste management sector.

3 The PRI's Plastics Investor Working Group consists of 29 global investors representing US$5.9 trillion in assets.

THE CASE FOR INVESTOR ENGAGEMENT

It is important for investors to address plastic waste and pollution and support the building of a circular economy through their stewardship activities. Failing to do so impacts the environmental systems and ecosystem services (i.e. public goods) that support economic performance, investor returns and beneficiary interests more broadly.

Packaging is one of the largest applications of plastic and drivers of plastic waste: it accounts for 45% of all plastic resin produced and for around 60% of post-consumer plastic waste in Europe alone.

The transition to a circular economy for plastics – where plastic production is decoupled from fossil fuel use and all plastic packaging is reused, recycled or composted – will require significant changes across a range of industries, including the entire plastic packaging value chain. Some of these changes are already happening – driven by increased societal awareness of the environmental and social impacts of plastic pollution, regulation, voluntary action by companies and consumer demand.

When analysing the plastics value chain, investors need to understand that they and the companies in which they invest are exposed to a range of risks[6], including:

Climate-related risks

Projections suggest that emissions from plastic could account for 10% – 13% of the Earth's remaining carbon budget by 2050 if plastic production and use grow as currently planned.[7]

Wider environmental risks

Mismanaged plastic waste contributes to waterway and ocean pollution, which clogs urban infrastructure and degrades natural systems, such as the ocean. The cost of such externalities to society, when considered alongside the greenhouse gas emissions of plastic packaging production, are conservatively estimated to amount to US$40 billion annually.[8]

Policy and regulatory risks

Many developed and developing countries are regulating – or in some cases banning – certain plastics. Companies that rely on plastics could also face higher taxation, extended producer responsibility fees and increased raw material costs.

Reputational risks

Companies that are heavily reliant on plastics face growing scrutiny and potentially significant reputational damage, as consumers become increasingly aware of the impacts of plastic pollution. Packaging has been the target of several campaigns against plastic.[9]

Human health risks

Microplastics, which have been detected in bottled water and the tissue of fish and other marine life[10], may have negative health impacts when ingested by humans. These are not yet fully understood but if they are determined in the future, may lead to heightened societal concern and health-related restrictions on plastic use.

4 Geyer, R, Jambeck, JR & Law, KL, Science Advances 3(7) e1700782 (2017) Production, use, and fate of all plastics ever made

5 European Commission (2018) Communication from The Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A European Strategy for Plastics in a Circular Economy

6 A range of research exists regarding the risks of plastics including: Federated Hermes (2020) Investor Expectations for Global Plastics Challenges; Ellen MacArthur Foundation (2016) The New Plastics Economy Rethinking the Future of Plastics; Ellen MacArthur Foundation (2017) The New Plastics Economy: Catalysing Action; Ellen MacArthur Foundation (2020) Financing the Circular Economy: Capturing the Opportunity; Pew Charitable Trusts and SystemIQ (2020), Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution.

7 The carbon budget refers to the total amount of carbon emissions that can be emitted for temperatures to remain at or below a specified limit i.e. the 1.5-degree limit outlined in the Paris Agreement. See CIEL (2019) Plastic & Climate: The Hidden Costs of a Plastic Planet for more detail.

8 Ellen MacArthur Foundation (2016) The New Plastics Economy Rethinking the Future of Plastics

9 PRI (2019) The plastics landscape: Risks and opportunities along the value chain

10 Pew Charitable Trusts and SystemIQ (2020), Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution.

The Ellen MacArthur Foundation estimates that with most plastic packaging used only once, 95% of its value (worth US$80 billion – US$120 billion annually) is lost to the economy.

Addressing these issues and transitioning to a circular economy for plastics creates opportunities along the value chain to reduce the impact of plastic packaging and meet consumer needs through innovation. For example, developing new:

- materials and packaging designs (e.g. edible coating replacing packaging or eliminating tear-offs);
- business models (e.g. re-use through at-home refills); and
- recycling technologies to improve collection, sorting and recycling infrastructure systems (e.g. advanced mechanical recycling facilities).

Addressing plastic pollution can also contribute to meeting the Sustainable Development Goals.

PLASTIC AND THE SUSTAINABLE DEVELOPMENT GOALS

Taking action to address plastic pollution and support the building of a circular economy will make a major contribution to achieving the Sustainable Development Goals. For example, such actions could support:

SDG 12.5

Substantially reducing waste generation through prevention, reduction, recycling and reuse by 2030.

