Waste Framework Directive review

Why we need waste prevention targets now

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Contents

This paper shows the lack of effectiveness of existing waste prevention policies. We need European level quantitative waste prevention targets, as well as effective national measures. This joint position paper also highlights manufacturers' role in reducing resource use and the size of the circular economy loop. Lastly, it offers some clarity on the differences between waste prevention and recycling, emphasising that recycling is lower in the European waste hierarchy than prevention.

Recommendations for the Waste Framework Directive review

The revision of the Waste Framework Directive (WFD) is key to shape and implement effective waste prevention plans, which, at the moment, are not properly achieving their objectives. A key aspect of waste prevention plans are specific waste prevention targets, which represent quantitative objectives and are the result of a set of waste prevention measures. In fact, waste prevention targets effectiveness relies on upstream resources reduction targets[1].

So far, EU member states' waste prevention plans do not adequately implement quantitative targets. On the one hand, the definition of waste prevention is confusing, as it is often associated with waste management measures – such as recycling – and not linked to reduction of primary resource consumption. On the other hand, many waste prevention measures focus on consumer initiatives, especially through awareness raising and campaigns. While these soft measures are useful, the priority should be on stronger and more binding measures. Moreover, targets should also focus on ensuring manufacturers are held accountable for placing an overwhelming flow of materials, goods, and substances on the market.

We are calling for reviewing the WFD by:

- Introducing overarching EU waste prevention targets, supported by specific waste prevention targets per key waste stream.
- Stressing the role of manufacturers in the upstream level and encouraging regulatory instruments to introduce mandatory reduction of resource use on manufacturers.
- When implementing Extended Producer Responsibility (EPR) schemes, upstream phases of the value chain beyond end-of-life must be addressed. This means introducing tools for prevention, repair, and reuse solutions, for funding the transition to circularity, as well as for revising the role of Producer Responsibility Organisations (PROs) within the EPR schemes.
- Minimum requirements[2] should also apply if EPR schemes are extended to other waste streams to implement effective waste prevention policies in the often overlooked and unregulated waste streams, such as textiles.

[1] European Environmental Bureau (2022). Environmental impact of waste management – revision of the Waste Framework Directive (WFD).
[2] RREUSE (2020). EPR and the role of social economy re-use operators: Implementing a socially inclusive waste hierarchy.

Why waste prevention is important

Waste production is an enormous environmental problem. In fact, solid waste causes air and water pollution, enhances GHG emissions, produces hazardous gases and leachates, massive land use and exposure to dangerous chemicals.[3] Despite efforts to decrease waste production, the quantity of waste has increased: between 2010 and 2018, the total amount of generated waste increased by 5% in Europe, reaching the amount of 114 million tonnes[4]. This means that the European Union is not on track to meet its policy goal of reducing waste generation.

To effectively curb waste production, **waste prevention is broadly recognised as a priority tool,** rather than recycling or other waste management tools. According to the EU Waste Framework Directive[5], waste prevention is defined as "measures taken before a substance, material or product has become waste, that reduce:

a) the quantity of waste, including through the reuse of products or the extension of the life span of products;

b) the adverse impacts of the generated waste on the environment and human health; or

c) the content of hazardous substances in materials and products."

Waste prevention can thus either be quantitative or qualitative. The former can be achieved by reducing quantitative production and the amounts of waste, or prolonging the lifespan of a product, delaying the moment when it becomes waste. Qualitative waste prevention, in contrast, means – reducing the content of harmful substances in materials and products[6] or preventing qualitative waste production of hazardous substances. Annex IV of the WFD gives examples of waste prevention measures[7].

It is extremely important to simultaneously tackle waste prevention both in terms of quantity and quality, This will allow to more effectively reduce the negative impact of waste on the environment and human health. Targeting the reduction of hazardous substances in materials and products is also the best proven approach to drive innovation towards a green industrial transformation. Moreover, this will make the EU a global reference for safety and sustainability targets[8]. Such reduction of hazardous substances would also positively impact the economic viability of end-of-life treatment due to lower costs at the recycling stage.

Furthermore, waste prevention can be implemented at all supply chain levels. It should nevertheless clearly be differentiated from waste management policies. In the EU, member states are required to implement the WFD prevention measures within their waste prevention programmes in order to "break the link between economic growth and the environmental impacts associated with the generation of waste". However, **the implementation of waste prevention is hindered by the absence of quantitative, horizontal reduction targets** in national waste prevention plans.

