

INC on Plastic Pollution

Potential options for elements towards an international legally binding instrument

Written submission from CEFLEX - the Circular Economy for Flexible Packaging in Europe Initiative

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Date	13 January 2023

The Circular Economy for Flexible Packaging (CEFLEX) initiative is a collaboration of around 200 companies, associations and organisations representing the entire flexible packaging value chain.

The cornerstone of the CEFLEX initiative is based on giving all flexible packaging waste items a positive economic value that enables their collection and return to the economy. This is key to preventing them leaking into the natural environment. We are committed to doing this by redesigning consumer flexible packaging and ensuring an effective but appropriate collection and recycling infrastructure. Our work shows that this low cost and material efficient packaging format can and is increasingly being cost-effectively collected and recycled to supply valuable new markets where it is used in place of virgin plastics again and again.

CEFLEX's expertise and our submission focusses on Strategic Goals 2 and 3:

- Ensure that plastic products are designed to be circular (reusable or recyclable), and
- Close the loop of plastic in the economy by ensuring that plastic products are circulated in practice (reused or recycled).

We also explain why consumer flexible packaging is necessary and not suitable for elimination and substitution (Strategic Goal 1).

I. Substantive elements

Objectives

Proposed objective: For the international agreement to create the conditions to enable a circular economy for plastics and plastic packaging, which would contribute to ending plastic pollution while allowing society to benefit from the economic, environmental and social advantages of plastics such as consumer flexible packaging to pack essential products including food, hygiene, medical products and medicines.

Scope of the instrument: Consumer, commercial and industrial flexible packaging should be in scope and should address the whole life cycle from design through to collection, sorting, recycling and use of secondary raw materials.

Core Obligations

Parties should be required to take appropriate measures to:

- Ensure that all packaging is designed for recycling, in line with globally acknowledged, evidence-based criteria.
- Comply with circular feedstock targets for plastics industry. Plastic packaging recycling targets should be decided at country level based on national development stage.
- Ensure that sustainably funded systems are in place to enable sustainable collection, sorting and recycling of all packaging designed for recycling within an ambitious timeframe and respecting local, regional social and economic conditions.
- Set up a UNEP-managed programme to educate and provide guidance that leads to the

development of waste collection and sorting infrastructure and sustainably funded collection, sorting and recycling systems in countries where needed – while avoiding cross-subsidization – which should have as the primary objective the generation of secondary raw materials that are fit functionally and economically to supply commercially viable end markets. Such a UNEP programme should be open for all industry and other interested stakeholders to contribute with their feedback and expertise.

- Establish transparent reporting mechanisms which generate metrics for monitoring achievements and progress towards achieving circularity based on well-defined global industry standards.

Control measures – should appear in the main body of the Treaty

- States should require and reward economic operators placing plastic packaging on the market to be able to provide evidence that it has been "designed for recycling" through compliance with relevant, recognised design-for-recycling criteria that are transparent, fact based and material and technology neutral. Such criteria should be reviewed periodically to include latest innovations in materials and processes.
- States should adopt comprehensive waste management legislation that includes a provision for all plastic packaging to be collected and made available for recycling. States should also adopt a regulatory framework that protects the rights of all "collectors" and ensures that they are appropriately rewarded economically for this to be sustainable.
- Economic operators placing plastic packaging on the market should be encouraged to accept their share of financial and operational responsibility for ensuring that it is collected, sorted and recycled in an economically, environmentally and socially sustainable manner. This principle should be recognised in national legislation to ensure a level playing field for all responsible companies and avoid them being penalised economically by those less responsible operators.

II. Implementation elements

Implementation measures

- Design-for-recycling guidelines should be developed in a consensus-driven approach covering the whole value chain (material producers, converters, packaging users, waste collectors, Packaging Recovery Organisations (PROs), recyclers) in consultation with other civil society stakeholders.
- They should be reviewed and updated as often as needed to keep pace with developments in infrastructure and available end markets.

Explanatory text

Role of flexible packaging in society

Flexible packaging protects food, medicines, consumer household, personal care and other goods and is generally made of plastic but can also include other materials such as paper or aluminium foil. For example, it ensures food products reach consumers **safe and fresh, preserving nutrition, taste and quality**. This versatile packaging also helps protect and preserve, **reducing CO2 emissions associated with food loss**. In the case of medical products and pharmaceuticals, flexible packaging keeps them **sterile and protected** while also making it possible to make them tamper evident and counterfeit proof. Most importantly, it also brings **affordability and convenience to food, water and other essential items** such as pharmaceutical, personal care and cosmetics, and home care worldwide. This is especially relevant in countries with large low-income populations.



