## Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste (Text with EEA relevance)

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## amending Directive 2008/98/EC on waste

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## THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee<sup>(1)</sup>,

Having regard to the opinion of the Committee of the Regions<sup>(2)</sup>,

Acting in accordance with the ordinary legislative procedure<sup>(3)</sup>,

Whereas:

- (1) Waste management in the Union should be improved and transformed into sustainable material management, with a view to protecting, preserving and improving the quality of the environment, protecting human health, ensuring prudent, efficient and rational utilisation of natural resources, promoting the principles of the circular economy, enhancing the use of renewable energy, increasing energy efficiency, reducing the dependence of the Union on imported resources, providing new economic opportunities and contributing to long-term competitiveness. In order to make the economy truly circular, it is necessary to take additional measures on sustainable production and consumption, by focusing on the whole life cycle of products in a way that preserves resources and closes the loop. The more efficient use of resources would also bring substantial net savings for Union businesses, public authorities and consumers, while reducing total annual greenhouse gas emissions.
- (2) Improving the efficiency of resource use and ensuring that waste is valued as a resource can contribute to reducing the Union's dependence on the import of raw materials and facilitate the transition to more sustainable material management and to a circular economy model. That transition should contribute to the smart, sustainable and inclusive growth goals set out in the Europe 2020 strategy and create important opportunities for local economies and stakeholders, while helping to increase synergies between the circular economy and energy, climate, agriculture, industry and research

policies as well as bringing benefits to the environment in terms of greenhouse gas emission savings and to the economy.

- (3) The targets laid down in Directive 2008/98/EC of the European Parliament and of the Council<sup>(4)</sup> for preparing for re-use and recycling of waste should be increased to make them better reflect the Union's ambition to move to a circular economy.
- (4) The coherence between Directive 2008/98/EC and related Union legislative acts such as Directive 2009/28/EC of the European Parliament and of the Council<sup>(5)</sup> and Regulation (EC) No 1907/2006 of the European Parliament and of the Council<sup>(6)</sup> needs to be ensured.
- (5) Many Member States have not yet completely developed the necessary waste management infrastructure. It is therefore essential to set clear long-term policy objectives in order to guide measures and investments, notably by preventing the creation of structural overcapacities for the treatment of residual waste and lock-ins of recyclable materials at the lower levels of the waste hierarchy.
- (6) Municipal waste constitutes approximately between 7 and 10 % of the total waste generated in the Union. That waste stream, however, is amongst the most complex ones to manage, and the way it is managed generally gives a good indication of the quality of the overall waste management system in a country. The challenges of municipal waste management result from its highly complex and mixed composition, direct proximity of the generated waste to citizens, a very high public visibility and its impact on the environment and human health. As a result, the management of municipal waste requires a highly complex system including an efficient collection scheme, an effective sorting system and a proper tracing of waste streams, the active engagement of citizens and businesses, an infrastructure adjusted to the specific waste composition, and an elaborate financing system. Countries which have developed efficient municipal waste management systems generally perform better in overall waste management, including the attainment of the recycling targets.
- (7) Experience has shown that, irrespective of the allocation of responsibilities for waste management between public and private actors, waste management systems can help to achieve a circular economy and that the decision on the allocation of responsibilities frequently depends on geographical and structural conditions. The rules laid down in this Directive allow for waste management systems where the municipalities have the general responsibility for collecting municipal waste, for systems where such services are contracted out to private operators, or for any other type of allocation of responsibilities between public and private actors. The choice for any such systems, and whether or not to change them, remains the responsibility of Member States.
- (8) Plant-based substances from the agri-food industry and food of non-animal origin no longer intended for human consumption which are destined for oral animal feeding should, in order to avoid duplication of rules, be excluded from the scope of Directive 2008/98/EC if in full compliance with Union feed legislation. Directive 2008/98/EC should therefore not apply to those products and substances when used for feed, and the scope of that Directive needs to be clarified accordingly. Without prejudice to other Union provisions applicable in the field of animal nutrition, animal by-products

destined to be used as feed materials in accordance with Regulation (EC) No 767/2009 of the European Parliament and of the Council<sup>(7)</sup> are already excluded from the scope of Directive 2008/98/EC to the extent that they are covered by other Union legislation.

