

# Strategy on plastics in a Circular Economy

## EuRIC position

EuRIC welcomes the introduction of the roadmap laying down the European Commission's "*Strategy on plastics in a circular economy*" ('the roadmap'). While the strategy aims at tackling several issues, our comments focus mostly on plastics recycling. As outlined in 'the roadmap', plastics is an important material for the economy, and the next great challenge will be to decouple its production from fossil feedstocks. To achieve such an objective, plastic recycling is the only solution, but it faces a number of obstacles that different policy actions must alleviate. One of these obstacles is linked to the inherent properties of plastics, while a number of others are deeply rooted in unaddressed market failures. The development of a greater industrial capacity to recycle plastics within the EU depends on the development of a coherent, predictable and practicable policy which EuRIC greatly supports.

### State of play: low recycling rates

Plastics are widespread and have countless applications, but the current recycling rates are low for various reasons further explained in this paper. Most of the plastics are produced from fossil fuels, having a significant impact of the environment and the climate. Despite the challenges inherent to plastic recycling, in Europe, some companies have heavily invested and operate efficient facilities recycling plastics, including complex plastics from WEEE and ELVs. The difficulties they encounter are primarily linked to i) the lack of incentives to stimulate the demand for recycled materials, ii) the lack of eco-design requirements to increase the recyclability of plastics in products and iii) insufficiently coherent and predictable policies (see below) which threaten long term investments.

### 1. Boost the development of output for recycled plastic materials to ensure a functioning market

The reincorporation rate of recycled plastic materials is too low to ensure a functioning market. This is in part related to the high volatility of the price of recycled plastics. The price of virgin plastic is linked to the price of oil, and is often lower than the price of recycled plastic. The production of plastics will not be efficiently decoupled from fossil feedstocks if no initiatives are taken to pull the demand for recycled plastic so as to avoid that plastic recycling mainly depends on highly volatile oil prices. This is all the more instrumental since the cost structure of recycled plastics has nothing to do with the costs of virgin polymers highly correlated to oil prices.

To achieve a functioning market, the demand could be driven by several incentives, for example:

- Implementing **green public procurement** rules to initiate a shift towards products such as packaging, electrical and electronic goods or vehicles that contain well-defined quantities of Post-Consumer Recycled (PCR) plastics content. Green public procurement will ensure that the public sector lead by example when procuring goods through public money;
- Setting **market mechanisms** which reward the environmental benefits of plastics recycling in terms of energy and CO<sub>2</sub> emission savings – that the market fails to internalize in prices – and level the playing field with virgin plastic;
- Creating incentives for the manufacturing sector to include recycled plastics into new products. This could be implemented on a reward basis, by granting positive benefits such as increased R&D and/or capital investment tax allowances linked to higher levels of traceable PCR content in new products or by setting recycled content targets for certain products category. In France, a call for projects (ORPLAST) of the Environment Agency (ADEME) supports the reincorporation of recycled plastics by helping manufacturers to study and invest in order to use recycled material, combined

with a grant to fill the gap between the price of fossil plastics and the price of recycled ones. This could also be tested at European scale.

## 2. Importance of focusing on eco-design requirements and adequate information that facilitate plastics recycling

- Adequate information: Visual marking of polymer types or flame retardants is useful for manual dismantling. On the longer run, color coding or the use of additives in the inks coloring the plastics will be the best options to support automated sorting.
- Design to foster the recyclability and recycled content of PCR plastics should become an integral part of products' specification to achieve a circular economy. This necessitates a better communication between manufacturers and recyclers to understand each other's constraints. EuRIC supports systematic inclusion of eco-design requirements which foster products' recyclability and, when products at stake fall under an extended producer responsibility (EPR) regime, eco-modulation of fees on the basis of products' recyclability and recycled content use.

**Practical example:** The commercialization and increase share of bottles made of **opaque PET bottles** that cannot be recycled. Even though the bottles are eco-designed for other aspects - they use 25% less plastics and allow to get rid of the aluminium strip covering the aperture – this example demonstrates that, at least for packaging, product recyclability is far from being the main objective of the ecodesign efforts.

