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The Turning off the Tap report provides a compelling case to end plastic pollution while assuring socioeconomic and environmental benefits, and it builds momentum for the systems change needed globally.

The importance and approach to delivering now

This report shows it is critical to apply a comprehensive approach across all stages of the life cycle and focus on reducing the size of the problem by accelerating the three market shifts and dealing with legacy issues. Many governments around the world are already taking these steps and undertaking the across-the-life-cycle actions of the New Plastics Economy Global Commitment¹ designed to eliminate, innovate and circulate plastics. Although negotiations for the international legally binding instrument to end plastic pollution are ongoing, countries can already take steps to accelerate action to end plastic pollution.

But as countries step up their actions, they need to harmonise the definitions of problematic and unnecessary plastics, along with the chemical composition of plastics and reuse systems, as Table 9 of the report describes. Harmonisation will reduce the costs borne by industry due to an uneven playing field, or by the environment and society due to inefficient systems and increased pollution.

Several of the topic sheets in this report (e.g. 'Design guidelines for circularity'; 'Reuse schemes'; 'Extended producer responsibility') offer options for governments to act on these topics, both nationally and internationally. Some instruments (e.g. national legislation, which may be enhanced with elements such as international standards)

can tackle activities across the plastics life cycle within one country's borders. Regional or global trade agreements can be used to influence life-cycle activities that occur in other countries.

In parallel to implementing systemic regulatory interventions to ensure progress is being made, governments may wish to refine their approaches to optimise the impact of regulatory interventions. Some steps coincide with the elements governments should consider when developing the regulatory instruments described in chapter 4. Critically, any government can start acting or enhancing its action now, before going through these steps, by following the report recommendations described in chapter 4 and Table 8. These offer win-win solutions for a flourishing, safe, circular and just economy while preserving the environment and human health.

¹ https://www.unep.org/new-plastics-economy-global-commitment.

Five steps to refine national action

As highlighted in UNEP/PP/INC.1/11 (and its addendum UNEP/PP/INC.1/INF/8), national circumstances differ, and, while the overall policy areas and systems change needed to transition to a just and safe circular economy are the same, governments may want to adapt policies to their own circumstances. A common blueprint to continuously refine national action towards global systems change contains these elements:

- Assess plastic flows and pollution and legislative framework. This is useful to ensure data-driven prioritisation of actions in the country.
- Create a strategy to achieve targets. Based on progress in the country and overall ambition (e.g. informed by the global vision to end plastic pollution), a government-led multi-stakeholder process can help set the strategy to achieve targets on areas of action considering the national circumstances and global needs.
- 3. Prioritise the most impactful actions, policies and measures. Building from the policies described in Chapter 4 of the main report and the targets identified (Table 3), prioritise the most significant actions, policies and measures. Using modelling tools to estimate the expected impacts of a set of policies on indicators such as jobs, GDP, plastic pollution and related emissions can support the decision-making process and help generate buy-in across government departments, industry and civil society.
- 4. Determine financial needs for priority actions and identify sources to ensure sustainable implementation. These will usually include a combination of revenue-generating policies, shifting of financial incentives, private-sector investment (possibly enhanced with fiscal incentives) and international cooperation.
- Implement actions, monitor effectiveness and continually improve through specific indicators linked to the initial baseline.

These five steps are further explained in the subsections below. They can all help to maximise the effectiveness of national action in the context of a global approach. Several international initiatives have developed toolkits and modelling approaches for the above steps. Governments will need to consider whether all these steps are necessary, depending on the ongoing progress of immediate actions taken.

1. Assess plastic flows, pollution and legislative framework

National Source Inventories (NSIs) are a means to reflect the sources of plastic pollution and highlight the most important ones across the plastic life cycle. An NSI provides a central repository of knowledge and data on the life cycle. It facilitates the production of statistics and indicators by identifying and measuring major flows from the environment to the economy (natural inputs), flows within the economy (production, consumption, trade and circularity) and flows from the economy into the environment (residuals and plastic pollution). At the national level, there may be a need to strengthen institutional capacity towards measuring plastic flows, where knowledge and data on sources may be fragmented across government, research institutions and civil society organizations.

An NSI provides an opportunity to centralise and strengthen data pipelines, engage with existing national statistical systems and harmonise definitions and classifications in measuring flows across the environment and economy while establishing baselines against which to measure the impact of an action. Information on existing commitments may help identify and align multiple actions; an NSI provides transparency to measure and track progress toward achieving targets and goals. It may be relevant to users from various stakeholder groups, including government (at all levels), private sector, civil society and academia, and it should be publicly available.

The data required for developing an NSI can be drawn from various sources, such as statistical surveys from national statistical offices, administrative records from different related agencies and citizen science. Various methodologies and models on plastic flows and plastic pollution monitoring developed by different actors in the past can partly close data gaps. Depending on the plastic life cycle phase(s) that they cover, these methodologies and models could be broadly categorised into several groups.

For example, one group could be considered as a 'macroeconomic modelling group,' covering methodologies that base their approach on the polymer production and plastic product manufacturing stage, which may include a subsequent life cycle stage². Others could be categorised as a 'waste group', covering the stage of plastic waste generation, collection, treatment and disposal³. Some could be considered as an 'environment group,' concerned with identifying plastics in the environment and modelling their movement in different environmental media⁴.

² These examples can include, National Guidance for Plastic Pollution Hotspotting and Shaping Action (UNEP 2020), WEF's National Analysis and Modelling (NAM) Tool (https://www.globalplasticaction.org/tools), Plastic Drawdown, among others.

³ Examples of these methodologies and models could include, Spatio-temporal Quantification of Plastic Pollution Origins and Transportation, Plastic Pollution Calculator, Waste Wise Cities Tool etc.