- (9) Definitions of non-hazardous waste, municipal waste, construction and demolition waste, food waste, material recovery, backfilling and extended producer responsibility scheme need to be included in Directive 2008/98/EC so that the scope of these concepts is clarified.
- (10)To ensure that preparing for re-use and recycling targets are based on reliable and comparable data and to enable a more effective monitoring of progress in attaining those targets, the definition of municipal waste in Directive 2008/98/EC should be in line with the definition used for statistical purposes by Eurostat and the Organisation for Economic Cooperation and Development (OECD), on the basis of which Member States have been reporting data for several years. Municipal waste is defined as waste from households and waste from other sources, such as retail, administration, education, health services, accommodation and food services, and other services and activities, which is similar in nature and composition to waste from households. Therefore, municipal waste includes, inter alia, waste from park and garden maintenance, such as leaves, grass and tree clippings, and waste from market and street cleaning services, such as the content of litter containers and sweepings except materials such as sand, rock, mud or dust. Member States are to ensure that waste from large commerce and industry which is not similar to waste from households is not included in the scope of municipal waste. Waste from production, agriculture, forestry, fishing, construction and demolition, septic tanks and sewage network and treatment, and end-of-life vehicles are excluded from the scope of municipal waste. Municipal waste is to be understood as corresponding to the types of waste included in Chapter 15 01 and Chapter 20, with the exception of codes 20 02 02, 20 03 04 and 20 03 06, of the list of waste established by Commission Decision 2014/955/EU<sup>(8)</sup> in the version in force on 4 July 2018. Waste falling under other chapters of that list is not to be considered as municipal waste except in cases where municipal waste undergoes treatment and is assigned codes listed in Chapter 19 of that list. Member States may use relevant categories in that list for statistical purposes. The definition of municipal waste in this Directive is introduced for the purposes of determining the scope of application of the preparing for re-use and recycling targets and their calculation rules. It is neutral with regard to the public or private status of the operator managing the waste and therefore includes waste from households and other sources that is managed by or on behalf of municipalities or directly by private operators.
- (11) While the definition of construction and demolition waste refers to waste that results from construction and demolition activities in a general way, it also includes waste arising from minor do-it-yourself construction and demolition activities within private households. Construction and demolition waste should be understood as corresponding to the types of waste included in Chapter 17 of the list of waste established by Decision 2014/955/EU in the version in force on 4 July 2018.

- (12) A definition of material recovery should be introduced to cover forms of recovery other than energy recovery and other than the reprocessing of waste into materials used as fuels or other means to generate energy. It includes preparing for re-use, recycling and backfilling and other forms of material recovery such as the reprocessing of waste into secondary raw materials for engineering purposes in construction of roads or other infrastructure. Depending on the specific factual circumstances, such reprocessing can fulfil the definition of recycling if the use of materials is based on proper quality control and meets all relevant standards, norms, specifications and environmental and health protection requirements for the specific use.
- (13) A definition of backfilling should be introduced to clarify that it means any recovery operation of suitable non-hazardous waste for the purposes of reclamation in excavated areas or for engineering purposes in landscaping. The waste used for backfilling should be limited to the amount strictly necessary to achieve those purposes.
- (14) A definition of extended producer responsibility scheme should be introduced to clarify that it means a set of measures taken by Member States requiring producers of products to bear financial or financial and organisational responsibility for the management of the waste stage of a product's life cycle including separate collection, sorting and treatment operations. That obligation can also include organisational responsibility and a responsibility to contribute to waste prevention and to the reusability and recyclability of products. Producers of products can fulfil the obligations of the extended producer responsibility scheme individually or collectively.
- (15) In order to contribute to achieving the objectives laid down in Directive 2008/98/EC, Member States should make use of economic instruments and other measures to provide incentives for the application of the waste hierarchy such as those indicated in Annex IVa, which includes, *inter alia*, landfill and incineration charges, pay-as-you-throw schemes, extended producer responsibility schemes, facilitation of food donation, and incentives for local authorities, or other appropriate instruments and measures.
- (16) In order to promote sustainable use of resources and industrial symbiosis, Member States should take appropriate measures to facilitate the recognition as a by-product of a substance or an object resulting from a production process the primary aim of which is not the production of that substance or object if the harmonised conditions established at Union level are respected. The Commission should be empowered to adopt implementing acts in order to establish detailed criteria on the application of the by-product status, prioritising replicable practices of industrial symbiosis.
- (17) In order to provide operators in markets for secondary raw materials with more certainty as to the waste or non-waste status of substances or objects and to promote a level playing field, it is important that Member States take appropriate measures to ensure that waste that has undergone a recovery operation is considered to have ceased to be waste if it complies with all the conditions laid down in Article 6(1) of Directive 2008/98/EC as amended by this Directive. Such measures may include the adoption of legislation transposing those conditions supported by procedures for their implementation, such as the establishment of material and application-specific end-of-waste criteria, guidance documents, case-by-case decisions and other procedures for the ad hoc application of

