

A futureproof Waste Framework Directive

Messages from the workshop on 14 June 2024





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1 WHY A WORKSHOP ON A FUTUREPROOF WASTE FRAMEWORK DIRECTIVE WAS NEEDED

In the European Green Deal and the 2020 Circular Economy Action Plan, the European Commission announced its ambitions regarding the revision of the Waste Framework Directive. Targets would be set and measures taken to tackle overall waste generation. Separate collection would be improved to promote safer and cleaner waste streams. Steps would be taken to ensure high quality recycling and ensure cleaner secondary materials for businesses. The instrument of extended producer responsibility (EPR) would be further expanded and strengthened. Action was also announced for specific waste streams, mostly for food waste, textiles and waste oils. The review clauses of the Waste Framework Directive foresee that, by the end of 2024, measures and targets regarding re-use and prevention would be considered. Also, setting preparing for re-use and recycling targets would be considered for construction and demolition waste and its materialspecific fractions, commercial waste, non-hazardous industrial waste and other waste streams, as well as preparing for re-use targets for municipal waste and recycling targets for municipal biowaste. In its 2023 Work Programme, the European Commission announced that in 2023, it would "take action to reduce waste and the environmental impact of waste, with a focus on food and textile waste". To this end, a targeted revision of the Waste Framework Directive was put forward in July 2023. Even though action on food and textile waste was very much needed and welcomed, narrowing down the scope to a targeted revision was a missed opportunity for the Waste Framework Directive to contribute to the ambitions laid down in the European Green Deal and the 2020 Circular Economy Action Plan. The European Environment Agency (EEA) showed in its 2023 Progress Report on the 8th Environment Action Plan that the European Union (EU) is not on track to meet its 2030 ambition regarding a regenerative circular economy. According to the EEA, it is unlikely (yet still uncertain) that the EU will significantly reduce the total amount of waste generated by 2030. Thus, more is needed regarding prevention, high-quality secondary raw materials and safeguarding waste management ambitions and targets. Therefore, OVAM decided to organize under the Belgian Presidency of the Council of the European Union a dedicated workshop on a future proof Waste Framework Directive.

2 BACKGROUND

OVAM explicitly chose to organize an in person workshop to create a trusted environment that would stimulate a fruitful exchange of thoughts. The workshop consisted of a plenary session with keynote speeches and a panel discussion to inspire participants for the afternoon's breakout sessions. For each

breakout session, <u>preparatory documents</u> were shared with participants to enable them to come prepared and to structure discussions.

2.1 PROGRAMME

9:00 - 9:10	Welcome by hosting City, Bart Somers, Mayor of Mechelen
9:10 - 9:15	Video message Zuhal Demir , Minister of Flanders for Justice and Enforcement,
	Environment, Energy and Tourism
9:15 - 9:35	Setting the scene, Werner Annaert , CEO OVAM
9:35 - 10:30	Plenary session with keynote speeches:
	- Karolina D'Cunha, DG Environment, European Commission
	- Almut Reichel, European Environment Agency
	- Q&A
11:00 - 12:00	Panel discussion about key challenges for EU waste policy
	Stéphane Arditi, EEB – Carin Lidman, CEMR – Andreas Brieger, SMEUnited
	Moderator: Victor Dries, OVAM
13:30 - 14:45	Breakout sessions №1
	1) Prevention: making tangible what is not there
	Moderator: Sofie Bouteligier, OVAM
	2) Waste hierarchy: in need of revival?
	Co-moderators: Elizabeth Cazaerck and Tom Creten, OVAM
	3) Waste/non-waste: how to address challenges?
	Co-moderators: Victor Dries and Wouter Dujardin, OVAM
15:15 - 16:30	Breakout sessions №2
	1) Biowaste collection: learning from experiences
	Co-moderators: Elizabeth Cazaerck and Gil Gram, OVAM
	2) Substances of concern in material loops: towards safe recycling
	Moderator: Christof Delatter, OVAM
	3) What place for waste incineration in a circular economy?

Moderator: Victor Dries, OVAM

2.2 PARTICIPANTS

OVAM welcomed participants from the European Commission, the Joint Research Centre, the European Parliament, the European Environment Agency, the Council of the European Union, 18 Member States (AT, BE, BG, DK, EE, ES, FI, FR, HR, HU, IE, LT, LV, MT, NL, PL, SE, SI) and 16 associations and sector federations representing civil society, business and local governments (ACR+, Cefic, CEMR, CEWEP, ECN, Ecopreneur, European bioplastics, EEB, Euric, FEAD, ESWET, MWE, New European Reuse Alliance, RREUSE, SMEUnited, ZWE).

