

A new UN treaty to address plastic pollution

Supporting the transition to a
circular economy for plastics



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Key messages for policymakers

Plastic pollution is rapidly outpacing current efforts to stop it. Without additional measures, the volume of plastic on the market will double, the annual volume of plastic entering the ocean will triple, and ocean plastic stocks will quadruple within the next 20 years. The costs of inaction increase year-by-year, if we fail to work towards a global solution.¹

Addressing the plastic pollution crisis requires a concerted approach to create a circular economy for plastic, based on three main principles:



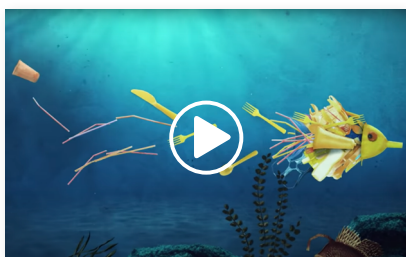
Eliminate all problematic and unnecessary plastic items we do not need



Innovate to ensure that the plastics we do need are reusable, recyclable, or compostable



Circulate all plastics items we use to keep them in the economy and out of the environment



Solving Plastic Pollution | Narrated by Sir David Attenborough & Dame Ellen MacArthur

By 2050 there could be more plastic than fish in the ocean. Sir David Attenborough explains why we must eliminate, innovate and circulate for a circular economy for plastic.

1 min 11 sec [Click here to watch](#)



“We need a circular economy for plastic” Ellen MacArthur Foundation on Breaking the Plastic Wave

This video is a call to action from Dame Ellen MacArthur to raise our level of ambition and tackle the flood of plastic waste at source.

2 min 8 sec [Click here to watch](#)

¹ Pew Charitable Trusts and SYSTEMIQ (2020): [Breaking the Plastic Wave](#). A comprehensive assessment of pathways towards stopping ocean plastic pollution.

Key messages for policymakers

Realising a circular economy for plastics (and beyond) is also crucial to address climate change and biodiversity loss. In view of the key international meetings on climate and biodiversity policy this year,² it is the right time to acknowledge the important contribution of a global transition towards a circular economy, for plastics and beyond, to achieve the goals and commitments under the Paris Agreement and Convention on Biological Diversity.

2021 is the year to build further consensus on the global policy responses needed that would complement and enhance existing voluntary action by governments, industry, and civil society. A new UN treaty to address plastic pollution would provide the framework for building the relevant capabilities and institutional mechanisms for increased international coordination and cooperation to solve this crisis.

Important work has already been carried out under the 2018 Canadian G7 presidency on the Ocean Plastics Charter,³ as well as under the 2019 Japanese G20 presidency on the Osaka Blue Ocean Vision and the G20 Implementation Framework for Actions on Marine Plastic Litter.⁴ In 2021 the G20 agreed to engage fully in upcoming UN discussions on how to take further decisive steps, including the possibility of a new global agreement or instrument to address marine plastic litter.⁵ Such a global policy framework could include binding targets and setting out the scope for sectoral, regional and national action plans as well as support for implementation. Relevant initiatives should be brought together to ensure that progress and impact monitoring will be based on consistent definitions and measurement towards a global goal, such as preventing all plastic leakage into the environment by a certain target date.

A comprehensive policy framework⁶ supporting the global transition to a circular economy would:

- Enable circular design solutions for plastics in the relevant sectors, including agriculture and fishery, medical, hygiene and cosmetic products, textiles and wearing apparel, construction materials, transportation, food and beverage packaging
- Promote better resource management capabilities to eliminate waste and pollution, keeping plastics in use for longer and re-circulating them after their useful life
- Review the setup of financial incentives and regulations to shape the right economic conditions for a circular economy, including for reuse models and recycled plastics
- Facilitate investments to scale relevant innovations, infrastructures and skills in countries and industries most in need of international support
- Foster public-private collaboration across value chains and governance structures

A growing number of leading businesses from the corporate and the financial sectors, are calling on national governments to commit to the development of a new UN treaty addressing plastic pollution and enabling circular economy solutions to scale globally.⁷ In this regard, governments, industry, and civil society stakeholders should work together towards creating a common understanding and direction of travel on the main building blocks for a new UN treaty on plastic pollution. This would also speed up formal negotiations, once the decision on a mandate under the United Nations Environmental Assembly (UNEA) will have been adopted.

