



Press release - embargoed to 00:01am EST, 19th September 2023

New report shows globally coordinated policies could cut annual mismanaged plastics by 90% and virgin plastic production by 30% by 2040

- Inaction could increase virgin plastic production by two-thirds, nearly double annual mismanaged plastics and increase greenhouse gas emissions by 63% by 2040 relative to 2019 levels.
- Report underlines the urgency of comprehensive globally binding rules in the upcoming international treaty on ending plastic pollution.
- Coordinated global action could reduce annual mismanaged plastics by 90% and virgin plastic production by 30% by 2040 relative to 2019 levels.
- Further and stronger measures are needed to fully end all aspects of plastic pollution and align the plastic system with the Paris Climate Agreement.

NEW YORK CITY, September 19, 2023 – The report [‘Towards Ending Plastic Pollution by 2040: 15 Global Policy Interventions for Systems Change’](https://pub.norden.org/temanord2023-539) [https://pub.norden.org/temanord2023-539], commissioned by the Nordic Council of Ministers for the Environment and Climate and developed by Systemiq, warns of escalating plastic pollution if transformative global policies are not implemented.

Without concerted global action, virgin plastic production could soar by 66%, from 430 million tonnes (Mt) in 2019 to 712 Mt in 2040, nearly doubling mismanaged plastic volumes to 205 million MT and significantly increasing greenhouse gas (GHG) emissions, further fuelling the triple planetary crisis.

The report proposes a package of 15 global policy interventions across the plastic lifecycle, advocating for a comprehensive approach beyond mere waste management solutions. The effective implementation of these policies can only be triggered by common global rules from the international, legally binding instrument to end plastic pollution.

Holding the Presidency of the Nordic Council of Ministers for Climate and the Environment, Gudlaugur Thór Thórdarson, Icelandic Minister of the Environment, Energy and Climate, said: “An ambitious plastic treaty is a unique opportunity to end plastic pollution by 2040. This report shows how current global policies, even if upgraded, do not solve plastic pollution entirely. Therefore, we will have to face tough negotiations, spur on more innovation, gather new knowledge and mobilise more ambitious policies to get there. Our future demands a truly circular plastic economy and clean oceans.”

Estimated impacts of the policy interventions presented in the plastic policy report include:

- A **30% cut in global virgin plastic production by 2040 compared to 2019 (or 60% compared to 2040 levels in the Business-as-Usual Scenario)**, mainly by promoting reuse, recycling and limiting single-use plastics. Select developed economies might reduce consumption by over 60%, while some developing countries might see up to a 50% rise due to growth factors.
- A **90% reduction in annual mismanaged plastics volumes** by 2040 relative to 2019, driven by reduction, elimination and expansion of circularity.
- A **sevenfold increase in global recycling output by 2040**, from 29 Mt in 2019 to 201 Mt by 2040, achieved with the support of recycling targets, product design rules, extended producer responsibility (EPR) schemes and fees on virgin plastics.

- **Controlled disposal would be needed** for waste that cannot be prevented or recycled. Select developed countries could see a 46% drop in controlled disposal volumes, while some developing countries would experience a 74% increase on 2019 levels, due to rapid population and economic growth outstripping the adoption of improved solutions.
- **GHG emissions in 2040 would remain the same as 2019 levels but** represent a mitigation of GHG emissions from the global plastic system of 40% relative to the 2040 levels in the Business-as-Usual Scenario. Significant additional measures to further reduce virgin plastic production, decarbonising energy supply or electrify production processes would be required to limit global warming to 1.5C.

Applying the proposed policies could provide important **savings in cumulative public expenditure over 2025-2040** due to the reduction of plastic waste for municipalities to collect and manage. However, such savings would apply predominantly to regions with existing infrastructure, while those lacking infrastructure today would still need to increase their spending.

Yet the report also highlights that even with these interventions, **13 Mt of plastics would remain mismanaged**, including 5 Mt of microplastics, resulting in negative impacts on both human health and the environment. The report argues that solutions are therefore lacking, and further innovation, research, and data would be required.

Yoni Shiran, Partner and Plastics Lead at Systemiq, said: "This report sets a new benchmark and shows that implementing 15 far-reaching policy interventions globally could take us a long way in the journey towards ending plastic pollution by 2040. The suggested policy package presents a starting point. However, further and stronger measures are required to eliminate mismanaged plastics fully, address risks to health and biodiversity, ensure a just transition and tackle the climate crisis."