3 SUMMARY

3.1 PLENARY SESSION

The workshop started with a plenary session with welcoming words from Bart Somers, Mayor of the hosting City of Mechelen and from Zuhal Demir, Minister of Flanders for Justice and Enforcement, Environment, Energy and Tourism. Mayor Somers emphasized that recycling is a must, but avoiding waste is better. He also showcased how cities can be laboratories for new ideas and local governments can be vital to support circular business models. In her video message, Minister Demir shed light on the achievements of the Government of Flanders and acknowledged the relevance of exchange and cooperation to address environmental challenges.



"Regarding the creation of a circular economy, it is time to deliver results, the time of supportive words and good intentions was necessary but is no longer sufficient."

Werner Annaert, OVAM

In his keynote speech, Werner Annaert, CEO of OVAM highlighted OVAM's long standing experience in waste policies, stressed the importance of EU waste policy with the Waste Framework Directive as its cornerstone and reflected on the challenges that lie ahead and merit a holistic approach. Recent reports show that we have to speed up our efforts, that it is essential to create safe material loops and that the Waste Framework Directive should contribute to a more overarching long-term vision that sets EU targets regarding the

reduction of the material footprint of our consumption. With an <u>EU Resources Law</u>, the EU could move things forward and go beyond experiments and voluntary approaches.

Karolina D'Cunha from DG Environment of the European Commission presented the last 5 years' accomplishments with regards to waste policy and circular economy. She stressed that we cannot achieve climate goals without becoming more circular and that reducing dependency on materials would contribute to our resilience and competitiveness, yet progress has been slow. She also reflected upon opportunities to



further improve the implementation of the Waste Framework Directive, as 18 Member States out of 27 are not on track to achieve waste management targets that are set by EU legislation. From the Waste Early Warning Report we can learn that it is urgent to act on better biowaste collection and better separate collection in general, that landfill and incineration should be disincentivized and that there is still a lot of work regarding the establishment of basic waste infrastructure. With the 2020 Circular Economy Action Plan, the

"Turning waste into resources is key to boost the EU's competitiveness and resilience, while achieving the circular economy and climate neutrality."

Karolina D'Cunha, DG ENV European Commission

European Commission has taken several initiatives to move forward, including setting direct requirements on economic operators through the use of regulations. As regards the next term, what will be done depends on the next European Commission. However, recent high-level reports, such as the <u>Letta report</u>, show continued political support for the transition to a Circular Economy. Selected legislative proposals might be possible, but foremost stronger implementation is needed, to narrow the gap.



"Considering the inherent impact of resource extraction and processing, and the impossibility of 100% circularity, it is crucial to prioritize the reduction of resource use."

Almut Reichel,

European Environment Agency

Almut Reichel from the European Environment Agency (EEA) stressed that EEA studies and other recent analyses¹ point out that we are not on track when it comes to the transition to a circular economy nor are we on track to reduce the generation of waste. The circular use of materials has not much increased over the past years. At the same time, it is clear that the extraction of resources is a main contributor to the triple

planetary crisis and that recycling alone will not get us where we need to be. We need to reduce the materials we feed the economy with. Accelerating the circular transition can happen before use (circular design, circular procurement, taxing, limiting unnecessary demand), during use (longer product lifespans through repair, reuse, remanufacturing), and after use (high quality recycling, establishing a secondary raw materials market and EPR schemes). Quantified and binding targets and awareness raising are seen as

key to making progress. As 100% circularity is not possible and as we are beyond planetary boundaries today, we should prioritize the reduction of resource use. To do that, we need to maximize the utility of existing products, reduce our material intake, have high quality secondary materials and have a global framework, as we cannot do it alone.