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3 Mutasem El-Fadel, Angelos N. Findikakis, James O. Leckie (1997). Environmental Impacts of Solid Waste Landfilling.

4 European Environmental Agency (2021). Waste generation and decoupling in Europe.

5 European Union (2008). Directive 2008/98/EC on waste and repealing certain Directives, article 3.12.

6 European Commission (2012). Guidance on the interpretation of key provision of Directive 2008/98/EC on waste.

7 Waste prevention can easily be interchanged with waste minimisation. However, waste minimisation encompasses not only waste prevention per se, but also other practices as re-use, recycling, incineration (energy recovery) and all practices aimed at reducing as much as possible waste disposal.

8 Joint Research Centre (2022). Technical Report: Safe and sustainable by design chemicals and materials.

In addition, there can be a **confusion between waste prevention and recycling**: recycling is about recovery operations that reprocess waste materials "into products, materials or substances whether for the original or other purposes". Hence, it is lower in the European waste hierarchy than prevention.

Lack of effectiveness of national Waste Prevention Plans

In 2018, Johansson et al.[9] evaluated Waste Prevention Plans (WPP) both at the EU level and in Sweden. Firstly, they highlighted **the importance of having quantitative prevention targets**. In fact, without any quantitative and operationalisable targets, the scope of waste prevention policies can easily mislead to handling already existing waste, rather than reducing it in the first place. Currently, waste prevention policies are a mixture of soft instruments (more socially acceptable, but less effective), hard measures (more drastic and effective, but less digestible) and informative measures, aimed at spreading awareness and communicating about waste prevention.

According to the analysis, **51% of waste prevention plans of member states are not consistent with the EU definition of waste prevention**. Instead, their policies' scope is targeted at managing the already existing waste (e. g. redirecting flows of waste). Alternatively, only 49% consist of direct measures mentioning reducing waste. **The only waste streams with precise reduction targets are food waste and household waste** (see further national WPP examples in annex I).

The most used measures focus on promotion, information, and investigation, aiming to raise awareness, increase knowledge, and identify key areas to work on. These measures belong to soft initiatives, which are not legally binding, voluntary and hardly invasive. Examples of such soft measures are awareness campaigns or identification measures. As a result, many waste prevention measures aim at making sure that a broad audience of citizens grasp the role of waste prevention.

Yet, stricter measures, such as economic or regulatory tools, are hardly present in waste prevention plans. **While soft tools can contribute to improving citizens' attitudes towards environmental issues, their effectiveness in reducing waste production numbers is still unclear.**

Another key aspect is that **many waste prevention measures address the end phases of the supply chain - such as preparing for reuse and recycling - rather than upper levels of the product life cycle**. Johansson et. al. argue that these measures do not address the core cause of waste increasing production, which is consumption. Making waste management more efficient, encouraging reuse and recycling are per se valuable practices which are embedded in circularity. However, **making waste management more efficient overlooks the role of economic growth within waste production. Hence,** the **lack of action on consumption and production will inevitably hinder the efficiency of these measures.**

In addition, Johansson et al. highlight that **waste prevention plans** frequently tackle household and food waste, which are **smaller waste streams** compared to, for example, construction and demolition waste.

Waste prevention plans resemble conventional waste management plans, with higher efficiency in waste management and handling, and therefore only partial effectiveness. According to the authors, the

[9] Johansson, N., & Corvellec, H. (2018). Waste policies gone soft: An analysis of European and Swedish waste prevention plans.

role of upstream stakeholders should be discussed further (e. g. the industries producing goods that will eventually become waste). **Shifting the focus from household waste to goods production and consumption would eventually make producers accountable for the unsustainable volume of goods that they continuously place on the market.**

Why we need quantitative waste prevention targets

The WFD has established a list of qualitative waste prevention measures aimed to reduce waste production. It has also set quantitative targets that should support preparing for reuse activities and high-quality recycling[10] They are:

- 55% preparation for reuse and recycling of household waste by 2025, 60% by 2030 and 65% by 2035;
- 70% preparation for reuse and recycling of construction and demolition waste by 2020 (which unfortunately also encompasses backfilling);
- Stricter methods to quantify progress towards recycling.