Flexible packaging is very light, resource and material efficient – preventing the use of raw materials and resources in production and transportation. About **half of primary food packaging on the EU market is flexibles** (in product units) but this accounts for only **one sixth (16%) of all packaging material used** for food (by weight)^[1].

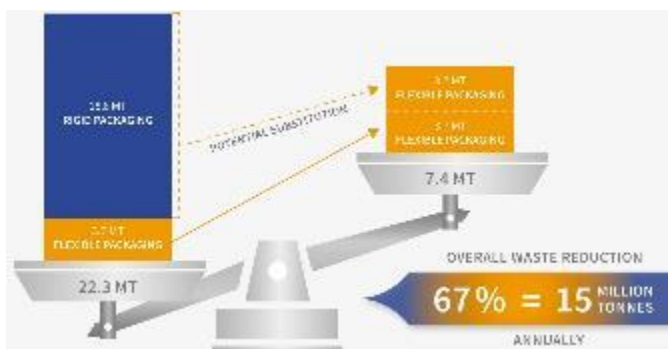


Around 5.6 million tonnes of consumer household flexible packaging were placed on the European market in 2019^[3], of which about 4.5 million tonnes are plastic-based. **Over 70% is used for food or contact-sensitive applications, such as medical or veterinary.**

This efficient use of material has environmental and economic advantages^[2] and prevents food waste that results in higher overall GHG emissions than the packaging, which is why **significant volumes of flexible packaging will need to remain and be recycled in a circular economy.**

While primarily a European initiative, flexible packaging use is similar worldwide, with its primary purpose giving access to fresh, easy to transport and resource efficient packed food, preventing food waste and protecting medical and personal care products.

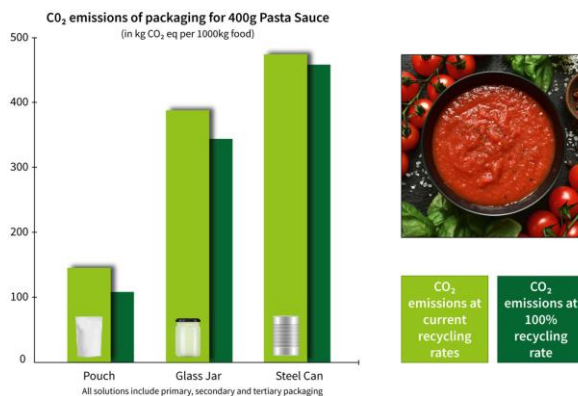
Supporting studies



Waste prevention and reduction

Switching from rigid to flexible primary packaging for food on the EU market gives an overall **waste reduction of 67% or 15 million tonnes.**

Source: ifeu 2019, Flexible Packaging Europe



Low carbon footprint

Compared to glass jars and steel cans, which are commonly used for – in this example – sauces; flexible packaging showed a more than 60% lower CO₂ impact than rigid alternatives.

Source: ifeu 2021, *Flexible Packaging Europe*

Key principles of CEFLEX’s circularity model

Making all plastic packaging materials circular requires

- designing it to be recyclable
- establishing the collection, sorting, recycling systems needed to manage it back to the economy
- providing management and funding to enable point collection, sorting and recycling to be realised sustainably so that the recycled materials can compete economically with virgin plastics and
- embedding the above principles in appropriate legislation in each country to provide a level playing field for all companies involved in realising the circular economy for plastic materials being placed on the market.

Design for a circular economy

Sustainable design is fundamental to creating an economic ‘upside’ and incentivising collection, sorting and recycling.

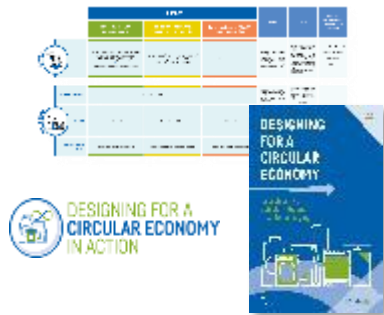
Quality materials can become quality products again, building a sustainable business case for transitioning to a circular economy – helping to eliminate waste and significantly reduce pollution.