⁴ Methodologies under this group could include DHI's early warning forecasts system, among others.

UNCTAD (2020) provided a "first attempt to quantify and map global trade flows across the entire life cycle of plastics – from raw inputs to final plastic products as well as waste⁵."

While these methodologies and models are useful tools to identify certain flows, emissions and hotspots of plastics and inform priority actions, they cover only parts of the life cycle and are sometimes fragmented. A Community of Practice is being established, supported by the Global Partnership on Plastic Pollution to further harmonize these approaches. This process will support closing data gaps in developing the above-mentioned NSI.

The objective of a legislation and policy analysis is to map and better understand existing governance, legal and institutional frameworks to address plastic pollution in different countries, including in the marine environment. This is done by identifying and reviewing existing or planned regulatory instruments in the country, e.g. starting from the types of instruments addressed in Chapter 4 of the main report (Table 8). The analysis may also include how relevant treaty commitments relating to plastic pollution are translated into domestic law and may extend from policies, strategies and action plans to legislation, regulations, good practices and voluntary standards. It may also include international developments and standards that can help harmonize national implementation. The collection of information from different countries will support the conduct of a gap analysis and needs assessment of governance, legislative and institutional frameworks related to addressing plastic pollution. For example, this process was recently completed in the Philippines, and the report can be found here.

2. Create strategies to achieve targets

Countries may find opportunities to refine their strategies and achieve their targets by following an NSI, conducting legislative and policy reviews, and considering the framework of actions and ambition described in this publication (see Table 3). For instance, the World Economic Forum has developed the National Analysis and Modelling (NAM) Tool⁶. This open-source online model allows countries to develop their own practical, science-based roadmap to accelerate their transition to a circular, low-carbon emissions plastics system.

3. Prioritise actions, policies and measures

Several entities currently support national action prioritisation, including UNEP with the **New Plastics Economy Global Commitment**; Global Partnership on Plastic Pollution and Marine Litter (GPML); the International Union for Conservation of Nature (IUCN); World Bank; Centre for Environment, Fisheries and

Aquaculture Science (Cefas); World Economic Forum and Global Plastic Action Partnership (GPAP); several Regional Seas Programmes; The Pew Charitable Trusts; U.S. Environmental Protection Agency (US-EPA); World Wide Fund for Nature (WWF); UN-Habitat; Common Seas; and Sustainable Seas Trust (SST).

When discussing tools and approaches to identify priority actions, it is important to consider common indicator frameworks and allow flexibility for national circumstances. This includes engaging with diverse stakeholders and the private sector, highlighting the importance of data availability and indicators, and emphasising the need to harmonise models and methodologies. Existing examples of action plans on plastic pollution and marine litter may be a valuable resource to build from.

With regard to the potential long-term effects of applying different policies, tools such as the World Bank's **Plastics Policy Simulator** (PPS) may be used to forecast the overall effects of combinations of policy instruments in terms of achieving targets, costs, effects on jobs and impacts on the environment (plastic waste and GHG emissions) to identify potential trade-offs and address them with adequate actions. PPS is the first technology-financial model for policymakers to estimate how firms and households will react to various plastic policy instruments and the costs, revenues and other impacts of these policies before laws are passed, or public money is spent. It supports governments, industry and civil society in search of mutually agreeable policy reforms to enhance plastic circularity and reduce plastic pollution.

4. Determine financial needs and investment plans

Once a package of policy and legislative changes has been selected, investments required to finance the systems change need to be estimated, with an analysis of financing needs along the plastic value chain. Assessing the landscape of existing financing is important to build a clear understanding of local and international financial sources, from public and development finance to private finance.

Analysing gaps and barriers to investments from upstream to downstream is also important. This should consider the local specificities (e.g. barriers to access to finance for innovation or, for SMES, higher risk or perceived risk for innovative technologies and models; barriers to access to international capital; insufficient development of local capital markets).

This preliminary analysis is crucial to define a plan that helps unlock investment, incentivise and channel it where it is needed most, through concessionary or blended finance.

 $^{^{\}rm 5}$ Global trade in plastics: insights from the first life-cycle trade database | UNCTAD.

⁶ https://www.globalplasticaction.org/tools.

Examples of finance roadmap development can be found in 'Financing System Change to Radically Reduce Plastic Pollution in Indonesia' by the Indonesia National Plastic Action Partnership and the NPAP Ghana Financing Roadmap developed by the Ghana National Plastic Action Partnership.

5. Implement actions, monitoring and continuous improvement

When it comes to national action, it is crucial to identify what is needed for implementation. These include developing de-risking financing mechanisms to support early-stage investment or to increase private investment in waste and recycling infrastructure, involving the private sector to develop and implement innovative financing instruments and developing disclosure requirements. Identifying and implementing investments supported by an international fund or through unlocking domestic sources

of financing and planning national investments are also crucial. Additionally, trade policies and measures can be conducive to reducing plastic pollution and accelerating the market transformation described in this report.

Developing legislation to bring new policies into the legal framework of the country will likely be required in most cases, and international support is available to help governments. The Marine Litter and Plastic Pollution Legal Toolkit is a global online resource that helps legislators and policymakers develop and strengthen national legal frameworks through a guided assessment approach. Monitoring of the effectiveness of the actions is crucial to allow continuous improvement. The report 'Unlocking the Plastics Circular Economy: Case Studies on Investment' by the Global Plastic Action Partnership, led by the World Economic Forum, provides examples of investment implementation actions.

From national implementation to global systems change

Strong action at the national level may contribute to the necessary transformation of the global plastics economy if it is aligned with a global vision, as described in the report. The harmonisation and interoperability of the toolkits and approaches described in this topic sheet

will enhance efficiency and ensure coherence among the actions from countries, thus contributing to achieving collective impact.

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