

## Background

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### 1. Pathways to plastics circularity

- According to a JRC study commissioned by DG GROW (2020), 25Mt CO<sub>2</sub> eq. /year can be saved by recycling all plastic waste in Europe. This is **15.8% of the total GHG emissions of the chemicals, rubber and plastics industry** (EU-27, 2018) and **0.55% of EU's total CO<sub>2</sub> emissions** (2018). However, this scenario only takes mechanical recycling into account. It is now essential to include chemical recycling in the scenario and pathway, i.e. **clarify the environmental performance** (Life Cycle Assessment) **of chemical recycling**. The call for data by the JRC on this is until end of this month.
- Plastics recycling will not suffice to achieve climate neutral plastics by 2050 and will need to combine with other alternative feedstock (biomass, captured CO<sub>2</sub>) and low-carbon production (e.g. electrification of crackers or pyrolysis units).
- PlasticsEurope has commissioned an independent study by **Systemiq**, called "The Future of the European Plastics System: A Comprehensive Assessment of Pathways to Plastics Circularity in Europe". **Jyrki Katainen**, who launched the Circular Plastics Alliance as a Commissioner, chairs the Steering Committee.

### 2. Chemical recycling

- Chemical recycling refers here to "thermal recycling" i.e. plastic waste heated at 400-500° in a reactor, to produce pyrolysis oil, which then goes as feedstock into a refinery or cracker, where it gets mixed with other feedstock (e.g. fossil fuels) to produce multiple outputs ( e.g. aromatics, monomers, fuels). In this process, it is not always feasible to "follow" the plastic waste into the various outputs, hence to determine how much recycled plastics 'comes from' the initial plastic waste (in physical terms).
- To ensure a business case for plastics, plastics producers would like to be able to "attribute" plastic waste freely to any of the outputs of the cracker/refinery, e.g. assume that all plastic waste put into pyrolysis has eventually become a monomer (and then a recycled plastic) – while a share may have actually become fuels. **DG ENV position** is that any losses to energy or fuels should be deducted (which can be 50-70 %), and there is free attribution within "products outputs". It seems this position **would be acceptable for PlasticsEurope (TBC)**
- The taxonomy on sustainable finance is clear that chemical recycling is eligible where mechanical recycling is not "technically feasible" or "economic viable" and CO<sub>2</sub> emissions of the recycled plastics are lower than the virgin equivalent. There are however many **worries from NGOs and mechanical recyclers** that large petro-chemical and chemical companies may start a "hunt for plastic waste" to feed their existing crackers and refineries and claim recycled content, thus creating shortages of plastic waste for the smaller mechanical recyclers. We cannot discard this risk because chemical recycling is more efficient when using "good" plastic waste (i.e. clean waste from separate collection, equally fit for mechanical recycling). **A no-regret policy option is anyway to significantly increase the separate collection and sorting of plastic waste** before mandatory recycled content enters into application, and try to clarify, where possible, which waste streams is better managed with which technology – depending on the available infrastructure (e.g. study or recommendations on waste collection)
- A sensitive question is the possible **price of a ton** of recycled plastics from chemical recycling vs. mechanical recycling.

### 3. Single Market

We have received a **number of complaints regarding national (or sometimes regional) provisions imposing labelling requirements on packaging**. The main provisions affecting the packaging industry (based on stakeholder comments) are:

- **FR Decree 2021-835 of 29 June 2021:** mandatory labelling of almost all household products with a national symbol ('Triman-logo') that indicates whether the product is subject to sorting rules and information on correct disposal. **A Detailed Opinion was issued on 1/10/2020** (TRIS procedure) indicating that the measures are not proportional and less restrictive means are feasible (e.g. digital logo). **FR ignored the opinion** and GROW E.2 currently assesses the next steps.
- IT Legislative decree n° 116 of 3 September 2020 (not notified; currently under assessment): mandatory indication of identification code of the packaging materials and instructions on correct disposal.

DG ENV envisages harmonised labelling under the revised Packaging and Packaging Waste Directive, with Commission proposal expected not before mid-2022; hence, the entry into force and/or application will take [REDACTED]

### 4. Mandatory recycled content in plastics packaging

- PlasticsEurope's has recently called for 30% mandatory recycled content in plastics packaging by 2030, which is quite ambitious<sup>1</sup>.
- **Plastics converters**, while agreeing on a 30% target for recycled content in packaging, are reluctant to mandatory recycled content on **final products** (i.e. pressure on manufacturers and converters to purchase recycled materials). They would prefer mandatory recycled content on **plastics materials** (i.e. pressure on producers to make and sell recycled materials). Converters fear that mandatory recycled content will lead to higher prices for recycled plastics, while quality does not improve. Besides, converters may struggle to "pass through" the higher costs of inputs (many plastics packaging converters are SMEs while their suppliers are large chemicals companies and their customers large brands).
- The **Circular Plastics Alliance** can play a role to **help the supply of recycled plastics increase in parallel with the demand**, by fostering quick, voluntary action on design-for-recycling of key plastic products and separate collection of plastic waste, and by keeping an overview not only of all the key value chain steps but also of most key plastics-using sectors.

### 5. Circular Plastics Alliance vs. European Plastic Pact

- The Circular Plastics Alliance has 290+ signatories, covering the whole plastics value chain, and positive deliverables. Unfortunately, the alliance only has a limited number of representatives of public authorities, mainly: Portugal, the Swedish Environmental Protection Agency, and 3 associations of regions and cities.
- The refusal by many Member State authorities to join the CPA has been due to the creation of a European Plastic Pact, a few months after the CPA, led by the FR and NL Ministries of the Environment, more "political", with 150 signatories positioned as "pioneers" (including 13 Member States). It focuses on packaging only.
- Recent efforts to step up the cooperation have not been very effective in triggering joint work.

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<sup>1</sup> Although fully aligned with 1) the CPA roadmap by 2025 and 2) DG ENV's options for impact assessment (30 or 40%)

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- Interests from national authorities to join the Circular Plastics Alliance (e.g. Ministry of economy) are systematically hampered by the Pact membership (e.g. Ministry of the environment)
- A recurring criticism from NGOs and Ministries of the Environment is that the CPA is “limited” to recycling (the reason being that the CPA shall be limited to existing EU targets) and doesn’t work on reduction and reuse.

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