CEFLEX’s Designing for a Circular Economy guidelines – a global guide and benchmark for flexible packaging design and circularity

The 'Designing for a Circular Economy' guidelines (D4ACE) are the result of a unique value chain collaboration, with hundreds of stakeholders contributing technical, environmental and market expertise. Over 180 CEFLEX stakeholders commit to reviewing their packaging portfolios and applying them, and **1000’s of organisations and experts around the world use the guidelines** to help transform flexible packaging design – making it easier to sort, recycle and use quality recycled materials again and again in a range of new applications.

They focus on polyolefin flexible packaging for **mechanical recycling infrastructure and technologies used commonly and at scale worldwide:**

- **Giving clarity** on redesigning to mono-materials and eliminate excess material through innovation for brands, retailers, converters, film producers and others,
- Helping to **increase levels and yields from collection, sorting and recycling processes,**
- Producing more **high-quality recycled materials** to be kept in the economy and used in sustainable end markets.

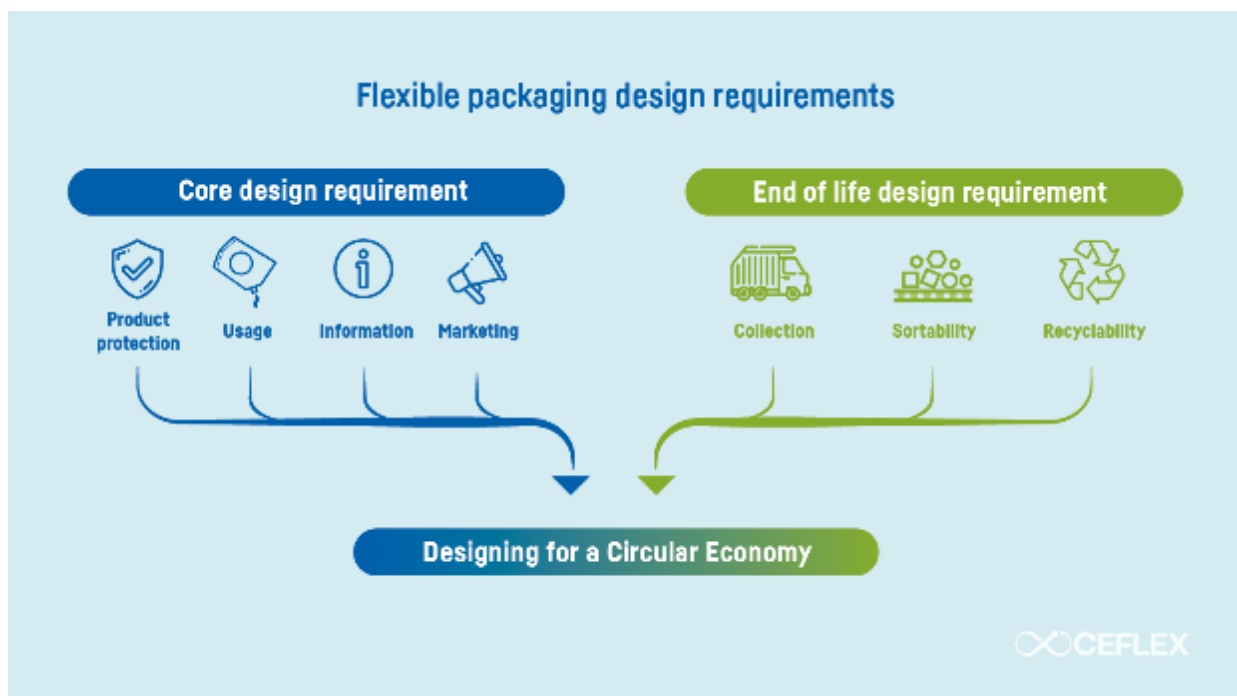


A living - open-access - resource that continues to boost innovation and circularity

The CEFLEX design guidelines built on the [Ellen MacArthur Foundation Project Barrier](#) - adding additional testing, information to activate them to a wider audience and consistently keep them up to date. This includes **additional clarity for multi-material structures and robust, independent data** to update and improve our design guidance. All results are made available

in **open-access to ensure experts, companies and governments can consult and use them.**

CEFLEX also works to develop or collaborate with a range of partners to ensure guidance and alignment for a broad range of materials. This includes flexible packaging containing aluminum foil, collaborates with the [Evergreen alliance](#) on its **design guidelines for fiber-based packaging** and additionally, CEFLEX and several of its stakeholders collaborate and align with organisations like the [Consumer Goods Forum](#). Their multiple format [‘Golden Design Rules’](#) use CEFLEX design guidelines as a basis for flexibles – giving sound actions to innovate, eliminate and increase recycling rates.