2 UN Climate Change Conference (COP26) and Convention on Biological Diversity (COP15)

3 [Ocean Plastics Charter](#)

4 [G20 Osaka Leaders' Declaration](#) (paragraph 39), [G20 Implementation Framework for Actions on Marine Plastic Litter, Towards Osaka Blue Ocean Vision](#)

5 [G20 Environment Ministers communiqué](#) July 2021

6 Ellen MacArthur Foundation (2021): [Universal circular economy policy goals: enabling the transition to scale](#).

7 Ellen MacArthur Foundation, Boston Consulting Group and WWF (2020): [The business call for a UN treaty on plastic pollution](#)

A global circular economy approach is needed for plastics

The problem of plastic pollution starts long before plastic reaches our oceans and so the solutions should not be framed as combating marine plastic litter only. Until now, many efforts to tackle plastic pollution have focused narrowly on improving waste management or clean-ups. Others have focused on banning single-use plastic bags and reducing the use of most-littered items. None of these measures will work in isolation, as the climate, biodiversity, and (plastic) pollution crises are increasingly interlinked.

The impacts of plastics on climate change have been widely underestimated or even overlooked compared to other sectors so far. Their production is an energy intensive process and, with over 90% of plastics made out of fossil fuels, the embedded carbon in plastic items is a significant amount, which can be released when burnt at the end of the product's life.⁸ Under a business-as-usual scenario, the sector's fossil fuel consumption will only increase: by 2040, plastics could account for 19% of the total emissions budget allowable if we are to remain below a 1.5°C increase in global warming.⁹

To halt and reverse biodiversity loss, transformative change will be needed that also fundamentally rethinks the heart of our production and consumption systems in such a way that biodiversity can be rebuilt and safeguarded. Progressing towards a circular economy is an essential step, since resource extraction and processing have been found to cause 90% of land-use related biodiversity loss and water stress.¹⁰ In addition to the impacts related to the production of plastics, their leakage into the environment during or post use contaminates soils, wildlife, freshwater and oceans. If no action is taken with regards to the latter, there could be more plastic than fish in the ocean by 2050.¹¹

In July 2020, The Pew Charitable Trusts and SYSTEMIQ released *Breaking the Plastic Wave: A Comprehensive Assessment of Pathways Towards Stopping Ocean Plastic Pollution* - one of the most analytically robust studies ever produced on ocean plastics. Thought partners were the University of Oxford, University of Leeds, Common Seas, and the Ellen MacArthur Foundation. The key findings from this report show that a comprehensive circular economy approach is needed, rethinking what is put on the market, whilst also rapidly increasing our ability to keep it in the economy after it has been used.¹²

The circular economy considers every stage of a product's life cycle - before and after it reaches the customer. This approach is not only vital to stop plastic pollution, but as the study shows, it offers the strongest economic, social, and climate benefits. In contrast, business-as-usual is driven by four main cumulative trends: population growth, rising per capita plastic use, shifts to low-value and hard-to-recycle materials, and disproportionate growth in markets with low plastic collection rates.¹³

In this context, an opportunity beckons for the plastics value chain to deliver better system-wide economic and environmental outcomes: First, in a circular economy we must eliminate the plastics that we do not need. Secondly, we must circulate the plastics that we do need. Deploying all known solutions at maximum speed and scale would still result in more than 150 million tonnes of plastic waste being incinerated, landfilled, or mismanaged every year by 2040. So we must also innovate at unprecedented speed and scale towards new business models, product designs, materials, technologies, and collection systems. For example, converting 20% of global plastic packaging into reuse models offers a USD 10 billion business opportunity.¹⁴

8 Material Economics (2018): [The Circular Economy: a Powerful Force for Climate Mitigation](#)

9 The Pew Charitable Trusts and SYSTEMIQ (2020): [Breaking the Plastic Wave](#). A comprehensive assessment of pathways towards stopping ocean plastic pollution.

