Brussels, 22 February 2022

EUMEPS feedback to the call for evidence of the European Commission for an impact assessment: Environmental impact of waste management – revision of EU waste framework

The association for European Manufacturers of Expanded Polystyrene (EUMEPS) is the voice of the Expanded Polystyrene (EPS) industry in Europe. Its members cover the entire EPS value chain from raw material suppliers and converters to recyclers, as well as supporting industries such as machinery and additive suppliers. They include individual companies as well as 22 national associations. This ensures that EUMEPS represents both large suppliers and small- and medium-sized converters and recyclers (SMEs) – altogether more than 1,000 companies, which employ more than 80,000 people.

EUMEPS welcomes the initiative of the European Commission (EC) and shares its stated objectives.

With its highly efficient material that consists of 98% air, the EPS industry consistently contributes to **waste prevention**. In particular, it reutilises non-waste by-products in its manufacturing processes, and produces protective and insulative packaging that is essential in preventing electrical and electronic equipment as well as food waste. Whilst EPS insulation contributes to resource efficiency during life spans of multiple decades, EPS packaging is reused where possible, e.g. in food catering. However, in many EPS applications, reuse is not feasible due to hygiene, food safety or functional reasons, as well life-cycle considerations. For example, protective EPS packaging is so efficient because it fits exactly the packaged good it protects; however, it is not reasonable to return it to the manufacturer of that specific product for reuse. Therefore, we focus our feedback on separate collection for recycling.

Separate collection is key to circularity

Based on its confidence in the recyclability of EPS and demand for recycled EPS, EUMEPS made a pledge to the EC in late 2018, which contributes to achieving the goal of 10 million tons of recycled plastics being used in new products on the EU market by 2025. EUMEPS pledged that 50% of EPS packaging waste and 46% of all EPS waste (packaging and construction) will be recycled by 2025. As documented in the pledge, our data shows that across Europe, we expect 560,000t of post-consumer EPS waste in the market by 2025, of which 370,000t will be EPS packaging waste. EPS currently accounts for about 3% of all plastic sold in Europe.

EPS is equally **versatile and valuable** during its production and use, as it is as a **secondary raw material**. It can be directly recycled into EPS foam granulate, used in lightweight concrete and loose fill floor and cavity wall insulation, but also into solid, non-foamed, PS.

However, **separate collection** of all plastics, including EPS, is **one key to achieving the circular economy** with zero plastic going to landfill. In a cycle, there is not really a *first* step, but separate collection is the first step that should be taken for plastic waste to remain circular as a high-quality recycled material. We insofar agree with, e.g., Plastics Recyclers Europe (**PRE**), who called for "[e]stablishing [and harmonising] separate [collection] schemes for plastic packaging and therefore creating separate streams" in 2019.

With a view to continuing the progress towards achieving this pledge and further increasing the circularity of EPS, EUMEPS and other organisations of the EPS industry have been **studying the collection and sorting of EPS waste**, **its current recycling, and future potential** across the EU. For EPS, these studies confirm the observations that the EC has made in its New Circular Economy Action Plan (CEAP 2.0; p. 13) and in the call for evidence: **The established collection system significantly impacts recycling performance**.

EUMEPS is familiar with diverging waste management practices across the EU. However, we **agree with the EC that harmonised "EU-wide waste-management legislation is the foundation for good waste-management policies and the functioning of the EU waste market" and welcome that the EC wants to consider "clarifying and/or restricting the scope of derogations** [from existing obligation to separately collect waste], introducing minimum requirements for source segregation and separate collection". Indeed, the EU Waste Framework Directive (WFD) has already generally provided since 2008 that **Member States must set up separate collection for plastic waste by 2015**. In principle, this means "source separation", i.e. separation by type and nature to facilitate [re-use and] recycling at the moment when waste is generated for the first time, rather than separating already mixed waste. Also, in light of how the EU's and all our circularity ambitions have increased since**, it is time to look closely at whether the derogations from this obligation are still applied correctly in all Member States.** In this context, we **call upon the EC to make available** the reports on separate collection and any derogations therefrom, which Member States had to submit until the end of 2021 (Art. 10(6) WFD).

At the same time, the EPS industry has been propelling the circular economy forward by working together with partners to increase separate collection, the sorting quality of EPS, and avoiding overly selective collection that discriminates against EPS by not including it.

The right degree of separation

There are various conceivable **degrees of separation** in collection, e.g. just sorting from residual waste, comingling plastics with other valuable waste materials such as metals, collecting plastics separately or even separately collecting different polymers and/or types of applications, such as food packaging. The most efficient degree of separation depends on the circumstances, in particular the characteristics and volume of the waste, which includes how easily it can be sorted from other waste streams, and the environment in which it is collected. **EPS** has some **beneficial peculiarities** in this regard:

- EPS insulative (e.g. fish boxes) and protective packaging are not used on a daily basis in households. Rather, they accumulate in significant volumes in industrial and **commercial waste**, e.g. in ports or with wholesalers and retailers. This commercial EPS packaging

waste is already successfully collected separately and recycled. **Reverse logistics** can make EPS protective packaging part of commercial waste in an ecologically and economically sensible manner when retailers collect it after delivering home appliances.

