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COMMISSION STAFF WORKING DOCUMENT
EXECUTIVE SUMMARY OF THE IMPACT ASSESSMENT REPORT

Accompanying the document

**Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE
COUNCIL**

on preventing plastic pellet losses to reduce microplastics pollution

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A. Need for action

What is the problem and why is it a problem at EU level?

Plastic pellets, due to their nature and size, are regarded as microplastics. Microplastic pollution is increasingly a source of public and scientific concern. Microplastics are present in the environment due to (1) the degradation of larger pieces of plastic improperly discarded, disposed of or abandoned in the environment, (2) the use of products containing intentionally added microplastics and (3) unintentional releases of microplastics. This initiative aims to address one source of these unintentional releases following a preliminary investigation to identify and characterise the main sources.

This initiative focuses on plastic pellets, the umbrella term used to refer to the raw material for all plastic products which can come in different forms (pellets, flakes, powders, etc.). If lost to the environment, pellets constitute the third largest source of microplastic released into the environment. This study estimates that between 52 and 184 thousand tonnes of pellets are lost each year (2019 figures). Once in the environment, pellets are almost impossible to capture, extremely mobile and known to be eaten by a range of organisms and animals, causing harm to biodiversity and ecosystems, and potentially to human health. Pellets can disintegrate into smaller particles, which's potential to cause harm may be even greater due to their higher number and smaller size. Pellet losses occur at every stage of the supply chain (producers, converters, recyclers, transport and storage providers, tank cleaning stations) mainly due to poor pellet handling practices and are therefore largely avoidable.

These poor pellet handling practices are the result of several factors:

- There is a lack of awareness throughout the supply chain about the volume of these losses, their impacts and how to prevent them;
- There is no economic incentive to reduce pellet losses, as the damage caused is not internalised in the price of pellets; and
- There is no current regulatory framework comprehensively tackling the handling of pellets across the supply chain.

What should be achieved?

This initiative makes a substantial contribution to deliver on the commitments made in the European Green Deal, the Plastics Strategy, the Circular Economy Action Plan, and the Zero Pollution Action Plan. It aims to reduce microplastic-related pollution by preventing and reducing pellet losses to the environment that are due to current handling pellet practices. This translates into 3 specific objectives:

- (1) Reduce and prevent pellet losses to a level consistent with the Commission's 30% reduction target for microplastics released into the environment by 2030 (compared to 2016 levels);
- (2) Improve information on the magnitude of pellet losses throughout the supply chain; and
- (3) Ensure the appropriate mitigation of impacts of related measures on SMEs involved in the supply chain.

What is the value added of action at the EU level (subsidiarity)?

Pellet pollution is a transboundary issue due to the mobility of pellets in the environment as well as the cross-border nature of pellet handling activities and supply chains. National action alone cannot address this problem, while EU-level action will ensure a high level of environmental protection throughout the EU.

EU-level action will prevent the fragmentation of the internal market by ensuring all operators are subject to the same rules, thus levelling the playing field. It will help cover the entire supply chain and will be more cost-effective than sector-specific or national actions.

B. Solutions

What are the various options to achieve the objectives? Is there a preferred option?

Based on a literature review and stakeholder input (to the Inception Impact Assessment, the Open Public Consultation (OPC) and the targeted SME survey), four policy options were considered:

Option 1: Mandatory standardised methodology to measure pellet losses;

Option 2: Mandatory requirements (based on industry best practices e.g. ‘Operation Clean Sweep’) to prevent and reduce pellet losses in a new EU law, with mandatory certification of companies, and 3 sub-options with lighter requirements for:

2a: micro-companies;

2b: micro- and small companies;

2c: micro-, small and medium companies;

Option 3: Improved packaging for pellet logistics; and

Option 4: EU target to reduce pellet losses.

The preferred option was constructed by combining the most cost-effective and appropriate options, in terms of their expected environmental, economic and social consequences, their administrative cost, and their effectiveness, efficiency, coherence and proportionality.

The preferred policy option is a combination of Option 1 (mandatory standardised methodology to measure pellet losses) and sub-Option 2b (mandatory requirements in a new EU law with lighter requirements for micro- and small companies). Option 1 will improve information on the magnitude of pellet losses throughout the supply chain (objective 2). Sub-Option 2b will directly reduce the amount of pellets lost to the EU environment (objective 1) while mitigating any impacts on SMEs in the supply chain (objective 3).

The reduction potential of each policy option was estimated and expressed using a range due to some uncertainty around the baseline for pellet losses. However, the comparison of the different options is relatively certain as it shows how options rank.

What are different stakeholders' views? Who supports which option?