However, these targets have a strong focus on recycling, or, in other words, how to manage waste that has already been produced. They do not aim to limit waste production at its source up to a certain ambition level. In fact, they can be fulfilled by recycling measures only, whereas preparation for reuse deserves separate targets to unlock important synergies between the environmental, economic and social spheres[11]. It is estimated that re-using or preparing for reuse could significantly reduce CO_2 emissions, all the while supporting about 200,000 jobs[12]. Data from social enterprises in the reuse sector shows that 70 jobs on average can be created for each 1,000 tonnes collected with a view of being reused[13].

> Considering this gap, **we call on the European Commission to reinforce the ambition of the WFD in terms of waste prevention** with the introduction of quantitative targets on waste prevention.

1. Quantifying waste prevention

While there is no common understanding of waste prevention meaning in national Waste Prevention Plans (WPP), **quantifying waste prevention is not straightforward either**. It is hard to assess what does not exist and even harder to establish a causal link between a certain metric and the effectiveness of a certain policy[14].

10 Directive (EU) 2018/851 amending Directive 2008/98/EC on waste, article 11.

11 OECD/European Commission (2022), Policy brief on making the most of the social economy's contribution to the circular economy, OECD. Local Economic and Employment Development (LEED) Papers, No. 2022/01, OECD Publishing, Paris, https://doi.org/10.1787/e9eea313-en.

12 RREUSE (2018). Position on the updated EU Waste Framework Directive.

13 RREUSE (2021). Job creation in the re-use sector: data insights from social enterprises.

14 Bartl, A. (2014). Moving from recycling to waste prevention: A review of barriers and enables. In Waste Management and Research (Vol. 32, pp. 3–18). SAGE Publications Ltd.

The confusion between waste prevention and recycling can be noticed in several WPP from EU member states. For instance, in Belgium, increasing "the amount and quality of sorting and recycling of construction and demolition waste" is counted as a waste prevention measure for buildings and construction waste. Another example can be found in the Netherlands, where one of the goals of the programme is to "promote high-quality materials to increase efficiency of material consumption, which may lead to waste reduction". Yet another example is in Germany's waste prevention plan, where a 70% reusable target for beverage containers is set as a quantitative target. While these measures and concepts are consistent with circularity, they do not address waste prevention directly.

This mismatch can also be noticed in international standards, e.g. ISO 14021:2016(en) *Environmental labels and declarations — Self-declared environmental claims* provides that "Material recycling is only one of a number of waste-prevention strategies."

This is why it is essential to introduce an **overarching waste prevention target in the European WFD and support it by means of specific waste prevention targets per key waste stream**.

NGO recommendations for such overall EU targets are:

- **Consider an overall EU ambition level of 20% waste prevention target on municipal solid waste (MSW) to be achieved by 2030**, and 30% by 2035[15].
- **Set a municipal residual waste target of 120 kgs per inhabitant by 2030**. This should be revised before 2030 to reflect harmonised MSWS reporting and member states' progress on waste prevention, preparation for reuse and recycling. This target would be calculated prior to waste entering the stabilisation process, or at the point it enters the incinerator furnace[16].

These targets are ambitious but crucial to reduce the size of the EU circular economy circle and keep it within planetary boundaries.

These overall EU waste prevention targets should be broken down into sector-specific waste prevention targets for key waste streams, such as for food and beverages, large and small household appliances, IT and telecommunications equipment, toys, leisure and sports equipment, electrical and electronic equipment, textiles, vehicles, furniture and furnishing[17].

2. Food waste leading by example

Food waste is a promising sector for implementing such a specific waste prevention target in support of an EU-wide one. In fact, the WFD requires the European Commission to assess "the feasibility of establishing a Union-wide food waste reduction target to be met by 2030". **The Commission is currently preparing a food waste reduction target proposal**, in line with the EU Farm to Fork strategy[18]. This is also

15 Zero Waste Europe (2020). The case for an integrated Waste Prevention Framework.
16 Zero Waste Europe (2021). Rethinking the Landfill Target.
17 Zero Waste Europe (2022). Research study on holistic indicators for waste prevention.
18 European Communication (2021). A Farm to Fork Strategy for a fair, healthy and environmentally friendly food system.

pursuant to the EU commitment "to halving per capita food waste at retail and consumer levels by 2030", as per the Sustainable Development Goal (SDG target 12.3)[19].

In addition, several EU member states have already introduced a national quantitative target for food waste (see member states' WPP below).

As per article 9(6) on prevention of waste of the WFD, a **European-wide target on food waste reduction by 2030** is envisaged, alongside targets on other waste streams. It is expected in 2023, within the review of the EU WFD[20].