- Insulative EPS food packaging accumulates in significant volumes in commercial waste and should best be kept **separate** as a **food contact material** (FCM) waste **stream**. EPS food packaging waste can be rinsed and cleaned for recycling, and an EU-funded project, EPS-SURE has demonstrated that it is technically, environmentally, and economically viable to collect, store, pre-treat (compaction, briquetting, washing), and **recycle** waste **EPS fish boxes** into new PS food contact packaging. The EPS industry and its partners have been implementing the collection and recycling of EPS fish boxes across Europe.
- Due to its characteristic foam structure, users and **consumers can easily distinguish EPS from other plastics.**[1] Established examples show that the most efficient option for the separate collection of EPS packaging waste are **local drop-off points** (i.e. bring-in schemes). Households have accepted them in countries such as Denmark, Norway, Sweden, Croatia, Belgium, The Netherlands, France, Lithuania, Spain, Switzerland, Austria, Ireland, and the UK. Furthermore, there are successful examples of **separate door-to-door collection** of household EPS waste in specific bags, at the same time as paper.
- EPS waste can be **compressed by a factor of 40-50 to transport** it more efficiently. Compactors are readily available and economic at all locations where significant volumes of EPS accumulate, such as wholesalers, retailers, and local collection points.
- **EPS is a fully sortable material**. EPS packaging is generally designed in a way that *does not* create challenges to available sorting technology, e.g. it is generally made from EPS as a mono-material, unlike complex packaging, which combines multiple materials. *However*, as discussed, **EPS' characteristic properties and value are generally too good to leave it to sorting** for recycling from mixed plastic/packaging, let alone residual waste.

In line with the **principle of separate collection at source** and due its specific properties, EPS waste can and should be separately collected, creating a **mono-material waste stream**.

We appreciate that the EC has not limited its initiative to municipal or packaging waste. Indeed, this initiative should **improve the separate collection of construction and demolition waste** (CDW), including EPS insulation, before the EC considers setting recycling targets for CDW and its material-specific fractions by the end of 2024 (pursuant to Art. 11(6) WFD). In this context, we would like to point out that PolyStyreneLoop, an industry project, which is supported by EU LIFE and demonstrates the economic viability of **closed-loop recycling of EPS insulation waste at industrial scale**, has developed guidelines on the collection and pre-treatment.

[1] For the production of EPS, a granulate is filled into a mould and foamed in hot steam. The particles of the granulate stick together, but usually **do not completely fuse** with one another. The **spherical, foamed granulate is generally recognisable** in the end product and sometimes even a single grain can be separated.

The role of the consumer

We should also not underestimate how important separate collection is to **give plastic waste value in the eye of the consumer** in the first place. This is also one appropriate **answer to the problem of litter in the environment**, which none of us want. Together with 38 other organisations, EUMEPS and its initiative Smart Packaging Europe supported a position on 'Establishing an EU harmonised system to provide consumers with understandable and clear sorting instructions for packaging waste' in December 2021.

Fair use of extended producer responsibility (EPR) fees

We also welcome that the EC considers reinforcing the polluter pays principle by improving enforcement of EPR requirements. We call upon the EC to interpret the net cost principle, which EPR schemes must implement by the start of 2023, in light of the polluter pays principle which provides that **EPR fees**, including eco-modulated fees, paid **for EPS products should be ring-fenced for the management of EPS waste**. They must not be used to cross-subsidise further improvements of the collection of other waste, in particular where producer responsibility organisations (PROs), regrettably, discriminate against EPS without sufficient justification and do not separately collect and/or sort it for recycling. After all, Art. 8a(4) WFD refers to the *individual* producer. Furthermore, EUMEPS supports measures against free-riding and addressing imports.

Conclusion

As documented in EUMEPS' pledge (please see above), our **data** shows that across Europe, we expect 560,000t **of post-consumer EPS waste** in the market by 2025, of which 370,000t will be EPS packaging waste. Unfortunately, too much of it is not used efficiently, despite already existing demand for the versatile EPS waste feedstock. EPS' versatility and value already creates a **market pull away from incineration** (and landfill) **to** the **recycling** solutions that we will scale-up further. To complement this, **we need a market push, e.g. more and non-discriminatory separate collection** and sorting of all plastics, including EPS. Due to its specific properties, EPS waste can and should be separately collected, creating a **mono-material waste stream**.

We ask the EC to take the necessary steps to ensure the separate collection of EPS and look forward to working with the EC, as well as national authorities, PROs EPS users and other stakeholders, on establishing best practice examples and options for the collection of EPS packaging as well as insulation waste for recycling.

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