During a panel discussion, Stéphane Arditi from the European Environmental Bureau, Andreas Brieger from SMEUnited and Carin Lidman from the Council of European Municipalities and Regions brought the insights from civil society, business and local governments regarding the challenges and opportunities to further strengthen the Waste Framework Directive and EU policies on waste, sustainable management of resources and circularity. A plea was made to expand the scope of the Waste Framework Directive to cover also industrial and commercial waste, to address 36% of all waste, instead of only 10%. The need for a just transition was highlighted. When developing new measures and obligations, they should be designed in such a way that SMEs can implement them. Also from a local governments' perspective, the implementation

¹EEA. 2024. Accelerating the circular economy in Europe. State and Outlook 2024. EEA. 2024. The destruction of returned and unsold textiles in Europe's circular economy. UNEP International Resource Panel. 2024. Global Resources Outlook 2024. EEA. 2023. How far is Europe from reaching its ambition to double the circular use of materials. EEA. 2024. Management of used and waste textiles in Europe's circular economy.

of the Waste Framework Directive is challenging, especially when it comes to prevention and re-use. Sustainable choices should become the most logical, convenient and affordable choices for both citizens and businesses and there is a responsibility for producers about how much and what they place on the market. Making repair affordable and scaling up circular business models so that they are competitive were two concrete solutions put forward to enable citizens and businesses to contribute to waste prevention. A

combination of on the one hand more harmonization at EU level to give the right market signals, and, on the other hand more cooperation between the local level and small and medium-sized local businesses to allow consumers to access circular solutions, was seen as a way forward.

"Waste management is just one aspect of the circular economy and resource management, that's why we need an overall resource reduction target. To unleash the full benefits of waste management, we must broaden our approach beyond municipal waste that represents only 10% of our EU waste. New measures should include setting prevention targets to eliminate waste from our economy and implementing much stronger economic incentives to promote circular investments and waste-saving business models.

Stéphane Arditi (middle), European Environmental Bureau



3.2 BREAKOUT SESSIONS

3.2.1 Prevention: making tangible what is not there

The breakout session on prevention was introduced by framing the expected future: in a business-as-usual scenario, production and consumption levels will go up, resource extraction and use will increase, and so will waste generation. Although waste prevention is the highest ladder of the waste hierarchy, it seems to be the most difficult one to enforce. The discussion was structured along five questions regarding the usefulness of targets, mandatory prevention measures, the role of extended producer responsibility (EPR)

for prevention, rebound effects of prevention measures and other issues to be addressed to further stimulate prevention.

Opinions were divided regarding the usefulness of setting targets. For some, targets enable to put a topic high on the political agenda and thus foster action. For others, having 18 Member States not on track for existing waste management targets proves the limit of this instrument. If targets are to be set, allowing derogations would undermine the target. Also waste stream or product-specific targets seemed most relevant for several participants. However, a plea was also made for more encompassing, overarching targets embedded in a Circular Economy Act, Materials Directive or Resources Law and for a target for municipal waste per capita, excluding biowaste, in the Waste Framework Directive. Some would like to extend the scope of the Waste Framework Directive to industrial and commercial waste, thus also setting a prevention target for this fraction. Further, it was stressed that neglected waste streams should also be addressed, not only the ones with high value for the economy.

From the discussion on targets it became clear that the achievement of the targets depends on the measures put in place by the Member State. At the same time, little effectiveness evaluations of prevention measures are available, resulting in a knowledge gap about what works and what does not work. Some stressed the importance of assessing effectiveness, whilst others would like to refrain from too much reporting and monitoring burden. It was mentioned that, in the future, smart systems could help to use the same reported data for several purposes, and, as such, lower the burden.

Waste prevention does not stand on its own. The material footprint of our consumption should also be lowered to contribute not only to the waste but also to the climate agenda. Product policy can significantly contribute to prevention by extending products' life-time, increase repairability and making maintenance more easy. EPR, even though mainly used for covering waste management costs, was initially intended to also influence better design and therefore prevention. Ecomodulation, linked to ecodesign criteria and circular business models, could help advance the role of EPR in prevention. Specific EPR provisions, such as mandatory budgets for prevention, re-use and repair, could serve the same goal.

Shifting and rebound effects of prevention measures were also discussed, again showing the need for an overarching vision on where we want to go in terms of resources management and how this interacts with waste prevention. Economic incentives for both consumers and businesses were identified as key to stimulate waste prevention alongside education and skill development. Education and repeated awareness-raising concerning care, maintenance and life-time extension (repair, share, hire...) for different target groups

were mentioned as crucial. Waste prevention should become the easy, logic, convenient and affordable choice and an attitude in every stage of our life and needs.