We believe the following **success factors** of the food waste reduction target can be replicated to other sectors:

- Application to the whole supply chain down to the final consumers.
- Expression in terms of a percentage of the total waste amount in this sector, compared to a baseline year, plus an absolute amount (e.g. in kg per capita per year per member state) – except where the weight is not sufficient to assess comprehensively the environmental, economic and social impacts of specific waste.
- Distribution among member states with mandatory national commitments adapted to national situations, such as higher objectives for countries with higher waste generation in this sector.

How to enhance the role of manufacturers on waste prevention

It is often assumed that the (financial) responsibility for the end-of-life of products automatically incentivises producers to introduce upstream changes (e.g. design for environment, repairability or reusability). However, evaluating the existing EPR schemes has shown that this is not the case[21]. Without sufficient financial incentives, expecting producers to implement systemic changes in, for instance, design and production on a voluntary basis, simply will not work. EPR schemes should be revised to serve as an incentive for better design and go beyond cost coverage. The fees should act as price signals that push producers to adopt systemic changes instead of optimising poor design[22]. This is especially important as EPR schemes are introduced for a growing number of product groups.

We thus need binding targets that push producers to work towards the highest steps of the hierarchy of prevention (fewer products) and reuse (replacing disposables by reusables), which must be supported by mandatory eco-modulation of fees. **EPR needs to start incorporating tools to realise prevention, repair, and reuse solutions,** with the allocation of a percentage of the fees collected to a fund dedicated to

19 Sustainable Development Goal 12. Ensure sustainable consumption and production patterns.

20 European Commission (2021). Inception Impact Assessment: Proposal for a revision of Directive 2008/98/EC on waste – part on food waste reduction target. European Commission's presentation.

21 Utrecht University (2021). White Paper on Pathways for Extended Producer Responsibility on the road to a Circular Economy.

22 Ecologic Institute for EEB, RPa and BFFP (2021). Extended Producer Responsibility and Ecomodulation of Fees.

financing the transition to circularity. EPR fees should also finance improvements in separate collection by ensuring consumers are informed on collection points and that reusable goods do not become waste due to damage occurring during transportation and storage.

Member states need to take the lead in doing so, instead of merely encouraging producers on a voluntary basis. The revised Waste Framework Directive should provide the tools for member states to implement enforceable targets for prevention, reuse, and high-quality recycling. In doing so, the effectiveness of EPR as a tool for resource use prevention will be strengthened.

In addition to setting these targets, **legislation targeting the role of PROs (Producer Responsibility Organisations) within EPR schemes is essential.** The financial and operational responsibility of PROs should be separated from strategic responsibility. PROs can be responsible for the execution of targets and the finances, but not for co-designing the targets and making strategic decisions.

Due to the lack of legislation on the role of PROs, we now see that

- they lobby against environmental policies on behalf of producers on the national and European level;
- in many cases PROs have a monopoly position that sidelines other stakeholders, such as municipalities, even though the current WFD stipulates that member states have to ensure a regular dialogue between relevant stakeholders;
- PROs fund large clean-up campaigns that shift the focus from producer responsibility towards consumer responsibility, and
- governments depend upon PROs for the collection of reliable data, without having the tools to verify the figures.

According to Utrecht University[23], **one of the possible solutions to this undesirable position of PROs within the EPR schemes, is to introduce a so-called circular value chain management organisation that is involved on the strategic level.** They would be responsible for assessments, strategic decision making, and monitoring the transparency of all involved in the EPR scheme. This independent body consists of all (economic) actors involved in the various sectors of the circular economy (e.g. repair, refurbishment, recycling, social economy actors).

This more inclusive way of governance is needed in order for EPR to be an effective instrument within the circular economy. It is especially important given that EPR is likely to be extended to other product streams, such as textiles[24], nappies and menstrual items. The current governance favours the inclusion of big industry actors in the policy-making processes. However,it needs to ensure that smaller businesses, NGOs, municipalities and other circular-economy actors have their interest represented equally, in accordance with Art. 8a of the WFD.

> While the suggestion of Utrecht University is only one of the possible policy options, **we urge the European Commission to include additional regulatory measures on limiting the negative impact that PROs have on environmental legislation in the WFD.**

[23] Vermeulen, W.J.V., C.W. Backes, M.C.J. de Munck, K.Campbell-Johnston, I.M. de Waal, J. Rosales Carreon, M.N. Boeve, (2021) Pathways for Extended Producer Responsibility on the road to a Circular Economy, White paper based on a literature review and the results of a Delphi study, on the experiences with EPR in the Netherlands, Utrecht University, Circular Economy and Society Hub, Utrecht ISBN: 978-90-6266-600-3.