the harmonised conditions established at Union level. Such measures should include enforcement provisions to verify that waste that is considered to have ceased to be waste as a result of a recovery operation complies with the law of the Union on waste, chemicals and products, in particular prioritising waste streams that pose a higher risk to human health and the environment due to the nature and volume of those waste streams, waste that is subject to innovative recovery processes or waste that is recovered for subsequent further use in other Member States. Measures may also include the setting of a requirement on the operators recovering waste or holders of recovered waste materials to demonstrate compliance with the conditions laid down in Article 6(1) of Directive 2008/98/EC as amended by this Directive. In order to prevent illegal shipments of waste and to raise awareness among Member States and economic operators, there should be greater transparency about Member State approaches to end-of-waste status, in particular with regard to their case-by-case decisions and the result of verification by competent authorities, as well as the specific concerns of Member States and competent authorities about certain waste streams. The final determination whether the conditions laid down in Article 5 or in Article 6 of Directive 2008/98/EC as amended by this Directive are fulfilled remains the exclusive responsibility of the Member State based on all relevant information provided by the holder of the material or waste.

- (18) Implementing powers should be conferred on the Commission in order to establish detailed criteria on the application of the end-of-waste status. In that context, specific end-of-waste criteria should be considered at least for aggregates, paper, tyres and textiles.
- (19) The application of rules on by-products and end-of-waste should be without prejudice to other provisions of Union law, particularly Article 28 and Article 50(4a) and (4b) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council<sup>(9)</sup> on shipments of waste, legislation on chemicals and legislation concerning the placing on the market of certain products. End-of-waste status can only be achieved if substances or objects comply with relevant requirements applicable to products. End-of-waste rules can be established in product-specific legislation.
- (20) Member States should take appropriate measures to encourage the development, production, marketing and use of products and components of products that are suitable for multiple use, that contain recycled materials, that are technically durable and easily reparable and that are, after having become waste, suitable for preparing for re-use and recycling in order to facilitate proper implementation of the waste hierarchy and without compromising the free movement of goods in the internal market. Those measures should take into account the impact of products throughout their life cycle, the waste hierarchy and, where appropriate, the potential for multiple recycling.
- (21) Extended producer responsibility schemes form an essential part of efficient waste management. However, their effectiveness and performance differ significantly between Member States. It is necessary therefore to set minimum operating requirements for such extended producer responsibility schemes, and to clarify that those requirements also apply to extended producer responsibility schemes established pursuant to other legislative acts of the Union, in particular Directives 2000/53/EC<sup>(10)</sup>,

2006/66/EC<sup>(11)</sup> and 2012/19/EU<sup>(12)</sup> of the European Parliament and of the Council, in addition to the requirements already laid down therein, unless explicitly stated otherwise. It is necessary to make a distinction between those general minimum requirements that apply to all schemes and those that only apply to organisations implementing extended producer responsibility obligations on behalf of producers of products. Unless Member States decide otherwise, the general minimum requirements for extended producer responsibility schemes do not apply to schemes that do not fulfil the definition of an extended producer responsibility scheme.