3.2.2 Waste hierarchy: in need of revival?

By classifying treatment options based on their environmental impacts, the waste hierarchy is a pillar of the EU and its Member States' waste management policies. Cemented in the Waste Framework Directive since 2008, it remains more than ever relevant to minimize waste and ensure that materials embedded in end-of-life products are channeled back into circular value chains. Yet the world has changed since 2008. Therefore, this breakout session discussed whether the waste hierarchy is in need of refinement and was centered around two statements that provoked an interesting discussion among the participants:

- New (r)evolutions force us to rethink the waste hierarchy
- It is not the waste hierarchy but its implementation that is in need of revival

As for the first statement, most participants agreed that the waste hierarchy is still strongly relevant. Although new evolutions and technologies should be taken into account, this should not necessarily mean that there is a need to rethink the waste hierarchy. Some type of granularity (acknowledging grey zones) could be useful and it could perhaps make sense to make explicit the position of certain new technologies and business concepts (e.g. chemical recycling or Product-as-a-Service). Yet, participants also pinpointed that the current simplicity of the waste hierarchy is its strong suit and we could already achieve a lot by improving definitions. A more fundamental thought was that we actually need a Resource Framework Directive or even a Products, Materials and Resources Directive rather than just a Waste Framework Directive, to bridge the gap between waste and product policy and make the link between waste and resource consumption more evident and tangible in policy. This would enable a more holistic approach.

As for the second statement, there was unanimous support for a better implementation of the existing waste hierarchy in legislation and in practice. The waste hierarchy is a key provision of the Waste Framework Directive, but especially the upper tiers are not always well-embedded in Member States' waste management policies or strongly addressed in existing EU legislation. There is a need to start effectively applying the waste hierarchy. Participants mentioned for instance the lack of prevention targets compared to recycling targets. The need for full producer/polluter responsibility and ecomodulation that also incorporates prevention was raised because today, the environmental cost is not internalized in products. Additionally, more incentives for investments in re-use infrastructure are needed. Furthermore, participants indicated that data and monitoring, guidelines, targets and enforcement would be necessary to shift the focus to the upper tiers of the waste hierarchy.

3.2.3 Waste/non-waste: how to address challenges?

Whether certain waste streams receive the end-of-waste label or not, has significant implications, including on potential exports, monitoring of processing, administrative burdens, and more. The EU has established specific end-of-waste criteria for some waste materials. However, for most waste materials, the holder needs to prove conformity with general end-of-waste criteria according to a process and interpretation that differs in each Member State. This breakout session aimed to provide solutions to address these issues and started with a recap of the existing EU legislation regarding end-of-waste. The discussion was then structured in two parts. The first part focused on the challenge that companies are using end-of-waste status to evade the export bans of the EU and import bans of third countries for certain types of waste materials. The second discussion was focused on how cooperation between Member States could help move forward national end-of-waste criteria for specific waste materials.

With regard to the challenge of evading export bans outside the EU and import bans of third countries, most participants supported the statement that the confirmation of the country of destination on the end-of-waste status is required even if a material is considered to be end-of-waste in a Member State. The stricter interpretation applies. Most participants agreed that when the competent authority of the receiving country did not give an answer within a limited time period, this should be regarded as "no confirmation". The related transport should then happen in line with the provisions of the Waste Shipment Regulation.

Within the EU, mutual recognition between Member States (as suggested in the Letta report) could be interesting, but today there is too little knowledge about and confidence in the quality of the decision by other Member States. End-of-waste criteria at EU level allow for free movement of resources that are not considered to be waste anymore, but the only materials for which EU end-of-waste criteria are available are metal scrap, glass cullet and fertilizers. Developing new end-of-waste criteria and embedding them in EU legislation would be the way forward, but has the disadvantage that the process of developing and negotiating them takes a lot of time.

All participants agreed that more cooperation between Member States is the solution to move faster towards national end-of-waste criteria for additional interesting resources. Exchange of information on those waste materials, for which Member States would like to develop end-of-waste criteria, can help to advance together, use scarce resources in a more efficient way and create a common basis. Also, exchange of best practices between Member States could help to develop and adopt EU end-of-waste criteria for priority waste materials at a faster pace. OVAM has made a first draft of an overview table of existing end-of-waste criteria in different Member States based on readily available information. All participants

supported the idea to further complete this overview and add contact details and information about endof-waste criteria that Member States are planning to develop.