10 Global Resources Outlook (2019): [Natural resources for the future we want](#)

11 Ellen MacArthur Foundation (2016): [The new plastics economy: rethinking the future of plastics](#)

12 Ellen MacArthur Foundation (2020) [The circular economy solution to plastic pollution](#)

13 The Pew Charitable Trusts and SYSTEMIQ (2020): [Breaking the Plastic Wave](#). A comprehensive assessment of pathways towards stopping ocean plastic pollution.

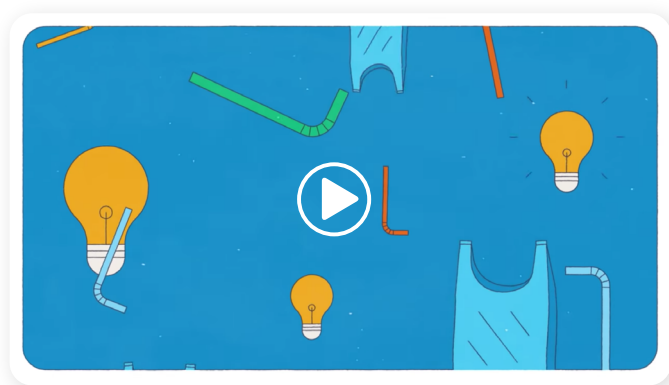
14 Ellen MacArthur Foundation (2019): [New Plastics Economy Reuse Book](#)

Existing industry and policy initiatives only take us so far

The New Plastics Economy initiative has brought together key stakeholders to rethink and redesign the future of plastics,¹⁵ starting with packaging.

Today, more than 1000 organisations are aligned behind a common vision on a circular economy for plastics, which has six key points:

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



The New Plastic Economy vision

8 minutes | [Watch on YouTube](#)

Through clear actionable targets, the New Plastics Economy Global Commitment¹⁶ sets out a clear direction and minimum ambition level for 2025 to build on.

The Global Commitment is led by the Ellen MacArthur Foundation, in collaboration with the UN Environment Programme (UNEP). A growing network of national and regional Plastic Pacts¹⁷ spread across five continents, is working to put this vision into practice with solutions tailored to their local context.

However, the 2020 New Plastics Economy Global Commitment progress¹⁸ report pointed out that additional efforts are necessary:

1. To set virgin plastics reduction targets, underpinned by increased action on elimination of plastics that we do not need and on scaling up of reuse business models
2. To embark on a well-funded research, development, and innovation agenda, focused on solutions such as new delivery models and new materials, in particular for flexible plastic and multi-materials (which represent 80% of remaining macroplastics leakage into the ocean by 2040)
3. To establish mechanisms to provide dedicated, ongoing, and sufficient funding of collection and recycling in which all industry players introducing packaging to the market provide funding, for example through Extended Producer Responsibility (EPR) schemes

15 Ellen MacArthur Foundation: [Circular economy vision for plastic pollution](#)

16 Ellen MacArthur Foundation and UNEP: [New Plastics Economy Global Commitment](#)

17 [The Ellen MacArthur Foundation's Plastics Pact Network](#)

18 [The Global Commitment Progress Report 2020](#)

Meanwhile, the political discussions on how to address global plastic pollution have gained significant momentum through decisions taken at various international fora. Both the G7 and G20 have launched plastic initiatives in previous years that are based on shared objectives to be implemented through national commitments and actions.

For example, the Ocean Plastics Charter¹⁹ was announced at the G7 summit in June 2018 by the leaders of Canada, France, Germany, Italy, the United Kingdom, and the European Union. Today, the Charter brings together 26 national governments and 9 global partners from businesses and civil society organisations who are committed to implementing a more resource-efficient and lifecycle management approach to plastics on land and at sea within their respective jurisdictions and areas of influence.