- (22) The general minimum requirements should reduce costs and boost performance, as well as ensure a level playing field, including for small and medium-sized enterprises and e-commerce enterprises, and avoid obstacles to the smooth functioning of the internal market. They should also contribute to the incorporation of end-of-life costs into product prices and provide incentives for producers, when designing their products, to take better into account recyclability, reusability, reparability and the presence of hazardous substances. Overall, those requirements should improve the governance and transparency of extended producer responsibility schemes and reduce the possibility of conflicts of interest emerging between organisations implementing extended producer responsibility obligations on behalf of producers of products and waste operators that those organisations contract. The requirements should apply to both new and existing extended producer responsibility schemes. A transitional period is however necessary for existing extended producer responsibility schemes to adapt their structures and procedures to the new requirements.
- (23) Public authorities play an important role in the organisation of municipal waste collection and treatment and related communication with citizens. Provisions relating to the financial responsibility of producers of products introduced as part of the general minimum requirements for extended producer responsibility schemes should apply without prejudice to the competence of public authorities as regards the collection and treatment of municipal waste.
- (24) In cases where public authorities are responsible for organising the operational aspects of managing waste from products that are subject to extended producer responsibility schemes, those services should be provided in a cost-efficient manner and the financial responsibility of producers of products should not exceed the costs necessary to provide those services. Such costs should be established in a transparent way between the actors concerned, including producers of products, their organisations and public authorities.
- (25) In order to ensure proper waste management, where producers of products or organisations implementing extended producer responsibility obligations on their behalf are responsible for the management of waste from products that they place on the market, they should ensure continuity of waste management services throughout the year, even if the targets and objectives applicable to them are met. They should also not restrict those services in terms of geographical, product and material coverage to the areas where the collection and management of waste are the most profitable.
- (26) Producers of products should cover the costs necessary to meet the waste management targets and other targets and objectives, including on waste prevention, defined for the

relevant extended producer responsibility scheme. Under strict conditions, those costs can be shared with the original waste producers or distributors where justified by the need to ensure proper waste management and the economic viability of the extended producer responsibility scheme.

- (27) The Commission should adopt guidelines on the modulation of financial contributions of producers of products to extended producer responsibility schemes in order to assist Member States in the implementation of this Directive in facilitating the functioning of the internal market. To ensure coherence in the internal market, the Commission should be able to adopt harmonised criteria for that purpose by means of implementing acts.
- (28) Authorised representatives established to fulfil extended producer responsibility obligations of producers of products may be subject to requirements that enable the Member State on whose territory they are established to monitor and verify compliance with those obligations. However, those requirements should not go beyond the requirements that are applicable to the producers of products and organisations implementing extended producer responsibility obligations on their behalf established in that Member State.
- (29) Waste prevention is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste. It is important therefore that Member States take appropriate measures to prevent waste generation and monitor and assess progress in the implementation of such measures. As part of such measures, Member States should facilitate innovative production, business and consumption models that reduce the presence of hazardous substances in materials and products, that encourage the increase of the lifespan of products and that promote re-use including through the establishment and support of re-use and repair networks, such as those run by social economy enterprises, deposit-refund and return-refill schemes and by incentivising remanufacturing, refurbishment and, where appropriate, repurposing of products as well as sharing platforms. In order to ensure a uniform measurement of the overall progress in the implementation of waste prevention measures, common indicators and targets should be established.
- (30) The promotion of sustainability in production and consumption can contribute significantly to waste prevention. Member States should take steps to make consumers aware of that contribution and encourage them to participate more actively in order to improve resource efficiency. As part of measures to reduce waste generation, Member States should include continuous communication and education initiatives to raise awareness on the issues surrounding waste prevention and littering and may include the use of deposit-refund schemes and the setting of quantitative targets, and provide, as appropriate, adequate economic incentives to producers.
- (31) Member States should take measures to promote prevention and reduction of food waste in line with the 2030 Agenda for Sustainable Development, adopted by the United Nations (UN) General Assembly on 25 September 2015, and in particular its target of halving per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses, by 2030. Those measures should aim to prevent and reduce food waste in primary production,

in processing and manufacturing, in retail and other distribution of food, in restaurants and food services as well as in households. In order to contribute and ensure to be on track towards the attainment of the UN Sustainable Development Goal, Member States should aim to achieve an indicative Union-wide food waste reduction target of 30 % by 2025 and 50 % by 2030. Having regard to the environmental, social and economic benefits of preventing food waste, Member States should establish specific food waste prevention measures, including awareness campaigns to demonstrate how to prevent food waste, in their waste prevention programmes. Member States should measure progress made in the reduction of food waste. To measure that progress and to facilitate the exchange of good practices across the Union both between Member States and between food business operators, a common methodology for such measurement should be established. Based on those methodologies, reporting on food waste levels should take place on an annual basis.