3.2.4 Biowaste collection: learning from experiences

As of January 2023, all EU Member States are required to separately collect bio-waste. Collecting bio-waste poses numerous practical challenges. There is no one-size-fits-all solution within the EU. As we learned from the Waste Early Warning Report, and repeated by Karolina D'Cunha in the plenary session of this event, better implementation of separate biowaste collection is needed. Therefore, the aim of this breakout session was to discuss best practices, existing barriers and recommendations for improving bio-waste collection in EU Member States.

To set the scene, Catalonia presented its Landfill and Incineration Tax which has proven to be a very effective instrument in stimulating the implementation of separate collection of biowaste. Catalonia implemented a fair tax system that focuses on both quantity and quality of biowaste collection. Thanks to this system separate collected municipal solid waste increased from 1.4% to 45.4% over the last 30 years. As for the quality, 7.5% of impurities in the collected biowaste (mostly plastics) were noted in 2023. Even though Catalonia can show an impressive progress and good results, some important challenges for the years to come were highlighted. For instance, it will be key to advance in "efficient" separate collection systems in large cities and in municipalities with high density in order to achieve the EU targets. Furthermore, a fair tax, such as Pay-as-you-throw, should be implemented by all municipalities. Focus should remain on the quality of the biowaste collected, achieving less than 5% of impurities. Additionally, the treatment capacity will need to increase within the coming 10 years, and attention should be given in that respect to the upcoming presence of biodegradable/compostable packaging.

Next, the ENT foundation presented the LIFE BIOBEST project. The project aims to promote greater efficiency in bio-waste management and break down barriers. A policy brief and guidelines were already published. Prior to this breakout, participants were asked to fill in a survey to identify barriers they encounter in their region/Member State. The ENT foundation presented the outcome of this survey. Legal barriers that were defined included EU and national targets not being cascaded to regional or municipal governments and the lack of effectively binding policy or enforcement. Economic barriers that were highlighted were the lack of financial incentives (e.g. Pay-as-you-throw), collection of biowaste being more expensive than the collection of residual waste, and insufficient resources being available to set up separate collection on the whole territory. Lastly, as for organizational barriers, participants indicated the lack of effective communication and educational campaigns and the challenges that come with high population density versus rural dispersion. In the last phase of the breakout session, participants filled in a new survey in real time to

identify recommendations to conquer the barriers. Much support was given to organizational recommendations like creating or improving strategic bio-waste implementation plans accompanied by sound financial strategies and increasing financing for continuous communication. Furthermore, promoting effective and individualized collection models (mainly door-to-door collection schemes) was identified as being important. As for the technical recommendations, there was broad support for further investigating how to set up separate collection of bio-waste for high density apartment buildings, for providing guidance and materials for at-home separation, for ensuring that planned or existing treatment infrastructure matches the need (taking into account where biowaste is generated and captured) and for promoting the certification of the input quality, recycling process and resulting compost/digestate. When it comes to economic recommendations, it was asked to re-evaluate the effectiveness of current Member States' taxes regarding incineration and landfill as it is expected that increasing these taxes would rebalance the economic viability of bio-waste management, as demonstrated by the Catalonia best practice presentation. As for legal recommendations, it was indicated that policy measures should include biowaste targets for separate collection, for the quality of biowaste collected and for the quantity of biowaste in residual waste.

To sum up, the recommendations address the regional level, the Member State level and the EU level. Work is needed to improve and close the gaps in the regulatory framework, include quantity and quality aspects to the current separate collection obligation, translate best practices into legislation, create guidelines, increase effective communication and awareness and monitor performance to allow the needed enforcement.

3.2.5 Substances of concern in material loops: towards safe recycling

The increasing number and diversity of hazardous substances used in products necessitates a reflection on how we can ensure the safety of secondary raw materials for future use. On the one hand, technological innovation might enable us to safely recycle more products containing hazardous substances. A strict ban on the presence of hazardous substances in recycled materials can lead to the need to partially or fully destroy waste streams that are currently being recycled. Substances of concern will keep interfering with recycling as long as they are not phased out in the production of new products. This breakout session aimed to identify issues that we would need to address and more general principles that we would like to include in the Waste Framework Directive to ensure safe recycling.

The following issues to tackle were identified by participants in this breakout session:

The database for information on Substances of Concern In articles as such or in complex objects (Products) (SCIP database) faces criticism for its impracticality for waste operators due to its complexity. It is designed

for producers, but it fails to meet the waste sector's needs. Transparency is vital in waste management to ensure recycled content matches the quality of virgin materials. Simplifying information transfer and aggregating data are crucial steps.