The Ocean Plastics Charter recognises key areas for action at national level including:

1. Sustainable design, production, and after-use markets
2. Collection, management, and other systems and infrastructure
3. Sustainable lifestyles and education
4. Research, innovation, and new technologies
5. Coastal and shoreline action

While upstream measures in the plastic value chain have been defined as a distinct area for policy action, the Charter lacks an institutionalised mechanism to provide international coordination, technical and financial support where most needed, as well as binding rules on monitoring and reporting.

In sum, current efforts do not aggregate to deliver the desired global change: preventing all plastic leakage into the environment by a certain target date. There is an opportunity to strengthen policy coordination and collaboration beyond exchange of information and best practices, but this requires a more binding and comprehensive international framework. Working towards a new UN treaty to address plastic pollution will accelerate progress and convergence under existing initiatives, even before such a treaty is adopted and comes into force.

The political reasoning for a UN treaty on plastics is well supported

A new UN treaty would allow governments to tackle plastic pollution in a way that the Paris Agreement has done for climate change and the Montreal Protocol has done for ozone depletion.

Indeed, for most other pressing environmental challenges that entail growing negative transboundary impacts and require problem drivers to be addressed internationally, there is already a global policy framework in place. In the case of the Montreal Protocol for example, it took only 18 months to reach a binding global agreement to protect the earth's ozone layer, once there was a clear understanding of the problem and consensus between governments about the scope and timeframe for political action. As a result, the ozone hole in Antarctica is slowly recovering, and projections indicate that the ozone layer will return to 1980 levels between 2050 and 2070.

A more recent example is the so-called Minamata Convention to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. It was signed in 2013 after three years of meetings and negotiations. In support of its objective, it includes provisions that relate to the entire life cycle of mercury, including controls and reductions across a range of products, processes, and industries where mercury is used, released or emitted. This approach could be well suited to be adapted to plastics.

Over the last two years, the political momentum and support for starting international negotiations on a comprehensive global policy framework to address plastic pollution has been growing:

- More than 70 leading companies support a call for a new UN treaty on plastic pollution²⁰ to address the fragmented landscape of regulation and complement existing voluntary measures.
- A majority of all UN member states from across the world have already officially declared that they are open to considering a new global agreement. As of August 2021, more than 100 national governments have already taken an explicit decision to support establishing an international negotiating committee at UNEA 5.2 in February 2022.²¹
- More than 2 million people have signed the online petition on the WWF website, supporting a global legally binding agreement that involves every country in ending the plastics crisis.²²

During the Conference of the Parties to the Basel Convention from 29 April to 10 May 2019, Governments already decided to include plastic waste in a legally binding framework which will make global trade in plastic waste more transparent and better regulated, whilst also ensuring that its management is safer for human health and the environment. This success is a good signal and excellent starting point to discuss a more comprehensive global policy framework covering the whole lifecycle of plastics, making sure that in the coming decades a circular economy approach to the plastic value chain is implemented around the world.

20 [The Business Call for a UN Treaty on Plastic Pollution](#)

21 WWF's [Global Plastic Navigator](#)

22 WWF's [Plastics petition](#)

A pathway to negotiating such a treaty is in sight

The United Nations Environment Assembly (UNEA) has adopted successive resolutions, leading to an increased focus on the effectiveness of policy response and governance options relating to plastic pollution.

At UNEA-3 in 2017, governments established an Ad Hoc Open-Ended Expert Group (AHEG) to review different governance options for combating marine plastic litter and microplastics from all sources, especially land-based. It considered existing agreements and frameworks and identified where gaps remained, in addition to analysing the effectiveness of existing and potential response options to address plastic pollution.²³

At UNEA-4 in 2019, member states called for more rigorous monitoring of the status of the global plastic pollution problem and efforts to address it, including existing activities and actions by governments covering the whole life cycle of plastics. A Plastics Policy Inventory²⁴ was created to support such monitoring. The expert group's mandate was extended to continue its work on scoping possible governance options which was concluded in November 2020 with a view to taking a decision at UNEA-5 in February 2022.²⁵ In the meantime, a majority of UN member states had already stated that they are open to consider starting negotiations on a new international treaty to address plastic pollution.