The report underscores the importance of a toxics-free circular economy, highlighting health risks from plastics particularly for vulnerable groups exposed to toxic chemicals throughout the plastic lifecycle. Additionally, it calls for urgent research and innovation to mitigate microplastic emissions, scale reuse models, advance sorting and recycling, and introduce safe alternative materials, as well as the development of scientific research and data to support policy making.

The full study, '*Towards Ending Plastic Pollution by 2040*' can be downloaded from the Nordic Council website at <https://pub.norden.org/temanord2023-539>.

Comments from other Nordic Ministers for the Environment:

Espen Barth Eide, Norwegian Minister of Climate and Environment, said: "Plastic pollution is everywhere. Without new and effective control measures, plastic production is set to double in 20 years, and the release of plastics to air, land and water will follow suit. We now have a window of opportunity to develop an effective plastic treaty by the end of 2024. Let's work together to reduce our consumption of plastics and end plastic pollution by 2040 to protect human health and the environment."

Magnus Heunicke, Danish Minister of the Environment, said: "Plastic pollution knows no borders. It's a challenge that demands collective international action. Denmark is committed to being a part of the solution, advocating for a global, legally binding treaty to end plastic pollution by 2040 in order to protect our environment and communities."

Kai Mykkänen, Finnish Minister of Climate and the Environment, said: "Along with the policies that enable elimination and reduction of plastics, this report highlights the potential of circular economy

in solving the plastic pollution crisis. Based on the report, it is evident that a globally binding agreement could trigger a set of policy actions to move us from the unsustainable business-as-usual to business based on circularity."

Romina Pourmokhtari, Swedish Minister of Climate and the Environment, said: "Throughout its lifecycle, plastics result in greenhouse gas emissions that threaten our global climate commitments. This report underscores that significant measures will be required. Sweden is committed to develop an ambitious global agreement and to take this once-in-a-generation opportunity to end plastic pollution."

-ENDS-

Media enquiries:

Norwegian Ministry of Climate and Environment

Eli Marie Hindahl, Advisor, eli-marie.hindahl@kld.dep.no, +47 46488638

Systemiq

Ulrike Stein, Senior Communications Manager, ulrike.stein@systemiq.earth +44 7903581400

NOTES TO EDITORS

About this study

The 'Towards Ending Plastic Pollution by 2040: 15 Global Policy Interventions for Systems Change' report was commissioned by the Nordic Council of Ministers for the Environment and Climate and developed by Systemiq. It presents a set of global policy interventions across the plastic lifecycle and estimates its impact on plastic stocks and flows across the value chain, as well as on GHG emissions, costs and jobs. It also acknowledges broader issues of plastic pollution like health and biodiversity risks and a just transition. Addressing the entire plastic lifecycle, the report contrasts Business-as-Usual with a Global Rules Scenario, in which legally binding global rules from the international instrument to end plastic pollution would trigger 15 far-reaching policy interventions. If universally adopted, these could cut annual mismanaged plastic volumes by 90% and annual virgin plastic production by 30% by 2040 relative to 2019 levels, underscoring the need for a full lifecycle approach. Yet, the report highlights that more ambitious efforts are needed to align the plastic system with the Paris Climate Agreement and fully address all aspects of plastic pollution, such as health and biodiversity risks, environmental toxins, and the importance of a just transition.

Nordic co-operation

Nordic co-operation is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and the Faroe Islands, Greenland and Åland.

Nordic co-operation has firm traditions in politics, economics and culture and plays an important role in European and international forums. The Nordic community strives for a strong Nordic Region in a strong Europe.

Nordic co-operation promotes regional interests and values in a global world. The values shared by the Nordic countries help make the region one of the most innovative and competitive in the world.

About Systemiq

Systemiq, the system-change company, was founded in 2016 to drive the achievement of the Sustainable Development Goals and the Paris Agreement, by transforming markets and business models in five key systems: nature and food, materials and circularity, energy, urban areas, and sustainable finance. A certified B Corp, Systemiq combines strategic advisory with high-impact, on-the-ground work, and partners with business, finance, policy makers and civil society to deliver system change. Systemiq has offices in Brazil, France, Germany, Indonesia, the Netherlands, and the UK. Find out more at www.systemiq.earth.