The French competent authority, because of the poor recyclability of opaque PET and of the practical problems posed to the recycling industry, rightly decided to impose a “malus”, i.e. a higher fee paid by producers using opaque PET to their EPR Scheme(s), in line with the principle of eco-modulation of fees, as long as no solution is found to recycle this new material. As a matter of fact, ecodesign must not impede innovation. A dialogue between manufacturers and recyclers must foster innovation as well as anticipate recycling developments. Opaque PET is not the only threat to well-functioning recycling systems: multilayer packaging, biodegradable plastics ... and more materials not yet invented could lead to similar challenges.

The next challenges will be to be able to recycle other polymers than the ones already recycled (thermoplastics such as polypropylene (PP) and polyethylene (PE)) without impairing their properties (downcycling), to be able to treat mixed plastic waste, and to deal more efficiently with the substances of concern that are included in the polymers. The current practice is to sort and eliminate- usually by incineration- the contaminated plastics, which means huge material losses, on top of other cross-media effects. Innovative technologies are needed to remove the substances of concern from the streams without losing too much of the materials and require EU funding opportunities.

## 3. Need for coherent and predictable policies: Finding the right interplay between waste and chemicals legislations

While the efforts made at European level to push for an increase in the recycling rates are welcomed, overall coherence of the policies is highly needed. Setting high recycling targets (for ELVs or WEEEs) means that the plastic content of these articles has to be recycled, which is of course positive but often incompatible with the various chemicals and products legislation that require to discard plastics containing regulated substances above the authorized concentration threshold. Naturally, substances that are hazardous for human health or the environment should not be perpetuated in material cycles through recycling. This is why it is important to ensure that they do not enter the value chain in the first place by minimizing their use at design stage.

In addition, socio-economic assessments and regulatory **predictability, consistency with products policy** and **transparency** are crucial to ensure that the industrial capacity of plastic recycling in the EU can grow and investments can be made in a predictable regulatory environment. This is particularly the case when considering the authorized thresholds of regulated substances in recovered materials. If the thresholds are extremely low compared to the average concentration of the substance in products on the market, a large part of the material will suddenly have to be discarded, disrupting the recycling activities and thus undermining the return on investments made by companies, while dissuading any actor from making any further investments.

When widely used substances are regulated, transitory periods should be granted for recyclers to be able to adapt their processes accordingly.

**Practical Example:** The flame retardant decaBDE, which was widely used in the plastics of vehicles and electronic goods at concentrations reaching up to 15% of the plastic weight, is being regulated under several EU legislations, and following its restriction under REACH, the maximum concentration allowed in recovered material is now 0.1% w/w. Consequently, a vast amount of plastics from ELVs and WEEE will have to be discarded instead of being recycled hence drastically reducing the quantities of available input material for recycling operations.

The fact that the current policy making gives the impression of being unpredictable and that suddenly expensive technologies developed to treat the plastic streams can become unsustainable because of the reduced amount of input material does not encourage - highly needed- investments in this field. The authorities should develop a system acting as a safety net to tackle this issue, because more and more substances are regulated and the problems linked to the legacy substances will not be resolved soon.

Furthermore, and this is a crucial point: REACH only applies to European producers, which means that « *Producers in third countries are not subject to authorisation requirements and can export articles containing these substances into the EU* » as described in the Commission Stakeholder Consultation Paper on the chemicals, products and waste interface. As a result, products containing substances included in the authorisation list are still put on the EU market, endangering Europeans' health and posing major problems to the recycling industry when these products reach end-of-life stage and contaminate entire waste streams. Proper enforcement of the existing legislation is a priority, and it is the only way to solve the issue of substances of concern contaminating the recycling streams.

**For more information focused on plastics recycling from WEEE and ELV, please read the following joint document: [“Complex Waste Plastics Recycling Industry ‘Wish List’” available on EuRIC website.](#)**

Through its Member Recycling Federations from 20 EU and EFTA countries, EuRIC represents today over:

- ✓ 5,500 companies generating an aggregated annual turnover of about 95 billion €, including large companies and SMEs, involved in the recycling and trade of various resource streams;
- ✓ 300,000 local jobs which cannot be outsourced to third EU countries;
- ✓ An average of 150 million tons of waste recycled per year (paper, metals, glass, plastics and beyond).

Recyclers play a key role in a circular economy. By turning wastes into resources, recycling is the link which reintroduces recycled materials into the value chains again and again.