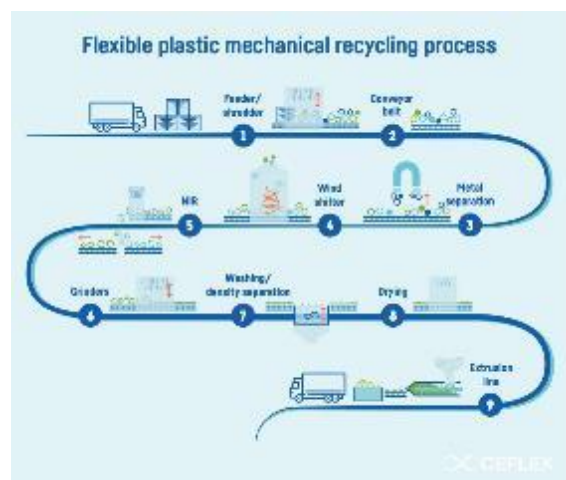


Adhering to the ‘Designing for a Circular Economy’ guidelines helps to deliver more easily recyclable flexible packaging into the market hereby **significantly increasing the likelihood of it being recycled whilst reducing the cost of doing this and the overall environmental impact when they replace virgin plastics. This in turn** helps reduce potential for pollution without compromising functionality to protect, package, transport, sell and use the product.

Companies ensuring end of life for their flexible packaging is well designed (also for recyclability) so that it is easily managed should find **competitive advantage with customers enabled through** legislative instruments and eco-modulation of their costs through Extended Producer Responsibility (EPR) schemes.

Collecting, Sorting and Recycling Flexible Packaging

CEFLEX is able to advise on how collection, sorting and recycling systems could be put in place, taking into account the roles of both formal and informal sectors. This is supported by value-chain consensus and alignment and data-driven research, particularly in Europe – where processes and legislation do much to define a global direction of travel, while navigating extensive national differences in application.



Case studies of circular flexible packaging initiatives outside of Europe

Better design and infrastructure are providing a blueprint for new circular businesses, supporting entrepreneurs and helping local communities earn new income

One such example is the *ASASE Foundation* ‘Closing the Loop’ project in [Accra, Ghana](#), where over 350 jobs both formal and informal are currently supported in two communities. The model is simple and effective. Plastic waste is separately collected by the informal sector and sold to the recycling facility, crushed, washed and pelletized to be sold for reuse in products such as various film structures, household items or building materials. Not only are waste management issues alleviated

in Accra, but the unlocked value of plastic waste is channelled back to these communities in the form of jobs and new income streams.



Since its start in January 2021, the *Closing the Loop* diverted around 2’700 tons of plastic waste from various streams, including from their collection centres, schools where they run educational programmes on plastic waste sorting, as well as monthly clean-ups conducted along Accra’s coastline. Replication of this model in 2 new communities of Accra by the end of 2023 is in progress.

A waste aggregator collaborating with the ASASE Foundation, collects typically up to 10 tons of waste every month and uses the income generated to support their family.

Many countries around the world are discovering the powerful combination of the circular economy for flexible packaging. Ensuring these materials are well designed and able to be used again is an economic and environmental opportunity - **reducing waste and creating sustainable business opportunities for companies and communities.**