23 [UNEP/EA.3/Res.7: Marine litter and microplastics](#)

24 [Plastics Policy Inventory | The Nicholas Institute for Environmental Policy Solutions](#)

25 [UNEP/EA.4/Res.6: Marine litter and microplastics](#)

At the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth, held in 2019 in Japan, the G20 Implementation Framework for Actions on Marine Plastic Litter²⁶ was established.

It was endorsed by the G20 Leaders at the subsequent G20 Osaka Summit together with a common global vision to address plastic pollution: the 'Osaka Blue Ocean Vision'.²⁷ As of July 2021, the number of countries and regions sharing the Osaka Blue Ocean Vision has risen to 87.²⁸ These countries, which include the G20 members, also share and update information through annual reports on relevant policies, plans and measures, and promote peer learning from best practices.

The Osaka Blue Ocean Vision signalled for the first time the international support for an overarching goal of stopping plastic leakage into the ocean by a certain target date.

Working towards this goal, the G20 countries committed to implement and report on relevant solutions in their own jurisdictions, as well as to enhance international cooperation and capacity building. The G20 Implementation Framework for Actions on Marine Plastic Litter acknowledges and is expected to complement the work carried out under the UN Environmental Assembly.

26 [G20 Implementation Framework for Actions on Marine Plastic Litter](#)

27 [G20 Osaka Leaders' Declaration | Documents and Materials | G20 Osaka Summit 2019](#), para 39

28 [G20 Report on Actions Against Marine Plastic Litter 2021](#)

Putting the G7 and G20 efforts into the context of the AHEG work towards UNEA-5, and drawing on several reports on the need for a global agreement to address plastic pollution, shows that there is already a lot of alignment around the potential elements of a new UN treaty.²⁹

These include:

- A clearly formulated joint vision and an ambitious global goal, which should be measurable, time-bound, and achievable, to be complemented with national action plans with clear targets, including a robust monitoring and reporting mechanism
- A dedicated international scientific body with a mandate to assess and track the extent of the problem, collate state-of-the-art knowledge to provide guidance on the solutions needed, and review the effectiveness of existing policy measures
- A comprehensive implementation support architecture, including technical and operational assistance to parties with limited capacity, as well as an innovation platform to share and scale latest knowledge and solutions
- A financial mechanism to mobilise and channel both public and private capital to parties in need of assistance to implement national action plans and other obligations
- A process to develop issue-specific protocols for key subcategories of the plastic pollution problem, for example at different stages of the plastic life cycle, different sources of pollution and sector-specific challenges

Evolution of a global policy response

- **2014**
UNEA Resolution 1/6 - **Agreeing on the global emerging threat**
- **2016**
UNEA Resolution 2/11 - **Identifying knowledge gaps**
- **2017**
UNEA Resolution 3/7 - **Recognising inefficient global governance and finding a common vision**
- **2018**
G7 Ocean Plastic Charter - **Taking action toward a resource-efficient lifecycle management approach to plastics in the economy**
- **2019**
UNEA Resolution 4/6 - **Strengthening international coordination and sharing knowledge**
- **G20 Osaka Blue Ocean Vision - Reducing additional pollution by marine plastic litter by 2050**
- **2020**
UNEA expert group on marine litter and microplastics - **Including the option of a new global agreement in their final report**
- **2021**
International Ministerial Conference on Marine Litter and Plastic Pollution - **Supporting the establishment of an Intergovernmental Negotiating Committee at UNEA 5**
- **2022**
UNEA 5.2 - **Adopting a resolution mandating negotiations on an internationally legally binding instrument on plastic pollution?**

29 [Tackling Marine Plastic Pollution; Nordic Plastic Report 2020; Convention on Plastic Pollution - Toward a new global agreement to address plastic pollution; The business case for a UN treaty on plastic pollution.](#)

The shape of the treaty could usefully draw on existing efforts

To match the level of international collaboration with the scale of the plastic pollution challenge, there are three key elements missing to develop a common understanding of what can be achieved with a new UN treaty:

- Alignment behind a common vision and shared goal of a global circular economy where plastic never becomes waste or pollution
- Clarity on the scope, ambition level, and a timeline for the implementation of solutions covering the whole lifecycle of plastics, including both upstream and downstream measures in the plastics value chain
- Commitment to build capabilities and provide assistance where it is most needed, capturing not only the environmental but also the social and economic benefits of the transition to a circular economy for plastics

The plastic-related initiatives mentioned earlier in this document, and others supported by e.g. the World Economic Forum, various national governments, and international financial institutions can inform further discussions about how the key elements of a global treaty can be designed.