Producers of articles often lack awareness of the presence of substances of concern (SoC) in their products, such as PFAS. A simpler system indicating SoC presence is necessary. The dynamic nature of SoC regulations necessitates a shift from bulk processes to focusing on individual products. Producers must understand the entire value chain. Responsibility for managing SoC and the costs that this entails should lie with those who put them on the market.

More substances beyond Substances of Very High Concern (SVHC) should be registered in a future-proof database. Artificial Intelligence (AI), Radio-frequency Identification (RFID), and industrial automation will be key in future waste processing, providing clear SoC indicators. Producers should bear more responsibility for SoC. They should provide the necessary information about used substances, develop and provide technologies for the detection and safe removal of such substances and finance the necessary actions within the waste management industry.

There was consensus about the need for recycled materials reaching the same standards as virgin materials to build confidence in recycled products. Ensuring high-quality recyclates, finding alternatives to SoC, and avoiding new SoC in the market are crucial. A phased approach to strict standards will support the circular economy while addressing legacy substances and pollution issues.

Enforcement on products imported from outside the EU is crucial not only for waste processors but also to prevent unfair competition for EU producers. Currently, the likelihood of penalties is too low, allowing non-compliance to persist. The online market adds to the complexity of enforcement. The EU needs to strengthen its efforts in this area and invest in more inspection to prevent that non-compliant products enter the EU-market. Another issue is that European companies can still produce and export substances banned in the EU, which then re-enter the market through imported products.

3.2.6 What place for waste incineration in a circular economy?

By adhering to the waste hierarchy and diverting waste away from landfills, waste incineration has contributed to the reduction of waste-related greenhouse gas emissions within the EU. Yet, within the broader aim of carbon neutrality and a circular economy, its role demands careful examination. While incineration plants can recover energy from waste and ease landfill pressures, there are concerns that over-reliance on incineration may hinder waste reduction and recycling goals fundamental to a circular economy.

This breakout session centered around the question: What role remains for waste incineration within a circular economy?

The session started with three presentations to set the scene.

Ive Vanderreydt from VITO started with an overview of the state of play in Europe. In most Member States waste generation has increased between 2004 and 2022. In some Member States waste generation even doubled in this period. Even though recycling has become more important as a treatment technology, landfilling and incineration levels remain high: on average, 26% of all municipal waste was incinerated (with energy recovery) and 23% was still landfilled in 2021. Yet, the differences between Member States are very big: while in 8 Member States landfilling accounts for less than 5% of waste treatment, more than 50% of all municipal waste is still landfilled in 10 Member States. Ive also presented the necessary shift from waste management in a linear economy to materials stocks management in a circular economy (with strong focus on product design, repair and manufacturing).

Ella Stengler from the Confederation of European Waste-to-Energy Plants (CEWEP) presented her view on why we don't recycle 100%. Her message emphasized the necessity of waste incineration for treating waste streams that are contaminated, contain infectious materials or substances of concern, or have mixed components, as well as for recovering energy from materials that have become too degraded after multiple recycling cycles. She also advocated that the integration of Waste-to-Energy and Carbon Capture and Storage can enable waste to be a net zero or even net negative emissions energy source.

Janek Vähk from Zero Waste Europe advocated that material use is responsible for over 55% of global greenhouse gas emissions and that current policies are insufficient to reach the EU climate goals. He cautioned that incineration has higher externalities compared to landfilling and that there is a large potential for improved waste management through advances in sorting and biological treatment technologies and by combining landfilling with methane capture with modern pre-treatment techniques. He warned that over-commitment to incineration can lock in excess capacity and deter investment in more sustainable waste management solutions.

The main outcomes of the discussions are as follows: To move away from landfilling, the focus of Member States should first and foremost be on maximizing prevention and recycling, keeping in mind three criteria: environmental impact, technological availability and economic viability. Member States should not foresee incineration capacity for all mixed residual waste existing today, but should prioritize investments in recycling infrastructure. Bringing down the amount of waste that would be in need of incineration could happen through measures such as: material use efficiency/product policies; Extended Producer

Responsibility schemes; door-to-door separate collection of recyclable waste streams; Pay-As-You-Throw schemes, whereby citizens/companies pay more when they produce more waste; deposit return systems; mixed waste sorting.