SDG 14.1

Preventing and significantly reducing marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution, by 2025.

WHAT SHOULD INVESTORS KNOW BEFORE ENGAGING?

For the purposes of this guide, the waste management sector encompasses waste collection, sorting, recycling, incineration, treatment and disposal. Companies can be involved in one or more of these activities, some of which – such as incineration and landfill – will need to be reduced, while others – collection, sorting and recycling – will need to be strengthened to achieve a circular economy.

Some of the largest waste management companies include Veolia Environnement, SUEZ Environnement Company, Waste Management, Republic Services and Stericycle.

Others include ADS Waste Holdings, Remondis, Clean Harbors, Hawkvale, Hahn Plastics, Covanta Holding Corporation, Progressive Waste Solutions, Luxus, PLASgran, and United Plastic Recycling.

The waste management sector also includes many smaller and state-owned companies. Indeed, national, regional and local governments are important actors for the sector, as they set the rules and frameworks by which it can operate. The effectiveness of investor engagement in each market or region will depend on how the waste management industry is structured and the government policies in place.

Further information regarding the risks faced by the waste management sector are highlighted in the PRI report, The Plastics Landscape: Risks and Opportunities Along the Value Chain (*see pages 16-22*).

PRACTICAL CONSIDERATIONS

When engaging with waste management companies, there are several practical considerations that investors need to keep in mind. These are not necessarily limiting factors but can present challenges for the sector – for action on plastics to be effective, it needs to be taken across a range of areas; namely across an organisation's own products, in the value chain and with wider stakeholders[11]:

- **The waste management infrastructure:** Corporate actions to improve recyclability and/or compostability may not directly result in high recycling rates in countries where the waste management infrastructure is lacking or ineffective. Even in developed countries, the proportion of recycled, reused or composted plastics can be low.[12] While most plastics can be recycled, it is not always economical to do so, due to the high financial costs of developing new recycling infrastructure or improving the scale and technical capability of existing systems; and the relatively low value of recycled plastic materials. Waste management processes and infrastructure often rely on policy measures, such as extended producer responsibility (EPR) schemes[13], for stable, fair and sustainable funding, while in low- and middle-income countries they may rely on other partnerships and investment.
- **Mechanical and chemical recycling:** Plastic waste can be recycled through mechanical[14] and chemical[15] methods. Mechanical recycling is commercially viable and benefits circularity, as it keeps plastic and its embedded energy relatively intact. Chemical recycling is complementary, converting plastics that are uneconomical or unsuitable for mechanical recycling into useful feedstocks, while creating virgin-like quality plastics. However, chemical recycling technologies are not yet widely commercialised and certain processes are energy intensive[16], raising concerns about the carbon footprint of materials recycled this way. To be effective and contribute to a circular economy for plastics, these methods need to be scaled up – this may be more successful if the industries involved (petrochemical and waste management) collaborate.
- **Alternative waste management methods:** Biodegradable and compostable[17] plastics are important solutions for building a circular economy. However, work is needed to develop and scale appropriate composting facilities to effectively treat these types of plastics before they can be used more widely.
- **Plastic conversion to fuel:** the conversion of plastics to fuel is not part of a circular economy.[18] This practice results in materials being burned, rather than being kept in the economy. As such, it perpetuates a linear model, rather than creating a circular one. Conversely, chemical and mechanical recycling – if set up well – can close material loops and be considered part of a circular economy.

11 Global dependency on plastics is so pervasive that bold, large-scale actions on upstream and downstream solutions are needed – see Pew Charitable Trusts and SystemIQ (2020), Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution.

12 For example, in the United States, the US Environment Protection Agency estimates that the overall plastics recycling rate was approximately 8.5% in 2018 – see https://www.epa.gov/sites/production/files/2020-11/documents/2018_ff_fact_sheet.pdf.

13 EPR legislation generally holds producers responsible for any negative environmental externalities and associated costs caused by their products. It usually incentivises manufacturers to design resource-efficient and low-impact products, and to facilitate their effective end-of-life collection and treatment for reuse and recycling.

14 Mechanical recycling turns plastics into new (secondary) raw materials without significantly changing their basic chemical structure.

15 Chemical recycling processes, such as pyrolysis and gasification, break plastics down into simpler hydrocarbons that can act as feedstocks to the petrochemical sector.