In addition, the Ellen MacArthur Foundation has laid out Five Universal Circular Economy Policy Goals³⁰ which are applicable across sectors, recognising that the relevant policy measures needed are interconnected.

Therefore, the specific policy areas listed below should not be viewed as a blanket and exclusive list of recommendations but as illustrative examples that can be considered when defining priority actions under the UN plastics treaty addressing plastic pollution within a given geographical or sector context:

- **Enable circular design solutions for plastics in the relevant sectors:**
This could include policies creating standards to harmonise design of packaging for different types of products and systems to facilitate their collection, reuse, and recycling; limiting both the intentional use and the release of microplastics through wear and tear; restricting the production and use of single-use items; or addressing chemical hazards and plastic additives hampering a circular economy.
- **Promote better resource management capabilities in countries and industries where most needed to avoid waste and pollution:**
This could include policies addressing pellet pollution in the plastics value chain; driving waste collection for recycling at residential, industrial, and commercial locations and public spaces; introducing Deposit Return Schemes (DRS) and other mechanisms to increase reuse rates; or building up capacity to set up effective Extended Producer Responsibility (EPR) schemes in the most critical regions and countries.

- **Review the setup of financial and economic incentives and regulations to shape the right conditions:** This could include policies incentivising circular and other environmental outcomes, for example through incentives to include recycled content, VAT reductions on reuse and recycling activities or machinery, as well as greenhouse gas emission pricing mechanisms. Or it could include disincentives for non-circular outcomes, for example through a landfill tax or ban, incineration gate fees, or a tax on the use of virgin plastics.
- **Facilitate investments to scale relevant innovations, infrastructures, and skills:** This could include policies and guidelines for public procurement, the establishment of a blended finance mechanism to mobilise private capital for investments into new sorting and recycling technologies, but also research funds dedicated to circular economy innovations, demonstration projects, or skills and training programmes including for workers in the informal sector.
- **Foster public-private collaboration across value chains and governance structures:** This could include working together across the private and public sectors when developing national plastics action plans under the UN treaty, including for example a roadmap to eliminate packaging waste, aligning ambitions for economy-wide reuse systems, or creating a joint innovation agenda towards 100% recyclable, reusable, or compostable plastics.

Any international agreement to reduce plastic pollution and promote a safe circular economy for plastics would have to be based on the following key principles: precautionary approach, common but differentiated responsibilities, polluter pays principle, and equity. Promoting equity is key in international collaboration: not all countries have the means to tackle plastic pollution effectively on their territory. To build the capabilities needed to work towards a circular economy for plastics and to provide institutional, scientific, technical, and financial assistance where it is most needed, governments have to acknowledge the need to establish a more formalised support mechanism.

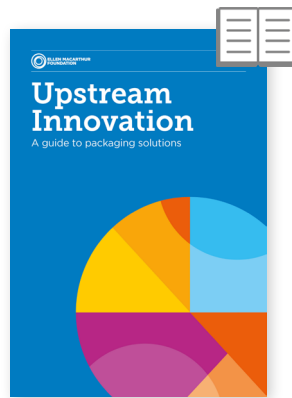
The scope and ambition of the actual content of a UN Treaty will have to match the overall objective of keeping plastics in the economy and stopping their leakage into the environment. Of necessity, these measures relate to the full lifecycle of plastic products in various sectors, which requires a multi-layered governance approach and, mutually reinforcing simultaneous actions from various stakeholders on sub-national, national, and regional level.

Other publications of interest



Oct 2020

Download the report [here](#)



Nov 2020

Download the report [here](#)



Jan 2021

Download the report [here](#)



Jun 2021

Download the position paper [here](#)

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