[24] Eunomia for European Environmental Bureau (2022). Driving a Circular Economy for Textiles through EPR.

Annex I: Mapping of waste prevention targets and policies at national and local level

Belgium - Flanders[25]

Flanders has set local targets based on their municipality, without specifying the type of waste they aim to reduce. Targets (table 1) are clustered according to age, income, urbanisation, demographic growth and geographical location. This plan covers the 2016-2020 period, but to reach the targets, it has been prolonged to 2022.

Area	Target (kg / inhabitant)
In the suburbs	122
Rural or urbanized rural municipalities with strong economic growth	125
Urbanized rural municipalities with industrial activity and demographic growth Small agricultural municipalities	129
In rural areas Rural and agricultural municipalities with industrial activity Medium sized cities	139
Significantly rural municipalities with high ageing in the population	144
Highly urbanized municipalities with low incomes Cities and metropolitan municipalities with industrial activity Metropolitan municipalities with tertiary activity	147
Residential suburbia with high income	158
Regional cities	151
Large and regional cities	197
Coastal municipalities	258

Flanders also aims to decouple consumption from waste generation, putting a **cap of 522 kg of waste production per capita by 2022**. They also tackle industrial waste, by setting a target of -15% of industrial waste compared to 2013 levels, in millions of tonnes.

Moreover, Flanders aims to increase the quantity of reused products by raising the quantity of reused goods from 5 kg per inhabitant to 7 kg per inhabitant. This reuse target covers all goods processed

25 OVAM (2016). Implementation plan for household waste and comparable industrial waste-summary OVAM.

through social reuse centres and sold as a second-hand good, and developed in cooperation with the federation of social enterprise Komosie (now Herwin)[26].

Netherlands

The Netherlands have updated their waste prevention plan and have set quantitative targets with the aim of implementing an efficient material consumption and mitigate their environmental impact. These targets consist of:

- A cap of 61 million tonnes for the total waste volume by 2023 and 63 million tonnes by 2029;
- As an intermediate goal, a reduction in primary material input (minerals, fossils, and metals) of 50% by 2030;
- Having food waste per capita by 2030 compared with 2015;
- 20% less plastic to be used by 2024 than in 2017.

Italy

Italy has set waste prevention targets to be reached within 2020 and use as baseline the year 2010. These targets consist of:

- 5% reduction in the ratio of generated municipal solid waste (MSW) to gross domestic product unit (GDP); as a monitoring measure, the trend in the amount of MSW produced per household will also be considered;
- 10% reduction in the ratio of generated special hazardous waste to GDP unit;
- 5% reduction in the ratio of generated special non-hazardous waste to GDP unit.

In this case, waste production is coupled with GDP as an economic indicator.

Spain

Using as baseline year 2010, Spain has pledged to reduce the total amount of waste by 10% within 2020. In their waste prevention program, four aims are outlined:

- reducing waste;
- encouraging reuse and prolonging product lifespan;
- reducing hazardous material content;
- lowering their environmental footprint.

Being a popular tourist destination, Balearic Islands have an enormous amount of waste per capita, accounting for 763 kg per inhabitant per year[27]. To tackle this challenge, they developed a waste prevention regulation in 2019. According to this regulation, they have set a target of -10% of waste prevention to be reached within 2021 and -20% within 2030. As for food waste, they set a target of -50% to be reached by 2030.

26 RREUSE (2013). RE-USE Targets Factsheet.

27 Comunidad Autónoma de las Illes Balears (2019). Ley 8/2019, de 19 de febrero, de residuos y suelos contaminados de las Illes Balears.

Sweden

Sweden has set the following quantitative targets:

- The reusable proportion of packaging placed on the market in Sweden for the first time is to increase by at least 20% from 2022 to 2026, and by at least 30% from 2022 to 2030;
- Total food waste is to be reduced by at least 20% by weight per capita from 2020 to 2025;
- The share of food production that reaches shops and consumers is to increase by 2025.

Sweden also aims to reduce both quantitatively and qualitatively textile waste, via awareness raising and information campaigns on hazardous substances in textile, as well as producer responsibility for certain classes of textiles.