16 CE100 Whitepaper (2019) Enabling a circular economy through a mass balance approach

17 See Glossary for definitions of these terms.

18 The Technical Expert Group on Sustainable Finance has not included waste-to-energy as an economic activity that can substantially contribute to climate change mitigation or adaptation in the EU Taxonomy. See pg. 209 of TEG (2020) Taxonomy Report: Technical Annex for more detail.

- **Packaging types and designs:** Rigid and flexible packaging are commonly distinguished due to their impact on recyclability. Rigids, especially bottles, are mostly recycled in practice, driven by economic considerations. Packaging design– its complexity, materials, colouring and components – has a huge influence on how easily the waste management sector can sort and separate different types. As a rule, the purer the waste stream, the higher the quality of the recycled produce.
- **Data gaps:** Getting access to high-quality, reliable data on plastics use is complex and demanding – jurisdictions define terms such as recyclable and compostable in different ways, making it difficult to compare statistics (e.g. on recycling rates).
- **Vertical integration and collaboration:** The above considerations point to the interdependencies and potential for partnerships between the waste management and petrochemicals sectors to create a circular value chain for plastics. They also point to the central role that fast-moving consumer goods and container and packaging companies might play through, for example, creating demand for recycled products or providing incentives needed to build waste management collection, sorting and recycling infrastructure.[19]

A CIRCULAR ECONOMY FOR PLASTICS

A circular economy[20] – by design – eliminates waste and pollution, keeps products and materials in use, and regenerates natural systems, providing a solution to plastic pollution. The Ellen MacArthur Foundation's New Plastics Economy offers an example of a circular economy for plastics that investors can support through their engagement activities (see Box 1).

BOX 1

VISION OF A CIRCULAR ECONOMY FOR PLASTICS

In the Ellen MacArthur Foundation's New Plastics Economy plastic never becomes waste, presenting a solution to plastic pollution which could have profound economic, environmental, and societal benefits.
Six characteristics define a circular economy for plastic packaging:

1. Elimination of problematic or unnecessary plastic packaging through redesign, innovation, and new delivery models is a priority
2. Reuse models are applied where relevant, reducing the need for single-use packaging
3. All plastic packaging is 100% reusable, recyclable, or compostable
4. All plastic packaging is reused, recycled, or composted in practice
5. The use of plastic is fully decoupled from the consumption of finite resources
6. All plastic packaging is free of hazardous chemicals, and the health, safety, and rights of all people involved are respected (in all parts of the plastics system)

More than 1000 organisations are united behind this vision through the New Plastics Economy Global Commitment and the network of Plastics Pacts (see Appendix for more detail). Global Commitment signatories include companies, such as major brands and retailers, that represent more than 20% of global plastic packaging volumes; 20 governments; 27 financial institutions with a combined US$4 trillion in assets under management; as well as several international organisations such as the World Economic Forum (WEF), WWF (formerly World Wildlife Fund), United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN).

19 For further details refer to the investor engagement guidance on the petrochemicals, containers and packaging and FMCG sectors included in this series.

20 Ellen MacArthur Foundation (2021), What is a Circular Economy?

WHAT SHOULD INVESTORS DO?

The following tables are designed to help investors constructively engage with waste management companies in the plastic packaging value chain on the issue of plastic packaging waste and pollution, including the questions they can ask; the actions they can encourage companies to undertake;[21] and the outcomes they should expect.

These are based on extensive research, input from the Plastics Investor Working Group and the Ellen MacArthur Foundation, as well as the New Plastics Economy Global Commitment (see Appendix). They are designed **to target the actions that companies should take between now and 2025** to effectively address the issue of plastic waste and pollution and support the building of a circular economy.

WHAT QUESTIONS TO ASK

The following initial and follow-on questions are designed to help investors have an impactful dialogue with waste management companies.