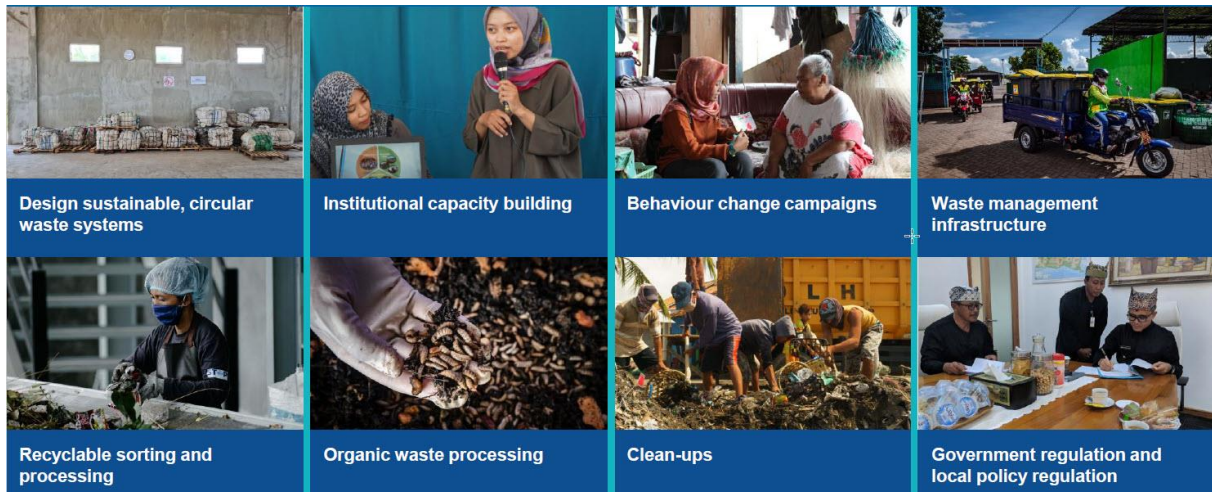
In [Khopoli, Maharashtra, India](#), a site developed as part of the Huhtamaki Foundation’s #CloseTheLoop initiative recycles about 1,600 kilograms of post-consumer used flexible plastic waste per day; tackling post-consumer waste to deliver a valuable secondary resource material.

It processes post-consumer waste to create resin to produce refined compounds to be used for household products for consumers in India. Recycled material from well-designed flexible packaging helps ensure these high-quality end markets are possible.



The Central Pollution Board of India (2012) estimates that India generates close to 26,000 tonnes of plastic waste a day and a little over 10,000 tonnes a day of plastic waste remains uncollected. A more circular approach, [bridging the gap in recycling and reuse of waste material in new products could help increase GDP by 5-10%](#) according to Mahindra & Mahindra.

[Project STOP](#) works hand-in-hand with regional governments to create effective circular waste management systems in high-need areas in Indonesia. The initiative supports cities through a system-enabler approach by providing waste management infrastructure, technical expertise and behavioural change campaigns. Providing a holistic system is reducing the harmful impact of mismanaged waste on public health, tourism, and fisheries. Rather than building traditional linear systems, where waste is collected and simply disposed at landfill, Project STOP also aims to create circular systems, where waste – including flexible packaging – is recycled into new products and the resulting economic value lowers the financial burden of the waste system on the city. Project STOP is solving the root causes of marine littering and is increasing the efficient use of resources, while opening social and economic benefits for communities.



By September 2022 Project STOP has served a population of 278,000, most of them with access to a formal waste management system for the first time. It has created 318 new full-time jobs and has collected 35,000t of waste, of which 4,000t are plastics. This **supports Indonesia’s national government commitments to reduce plastic pollution and boosts sustainable financing models** through governmental and private sector systems, helping to cultivate a coordinated governance model with clear responsibilities and accountabilities, further contributing to the waste system’s effectiveness and efficiency.

Optimised packaging design is fundamental to the sustainable business case for these initiatives and their adoption of the circular economy.

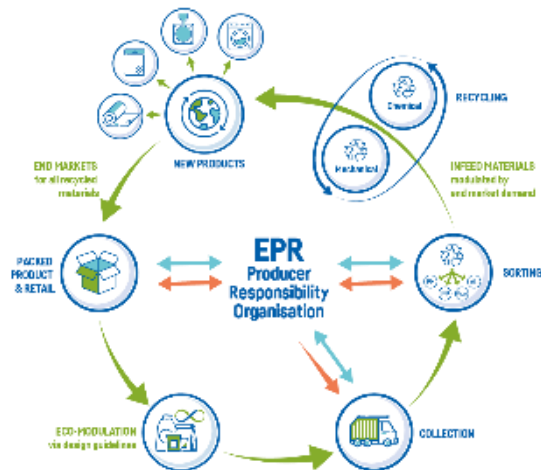
Extended Producer Responsibility - a key enabler and coordinator of the circular economy

EPR schemes ensure that companies take responsibility for the collection, sorting, and recycling of the packaging they place on the market, from start to finish. In CEFLEX’s experience, they are a key enabling measure underpinning the economic sustainability of a circular economy.