During the OPC, around 80% of respondents agreed that microplastic pollution were hazardous to the environment and human health. A majority agreed there was improper handling in current pellet-related activities and 87% called for an EU-level comprehensive legislative system for pellet-handling companies.

NGOs strongly support the establishment of harmonised mandatory requirements at the EU level. Producers also consider that these requirements would be easy and fast to implement, as long as they are built on their existing certification scheme (Operation Clean Sweep). Recyclers also favor EU-level requirements to ensure a level playing field. Converters, mainly made up of SMEs, reported some requirements would be difficult to implement due to limited resources.

During the targeted SME survey, micro- and small companies indicated that the costs of complying with certain mandatory requirements would be too burdensome for them and a majority of respondents named financial support and a measurement standard as support measures that would best help them tackle pellet losses.

The preferred option is therefore in line with stakeholders’ views and should be acceptable to both relevant stakeholders and the general public.

C. Impacts of the preferred option

What are the benefits of the preferred option?

The measures in the preferred option ensure that the entire pellet supply chain within the EU is subject

to the same mandatory requirements. It is expected to contribute to a 60-83% reduction in the volume of pellets released into the environment (25 – 141 thousand tonnes/year), thus contributing to around a quarter of the Commission’s 30% overall reduction target for microplastics releases by 2030.

The reduction in pellet losses benefits the environment and the economy (e.g. through increased attractiveness for tourists and more fishing harvest due to fewer pellets in the environment). In addition, it constitutes a precautionary measure against a potential risk to human health. The costs are also lower for local communities in affected areas who do not have to finance the clean-up of losses.

In addition, there is better data on pellet losses available thanks to the measurement standard.

For businesses, there are some cost savings as they only have to apply one measurement standard, and they lose fewer pellets. A level playing field thanks to only one set of mandatory requirements also benefits them.

What are the costs of the preferred option?

The proposed measures are expected to cost businesses an additional EUR 376 to 491 million per year, because businesses need to adapt their prevention and reduction measures. Businesses also need to finance the external auditing and certification of their measures and then to notify public authorities. While the measurement standard entails initial adjustment costs ranging between EU 1.3 and 3.2 million, in the long run its implementation saves businesses money because businesses only have to apply one measurement process in order to comply with the separate reporting requirement under the REACH Regulation on pellet losses.

Public authorities in the Member States face some extra processing and enforcement costs as they need to set up a public register of certified companies and ensure compliance with the regulation. This however is balanced by savings due to clean-up avoidance.

Consumers might face a minor increase in the cost of plastic products if pellet producers do not absorb the slight increase in pellet costs.

What are the impacts on SMEs and competitiveness?

The pellets supply chain has a large share of SMEs. While producers and recyclers are mostly large companies, around 89% of converters and around 96% of logistics are estimated to be SMEs. To evaluate the impact of the preferred option on SMEs, a targeted survey was undertaken. From the 330 respondents, a majority reported that a lighter version of the mandatory requirements would be acceptable. This was taken on board through the application of sub-Option 2b, which reduces the level of requirements for micro and small companies (e.g. a lower frequency of external auditing, no obligation to invest in certain expensive pieces of equipment or procedures). As requested by the respondents to the survey, the preferred option includes financial & non-financial support for these smaller operators and lays out the possibility of giving them more time to adapt to the new requirements.

Regarding the competitiveness of the EU plastic pellets sector more generally, the estimated costs of the preferred option represent about 0.13% of the EU plastics sector turnover, therefore not presenting a significant threat to the sector’s competitiveness. While the impacts could be more severe for SMEs, the lighter requirements for these operators should help mitigate these effects. Measures only apply to operations within the EU. This will have a very minor negative impact on the international competitiveness of EU operators. However, EU operators will be at an advantage if/when other countries adopt similar requirements, e.g., through an international agreement such as the Global Treaty on Plastic Pollution.

Will there be significant impacts on national budgets and administrations?

There will be minor costs (EUR 313 000 for the first year and EUR 125 000 per year for the EU) associated with the processing of the reporting on external auditing and enforcement of the regulation.

Will there be other significant impacts?
No.
Proportionality?
The assessment of this initiative showed that the preferred option does not go beyond what is necessary to achieve the objectives of the initiative. It aligns with what industry had indicated would be appropriate to effectively reduce pellet losses and includes lighter requirements for micro and small companies who had indicated the necessity of this. The preferred option will significantly reduce unintentional microplastic releases, thus generating benefits for the environment, and possibly human health, which outweigh the additional associated costs.
D. Follow up
When will the policy be reviewed?
The overall 30% reduction target for microplastics released into the environment is set for 2030. Progress towards this target will be assessed every two years (2024, 2026, 2028, 2030) in the Zero Pollution monitoring report. Following the 2030 report, a review of the initiative could take place.