Table 1: Investor questions[22]

	EXPECTATION	INITIAL QUESTIONS	FOLLOW-ON QUESTIONS (IF NEEDED)
GOVERNANCE	**Commitment**	Have you made a formal commitment to grow the quantity (weight) and quality of plastics that your business recycles or composts?	If not, do you intend to?
	Risk assessment and management	How much plastic (in metric tonnes) do you collect and sort, and what proportion of this is recycled/ composted? Have you assessed the risks presented by plastics to your business, including: ■ existing and future regulation[23] ■ reputational issues ■ climate change ■ wider environmental pollution (ocean and waterway) Have you assessed the opportunities associated with product and business model innovation for your business?	What risks and opportunities have you identified and how significant are these for your business? How are you actively monitoring the development of policy and regulation, and its associated risks and opportunities for your business? Which plastic product groups have the greatest potential for increased collection and recycling? What actions will you take as a result of this assessment?
	Objectives, targets and action plans	Have you set targets to increase the quantity (in metric tonnes) and proportion of plastics you recycle/compost, and reduce the amount that are landfilled or incinerated? Have you set targets to improve the quality of the product that you recycle – e.g. by improving sorting, and recycling processes?	What are you doing to deliver these? How are you performing against them? What challenges have you encountered in meeting them? What resources (financial or otherwise) have you allocated to implement these actions and deliver these targets – e.g. proportion of R&D and capex? Who oversees your plastic-related commitments, objectives and targets strategically? Who oversees their day-to-day delivery? Have you developed strategies to increase the quantity of recycled or composted plastic? If you have not set targets yet, do you intend to?
	Reporting	Do you report on your plastics collection, sorting and/or recycling/composting?	What metrics do you use to track and assess your performance? How will your reporting evolve in the future?

21 Collaboration with other stakeholders in the value chain, including at regional and national levels, is also important as it can better enable companies to deliver their commitments. While the investor questions and table on assessing company performance do not focus on collaboration in detail, one example of an initiative encouraging collaboration can be found in Appendix.

22 Definitions are provided in the Glossary.

23 For further information see PRI (2019) The Plastics Landscape: regulations, policies and influencers.

	EXPECTATION	INITIAL QUESTIONS	FOLLOW-ON QUESTIONS (IF NEEDED)
OUTCOMES	**Grow the volume* and quality of recycled/ composted plastics, and accordingly increase the ratio of these over landfilled and incinerated plastic volumes** ***in metric tonnes and proportion**	How much* collected plastic is recycled or composted, rather than sent to landfill or incinerated? How are you increasing the quality of your recycled output? How are you increasing the amount* of plastics that are reused, recycled, or composted?	How are you reducing the amount* of plastic waste sent to landfill or incinerated? How are you supporting efforts to provide the infrastructure and incentives to collect, sort and recycle plastics (e.g. through collaboration, providing financial support, engaging with policy makers[24])?

24 See, for example, the Plastic Waste Coalition of Action from The Consumer Goods Forum (CGF), which has committed to developing Extended Producer Responsibility (EPR) frameworks to support the improvement and development of waste management systems, to supporting waste management schemes around the world and to piloting new programmes to increase recycling rates.

HOW TO ASSESS PERFORMANCE

The table below is designed to help investors understand where a company falls on the spectrum of actions required to address plastic waste and pollution and support the building of a circular economy by 2025, based on the following categories:

- **Beginner:** These companies acknowledge plastics as an important issue and have started to take some initial actions to understand the relevance of plastics to their business and build their organisational capacity to address plastic pollution.
- **Intermediate:** These companies, in addition to undertaking the actions outlined in the beginner category, have started to systematise their approach to plastics by setting ambitious objectives and targets; delivering against those targets and providing comprehensive, credible reporting on their ambitions and performance; and have signed up to the New Plastics Economy Global Commitment (see Appendix for more detail) – or made similar commitments.
- **Advanced:** These companies, in addition to undertaking the actions outlined in the previous categories, have made significant progress against their commitments and can provide clear evidence of taking innovative action or contributing to wider systemic change.