- (32) In order to prevent food waste, Member States should provide incentives for the collection of unsold food products at all stages of the food supply chain and for their safe redistribution, including to charitable organisations. Consumer awareness of the meaning of 'use-by' and 'best-before' dates should also be improved in order to reduce food waste.
- (33)Litter, whether in cities, on land, in rivers and seas or elsewhere, has direct and indirect detrimental impacts on the environment, the well-being of citizens and the economy, and the costs to clean it up present an unnecessary economic burden for society. Member States should take measures aimed at preventing all forms of abandonment, dumping, uncontrolled management or other forms of discarding of waste. Member States should also take measures to clean up litter present in the environment, irrespective of its source or size and regardless of whether waste has been discarded wilfully or by negligence. Measures to prevent and reduce litter from products that are the main sources of littering in the natural and marine environments could consist of, *inter alia*, improvements in waste management infrastructure and practices, economic instruments and awareness raising campaigns. When considering a measure having restrictive effects on intra-Union trade, Member States should be able to demonstrate that the measure in question is adequate to attain the objective of preventing and reducing littering in the natural and marine environment, does not go beyond what is necessary to attain that objective and does not constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.
- (34) The fight against litter should be a shared effort between competent authorities, producers and consumers. Consumers should be incentivised to change their behaviour including through education and awareness raising, while producers should promote the sustainable use of and contribute to appropriate end-of-life management of their products.
- (35) Litter in the marine environment is a particularly pressing problem, and Member States should take measures that aim at halting the generation of marine litter in the Union, thereby contributing to the goal of the 2030 Agenda for Sustainable Development adopted by the UN General Assembly on 25 September 2015 to prevent

and significantly reduce by 2025 marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution. Since marine litter, in particular for plastic waste, stems to a large extent from land-based activities caused mainly by poor solid waste management practices and infrastructure, littering by citizens and lack of public awareness, specific measures should be laid down in waste prevention programmes and waste management plans. Those measures should contribute to the goal of achieving good environmental status in the marine environment by 2020 as laid down in Directive 2008/56/EC of the European Parliament and of the Council<sup>(13)</sup>. In accordance with that Directive, Member States are required to establish specific strategies and measures and update them every six years. They are also required to regularly report, starting in 2018, on the progress to maintain or achieve the goal of good environmental status. Measures to tackle litter in Directive 2008/56/EC and Directive 2008/56/EC and Directive 2000/60/EC of the European Parliament and of the Council<sup>(14)</sup>.

- (36) Certain raw materials are of a high importance to the economy of the Union and their supply is associated with a high risk. In order to ensure security of supply of those raw materials and in line with the Raw Materials Initiative established by the Commission in its communication of 4 November 2008 on 'The raw materials initiative meeting our critical needs for growth and jobs in Europe' and the objectives and targets of the European Innovation Partnership on Raw Materials, Member States should take measures to promote the re-use of products constituting the main sources of critical raw materials to prevent that those materials become waste. In that context, the Commission has established a list of such materials for the Union in its communication of 13 September 2017 on 'the 2017 list of Critical Raw Materials for the EU' and that list is subject to regular review.
- (37) To further support effective implementation of the Raw Materials Initiative, Member States should also take measures to achieve the best possible management of waste containing significant amounts of critical raw materials, taking economic and technological feasibility and environmental and health benefits into account. They should also include in their waste management plans nationally appropriate measures regarding collection, sorting and recovery of waste containing significant amounts of those raw materials. The measures should be included in the waste management plans when they are updated for the first time following the entry into force of this Directive. The Commission should provide information about the relevant product groups and waste streams at Union level. The provision of that information does not preclude, however, Member States from taking measures for other raw materials considered as important to their national economy.
- (38) When products, materials and substances become waste, the presence of hazardous substances may render that waste unsuitable for recycling or the production of secondary raw materials of high quality. Therefore, in line with the 7th Environment Action Programme, which calls for the development of non-toxic material cycles, it is necessary to promote measures to reduce the content of hazardous substances in materials and products, including recycled materials, and to ensure that sufficient information about the presence of hazardous substances and especially substances of

very high concern is communicated throughout the whole life cycle of products and materials. In order to achieve those objectives, it is necessary to improve the coherence among the law of the Union on waste, on chemicals and on products and to provide a role for the European Chemicals Agency to ensure that the information about the presence of substances of very high concern is available throughout the whole life cycle of products and materials, including at the waste stage.