Extended Producer Responsibility in a circular economy

All materials captured, recycled and used in a wide range of sustainable end markets – independent of cost and recycling targets

↔ Contract agreements
→ Financed by fees



EPR systems designed to deliver circular materials and funded accordingly will help create the conditions to allow all parts of the value chain to make the changes necessary to go circular

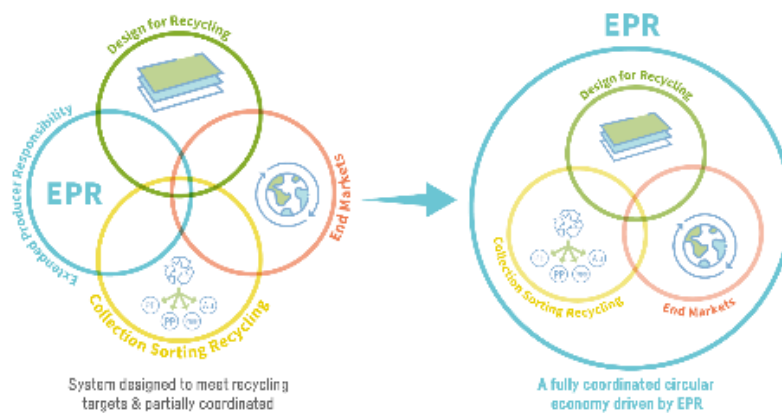
Only legally endorsed well-funded EPR schemes can coordinate a system where all materials are captured, recycled, and used in a wide range of sustainable end markets independent of their full net cost and recycling targets – and each step in the value chain needs to collaboratively work with them to deliver the circular economy for all plastic packaging materials.

In order to function well, however, EPR schemes must meet a number of minimum conditions to ensure all materials can be captured, recycled and used in a wide range of sustainable end markets – independent of cost and recycling targets

CEFLEX EPR ‘Criteria for Circularity’: EPR can and should adopt a central role, designed to deliver circular materials and to support the development of the circular economy. In an optimal scenario, schemes are:

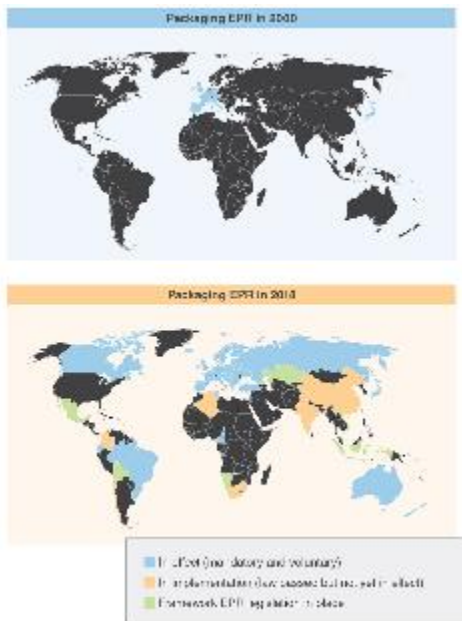
- **Fully funded to develop a circular economy:** allowing all packaging materials to be circular, moving beyond a system designed to meet recycling targets at managed costs,
- **A coordinating and strategic lead:** ensuring it is sustainable and economically viable for all actors throughout the process,
- **An accelerator for recycled content and sustainable end markets:** able to manage material flows to match end market demand and ensure recycled polymer suitable for use as a replacement for virgin,
- **Able to support investment:** providing guaranteed access to necessary in-feed waste streams and manage risk when developing new technology and capabilities like chemical recycling.

Role for EPR in the Circular Economy



EPR – a global solution?

Numerous institutions and organisations – such as the [OECD](#), World Bank and [Ellen MacArthur Foundation](#) – around the world are convinced of the value EPR can bring in reducing plastic waste leaking into the environment through improved waste collection and increased recycling rates. The number of EPR systems being implemented worldwide is accelerating. EPR can be adapted to meet local realities in terms of collection, sorting and recycling but has at its core the principle of covering the full cost of returning these waste plastic materials to the market. Although in many EPR systems these costs are covered by a fee paid by the companies placing the products on to the market, the EPR fee is effectively an integrated part of the overall cost of the product.



One example, by using a single Producer Responsibility Organisation (PRO) to administer EPR can effectively help establish a nation or state-wide program with simple implementation and a high level of control.

Therefore, countries with little or no experience with EPR schemes can initially benefit from a less complex system. Governments can consider implementing a competitive landscape later if needed, once their EPR scheme is well-established.

The OECD has issued [EPR policy development guidance including specific issues in emerging market economies](#) to assess the cost and environmental effectiveness of EPR and its overall impact on the market. The policy is also a cornerstone of [sustainable plastic management plans in Bangladesh](#) and fostering circular economies across the [entire APEC region](#).