Table 2: Assessing company performance

	EXPECTATION	BEGINNER	INTERMEDIATE	ADVANCED
GOVERNANCE	**Commitment**	The company acknowledges plastic pollution as an important business and stakeholder issue.	The company has made the following commitments (as part of its business strategy or as a signatory to the Global Commitment or other initiatives) to be achieved by 2025: ■ grow the quantity (weight) and quality of recycled/composted plastics; and ■ increase the ratio of recycled and composted plastics over those sent to landfill or incinerated.	The company has an action plan that explains how it will achieve its commitments through internal actions and through collaboration within the value chain and society (e.g. informing/supporting relevant regulation, collaborating with suppliers, engaging customers).
	Risk assessment and management	The company has assessed the risks presented by plastics to its business, including those related to: ■ existing and future regulation ■ reputational issues ■ climate change ■ wider environmental pollution (ocean and waterway) The company has assessed the opportunities associated with product and business model innovation.	The company has a clear understanding of the plastics (by type and weight) that it handles and the quantities of each that are recycled/composted, incinerated and otherwise disposed of. The company has an action plan to mitigate the identified risks. The company has a process to actively monitor emerging policy and regulation in relation to plastics and update its risk assessments accordingly. The company's action plan includes product and business model innovation in waste management, e.g. scaling new recycling facilities and collection systems, piloting new technology to increase sorting and recycling capabilities, collaborating with suppliers to achieve higher recycling rates.	The company's action plan to mitigate identified risks also addresses wider value chain issues beyond the its own operation e.g. programmes of work with regulators to develop incentives for waste reduction, reuse, recycling and composting; with local authorities to develop waste collection and recycling infrastructure; or with companies to eliminate unnecessary or problematic plastics. The company can provide clear evidence of effective risk management and that it is seizing opportunities to increase recycling rates and the ratio of recycled versus landfilled and incinerated plastics.

GOVERNANCE CONTINUED

EXPECTATION	BEGINNER	INTERMEDIATE	ADVANCED
Objectives, targets and action plans	The company has set qualitative targets (e.g. to take specific actions).	Explicit board-level or senior management responsibility has been assigned to oversee the company's plastics-related objectives and targets and their delivery. The company has set time-bound targets that are aligned with the Global Commitment.	The company has made significant progress towards achieving its existing targets and has set more ambitious ones e.g. increasing its revenue share from plastics recycling.
Reporting	The company provides some information on how it is increasing the quantity (weight) and quality of recycled/composted plastics. The company provides some data on the amount of plastic it handles and how much is recycled/ composted, incinerated and otherwise disposed of.	The company reports annually on: ■ total weight (metric tonnes) of plastics handled and recycled/ composted as opposed to incinerated or sent to landfill; ■ its progress against its commitments, objectives and targets; ■ its plastics-related risks and opportunities and how it manages these The company provides analysis of the actions taken, the outcomes achieved (e.g. impact on plastic packaging quantities disposed of), and any barriers/ challenges encountered in meeting its targets.	The company measures the plastics that it collects, sorts, recycles/ composts, incinerates, and/or otherwise disposes of, including: ■ total weight (metric tonnes) of plastics handled and recycled annually by plastic packaging type; ■ proportion of plastics handled that are recycled and composted (% by weight and plastic packaging type) as opposed to incinerated or sent to landfill; ■ proportion of capex and R&D budgets allocated to deliver its plastics-related targets. The company can estimate the quality of recycling and recycling rates for plastic packaging types by country. For each country it operates in, the company can describe the state of the plastics collection, sorting, recycling and reprocessing industry; estimate the proportion of plastics that are collected, sorted and recycled; and identify how to support this wider industry. The company reports on how its efforts on plastics relate to other issues such as climate change, water, and the SDGs. It can explain how potential tensions between these have been assessed and resolved, and how potential opportunities have been identified and seized. The company has identified the stakeholders it needs to work with to deliver its commitments, objectives and targets, and describes how it engages with each of these.

	EXPECTATION	BEGINNER	INTERMEDIATE	ADVANCED
OUTCOMES	**Grow the volume* and quality of recycled/ composted plastics, and accordingly increase the ratio of these over landfilled and incinerated plastic volumes** ***in metric tonnes and proportion**	The company acknowledges the importance of ensuring that plastic packaging is reused, recycled or composted in practice. The company has explicitly committed to work with governments and other actors to grow the weight and quality of recycled/composted plastics.	The company can demonstrate how it has significantly improved the annual amount and quality of the plastic it collects, sorts, recycles and composts. The company can demonstrate how it has increased its annual ratio of recycled and composted plastic over that sent to landfill and incinerated.	The company has comprehensive programmes to build the plastics recycling infrastructure in its countries of operation. The company can provide concrete examples of working with governments and other actors across the value chain to ensure that plastics are reused, recycled or composted in practice, such as: ■ supporting measures (e.g. EPR schemes) that facilitate or provide financial support to collection and sorting schemes; ■ supporting the development and implementation of public policy measures to ensure that plastic is reused, recycled or composted; ■ participating in industry initiatives and partnerships focused on driving systemic change through collaboration; ■ developing better, more consistent data on plastics recycling, composting, incineration and disposal. The company is building partnerships with companies to eliminate problematic or unnecessary plastic, facilitate reuse models (e.g. through supporting reverse logistics), or ensure that plastics are recycled or composted in practice.