A 100% recycling rate is unlikely, but progress can still be made by ecodesign. As such, Member States should have a certain amount of incineration capacity as a safe sink for (organic) pollutants and recycling residues, whereby attention must be paid to potential emissions. Member States should have a strict capacity planning for incineration, with permits limited in scope and time, as overcapacity creates a lock-in effect which can inhibit recycling efforts. A reduction target for incinerated waste, as for landfilling, is recommended. Facilities should be constructed in an optimal location, in proximity to waste supplies and to potential end users of the generated energy. Member States could cooperate, whereby oversupplies of combustible waste can be treated in other Member States with the most appropriate and environmentally performant facilities. Optimizing the possibility and safety of shipments of waste across Member States is necessary. However, overdependence on other Member States for the treatment of waste should be avoided.

4 KEY MESSAGES FOR THE EUROPEAN COMMISSION

4.1 PREVENTION

- Targets can be useful and trigger commitment and action when linked to knowledge on which measures are effective.
- Targets and action plans are most effective when specific for a waste stream or product groups with the same needs and approach.
- Waste prevention and reducing our material footprint are interlinked, as are the different legal instruments that address sustainable production and consumption and waste prevention.
- There is room to improve EPR's contribution to waste prevention, including by mandatory budgets for prevention, re-use and repair and by education and awareness-raising on sustainable use of materials and products.
- Both consumers and businesses need economic incentives to contribute to waste prevention.

4.2 WASTE HIERARCHY

- We need to take into account new (r)evolutions and technologies in waste treatment and policy insights on resource use. This could be done by refining the waste hierarchy, but should certainly also be reflected in more clear definitions, targets and obligations elsewhere in the Waste Framework Directive.
- We need a stronger framework on resource use. Waste policy is not enough. We need to bridge for instance the gap between waste and product policy and make the link between waste and resource consumption more evident and tangible in policy, with attention for an holistic approach.
- We finally need to start implementing the waste hierarchy in the way it was intended and put more focus on prevention strategies, both in the Waste Framework Directive itself, in other legislation and in the implementation by Member States. To achieve this, data and monitoring, ecomodulation, guidelines, targets and enforcement must be further explored.

4.3 WASTE/NON-WASTE

- An EU platform is needed where information on existing and planned End-of-Waste criteria (both at Member State and at EU level) is gathered and is publicly accessible.
- Mutual recognition of End-of-Waste decisions of Member States needs to be enabled, for instance by developing a list of questions that need to be answered for each of the general End-of-Waste criteria of articles 5 (By-products) and 6 (End-of- Waste status) of the Waste Framework Directive. This would bring more clarity for Member States on how to check whether a material complies with the general End-of-Waste criteria and could provide an intermediate approach in attendance of End-of-Waste criteria at EU level for those materials.

4.4 BIOWASTE COLLECTION

Work is needed to close the gaps in the regulatory framework. Best practices should be translated
into or promoted in EU legislation. Furthermore, besides the existing obligation for biowaste
collection, to enable proper biowaste management, policy measures need to include biowaste
targets for separate collection, for the quality of biowaste collected and for the quantity of biowaste
in residual waste.

- Best practices on biowaste management should be shared with and easily accessible to other
 Member States.
- There is a need for guidelines for Member States on how to set up successfully separate biowaste collection.
- More support is needed for effective communication and awareness raising.

4.5 SUBSTANCES OF CONCERN IN MATERIAL LOOPS

- Information about Substances of Concern (SoC) (from the SCIP database and future digital product passport) needs to be made accessible and usable for the waste processing sector.
- Producers have a significant responsibility in this regard, not only financially, but also in terms of providing information and detecting SoC.
- Enforcing SoC regulations on products entering the EU market from outside is key.

4.6 WASTE INCINERATION IN A CIRCULAR ECONOMY

- Facilitating the exchange of information and lessons learned between Member States is recommended to help Member States with high landfill rates leapfrogging to the most optimal scenario by using and adapting existing expertise.
- A reduction target for incinerated waste, as for landfilling, is needed.
- Member States can cooperate on residual waste treatment. This can happen when a Member State's
 incineration capacity is insufficient and the excess combustible waste is being processed in another
 Member State equipped with the most appropriate and environmentally efficient facilities. To this
 end, safe shipments across Member States are key. However, overdependence on other Member
 States for the treatment of waste should be avoided.