EXAMPLES OF BEST PRACTICE

The following examples[25] demonstrate how companies in the waste management sector have supported efforts to grow the weight and quality of recycled/composted plastics.

PARTNERSHIPS AND STRATEGIC RELATIONSHIPS

Veolia is partnering with Nestle to collect, sort and recycle plastic material in 11 priority countries in Asia, Africa, Latin America and Europe. Veolia has commented that the recycled content commitments by brands and retailers and the resulting off-take agreements that it has set up with these have been very helpful to support its commitment to multiply its plastic processing activity five-fold by 2025.

Several companies across the plastics value chain have invested in recycling companies to build their internal waste management capacity:

- Retailer **Schwarz Group** has acquired Sky Plastic Group AG to add plastics recycling expertise to its portfolio.
- Packaging group **ALPLA's** partnership activities include:
  - invested in Paboco to explore new packaging materials and to scale up from pilot to production;
  - a joint venture with Fromm (Switzerland) which will aim to recycle PET derived from Germany's non-deposit-based recyclables collection system;
  - a partnership with Bangkok-based PTT Global Chemical to establish a recycling plant in Thailand;
  - joining a new consortium focused on chemical recycling for opaque and difficult-to-recycle plastics alongside BP Infina. It aims to eliminate downcycling and subsequent incineration.

SETTING AND ACHIEVING RECYCLING TARGETS

- In 2020, **Encorp Pacific (Canada)** increased its 2025 target from 75% to 80% for recycling empty plastic beverage containers sold into the Province of British Columbia. In 2020, it announced several investments and initiatives to modernise the province's beverage container collection systems, including expanding the number of Return-It Express Plus and solar panelled Express & GO contactless return stations.
- **Veolia** has committed to a five-fold increase in its revenue from plastic processing – not including collection and sorting – from €200 million in 2016 to €1 billion in 2025. It will achieve this through mergers and acquisitions, developing new greenfield sites and new recycling technologies to increase recycling yield and the grade/quality of the recycled materials.

HARNESSING TECHNOLOGY TO IMPROVE COLLECTION AND SORTING PROCESSES

- To increase the quality of collected waste in Ferrara (Italy), **Hera Group** created a dashboard that collects information regarding garbage truck journeys, waste type and quality, and collection anomalies. Hera Group analyses this data to implement targeted communication programmes to improve waste separation in the districts where the quality is lower, and to optimise its plant operations based on waste quality. Hera is planning to extend this technology to garbage bins, providing it with more granular, location-specific information.
- In cooperation with the HolyGrail project, **Digimarc Corporation** has continued work on its digital watermarking solution for sorting plastics in mixed waste streams. The company reported that it is now working with two sorting equipment manufacturers and several Fortune 500 brands to implement its barcode solution for recycling and reuse applications

25 These examples are taken from The Global Commitment 2020 Progress report and the associated organisational reports unless referenced otherwise.

APPENDIX

THE NEW PLASTICS ECONOMY GLOBAL COMMITMENT

The New Plastics Economy Global Commitment, established by the Ellen MacArthur Foundation in collaboration with the United Nations Environmental Programme (UNEP), unites businesses, governments, and other organisations behind a common vision and set of targets, to address plastic waste and pollution at its source.

WHAT IS EXPECTED OF THE WASTE MANAGEMENT SECTOR?

Waste management signatories of the Global Commitment are expected to:

- endorse its Common Vision;
- make the following individual commitments:
  - set an ambitious 2025 target to grow the volume and quality of recycled/ composted plastics, and accordingly increase the ratio of recycled and composted over landfilled and incinerated plastic waste volumes;
  - report annually and publicly on progress made towards meeting these commitments.
- commit to collaborate towards increasing reuse/ recycling/composting rates for plastic.

The progress of waste management signatories against their targets is tracked annually by the Ellen MacArthur Foundation and published on its Global Commitment Progress Report website. These progress reports aim to drive transparency and consistency in data sharing on plastics across a range of businesses and governments. Individual organisation reports are also available.

THE PLASTICS PACT

Delivering on a circular economy for plastics will require unprecedented levels of collaboration – at global, national and regional levels – to ensure solutions are tailored to local contexts.

The Plastics Pact – a network of initiatives that bring together national and regional stakeholders – is an example of such collaboration. Each Plastics Pact is led by a local organisation and unites governments, businesses and citizens behind the New Plastics Economy, with a concrete set of ambitious local targets.

Plastics Pacts have been established in Africa, Europe, North & South America and Oceania, in countries including Australia, Chile, France, the Netherlands, South Africa, the UK, and the United States.

GLOSSARY

The following definitions are derived from the Ellen MacArthur Foundation's 2020 New Plastics Economy Global Commitment: Commitments, Vision and Definitions.

Biodegradability
A property that is needed – among others – to make packaging compostable. The term does not indicate whether a plastic package can in practice be collected and composted following a managed process (e.g. how quickly and under what conditions it can biodegrade).

Compostable packaging
Packaging/packaging components that comply with relevant international compostability standards and whose post-consumer collection, sorting, and composting are proven to work in practice and at scale, defined as a 30% composting rate achieved across multiple regions, collectively representing at least 400 million inhabitants.

Hazardous chemicals
Chemicals that show intrinsically hazardous properties: persistent, bio-accumulative and toxic; very persistent and very bio-accumulative; carcinogenic, mutagenic, and toxic for reproduction; endocrine disruptors; or equivalent concern.

Post-consumer recycled content
The proportion, by mass, of post-consumer recycled material in a product or packaging. Post-consumer material is generated by households or commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain, but excludes pre-consumer material (e.g. production scrap, post-industrial material).

Problematic and unnecessary plastic packaging
Problematic or unnecessary plastic packaging or its components:

- is not reusable, recyclable or compostable;
- contains, or its manufacturing requires, hazardous chemicals that pose a significant risk to human health or the environment (applying the precautionary principle);
- can be avoided (or replaced by a reuse model) while maintaining utility;
- hinders or disrupts the recyclability or compostability of other items;
- has a high likelihood of being littered or ending up in the natural environment.

For example, the UK Plastics Pact has identified eight problematic plastic products to be eliminated: disposable cutlery; polystyrene packaging; cotton buds with plastic stems; stirrers; straws; oxo-degradables that break down to create microplastics; PVC packaging, disposable plates and bowls.[26]

Recyclable packaging
Packaging or its components are recyclable if their successful post-consumer collection, sorting, and recycling is proven to work in practice (rather than technically) and at scale, defined as a 30% post-consumer recycling rate achieved across multiple regions, collectively representing at least 400 million inhabitants.

Renewable material
Material composed of biomass from a living source that can be continually replenished. When claims of renewability are made for virgin materials, those materials shall come from sources that are replenished at a rate equal to or greater than the rate of depletion.

Reusable packaging
Packaging that can be refilled or used for the same purpose for which it was conceived, for a minimum number of times, in a reuse system. Such a system should be able to prove a significant actual reuse rate, or average number of use-cycles of a package, in normal conditions.

Reuse system
Established arrangements (organisational, technical or financial) that ensure the possibility of reuse, in a closed-loop, open-loop or hybrid system.

Single-use packaging
Packaging that is designed to be used once before disposal.

Virgin plastic
Plastics that have not been previously used or subjected to processing other than for their original production, i.e. not produced from post- or pre-consumer recycled material.

26 https://www.wrap.org.uk/content/eliminating-problem-plastics

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The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org

PRI Principles for Responsible Investment

The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact.

United Nations Environment Programme Finance Initiative (UNEP FI)

UNEP FI is a unique partnership between the United Nations Environment Programme (UNEP) and the global financial sector. UNEP FI works closely with over 200 financial institutions that are signatories to the UNEP FI Statement on Sustainable Development, and a range of partner organisations, to develop and promote linkages between sustainability and financial performance. Through peer-to-peer networks, research and training, UNEP FI carries out its mission to identify, promote, and realise the adoption of best environmental and sustainability practice at all levels of financial institution operations.

More information: www.unepfi.org

UN environment programme | finance initiative

United Nations Global Compact

The United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals and issues embodied in the Sustainable Development Goals. The UN Global Compact is a leadership platform for the development, implementation and disclosure of responsible corporate practices. Launched in 2000, it is the largest corporate sustainability initiative in the world, with more than 8,800 companies and 4,000 non-business signatories based in over 160 countries, and more than 80 Local Networks.

More information: www.unglobalcompact.org

United Nations Global Compact