- (39) Improving resource use could bring substantial net savings for Union businesses, public authorities and consumers while reducing total annual greenhouse gas emissions. For that reason, the Commission should propose, by the end of 2018, a lead indicator and a dashboard of sub-indicators on resource efficiency in order to monitor the progress towards the target of increasing resource efficiency at Union level.
- (40) Fostering a sustainable bio-economy can contribute to decreasing the Union's dependence on imported raw materials. Bio-based recyclable products and compostable bio-degradable products could represent therefore an opportunity to stimulate further research and innovation and to substitute fossil fuel-based feedstock with renewable resources.
- (41) In order to avoid waste treatment which locks in resources at the lower levels of the waste hierarchy, increase preparing for re-use and recycling rates, enable high-quality recycling and boost the uptake of quality secondary raw materials, Member States should ensure enhanced compliance with the obligation to collect waste separately, as laid down in Articles 10(2) and 11(1) of Directive 2008/98/EC, including the obligation to set up separate collection for at least paper, metal, plastic and glass waste that Member States had to meet by 2015, and should introduce separate collection of biowaste, hazardous waste produced by households and textile waste. Where appropriate, hazardous bio-waste and packaging waste containing hazardous substances should be subject to specific collection requirements.
- (42)Separate collection could be achieved through door-to-door collection, bring and reception systems or other collection arrangements. While the obligation to separately collect waste requires that waste be kept separate by type and nature, it should be possible to collect certain types of waste together provided that this does not impede high-quality recycling or other recovery of waste, in line with the waste hierarchy. Member States should also be allowed to deviate from the general obligation to separately collect waste in other duly justified cases, for instance where the separate collection of specific waste streams in remote and scarcely populated areas causes negative environmental impacts that outweigh its overall environmental benefits or entails disproportionate economic costs. When assessing any cases in which economic costs might be disproportionate, Member States should take into account the overall economic benefits of separate collection, including in terms of avoided direct costs and costs of adverse environmental and health impacts associated with the collection and treatment of mixed waste, revenues from sales of secondary raw materials and the possibility to develop markets for such materials, as well as contributions by waste producers and producers of products, which could further improve the cost-efficiency of waste management systems.

# (43) The targets for preparing for re-use and recycling of municipal waste should be increased in order to deliver substantial environmental, economic and social benefits and to accelerate the shift towards a circular economy.

- (44) Through a progressive increase of the existing targets for preparing for re-use and recycling of municipal waste, it should be ensured that economically valuable waste materials are effectively prepared for re-use or recycled, while ensuring a high-level protection of human health and the environment, and that economically valuable materials found in waste are channelled back into the European economy, thus advancing the Raw Materials Initiative and the creation of a circular economy.
- (45) Large differences exist among Member States with respect to their waste management performance, particularly as regards recycling of municipal waste. In order to take account of those differences, those Member States which in 2013 prepared for re-use and recycled less than 20 % of their municipal waste or landfilled more than 60 % of their municipal waste according to data reported under the Joint Questionnaire of the OECD and Eurostat should be allowed to decide to extend the time for complying with the preparing for re-use and recycling targets established for 2025, 2030 and 2035. In light of average annual progression rates observed in Member States over the past 15 years, those Member States would need to increase their recycling capacity to levels that are well above past averages to meet those targets. In order to ensure that steady progress towards the targets is made and that implementation gaps are tackled in due time, Member States that make use of additional time should meet interim-targets and, based on detailed criteria, establish an implementation plan.
- (46)In order to ensure the reliability of data, it is important to lay down more precisely the rules according to which Member States should report what is effectively recycled and prepared for re-use and can be counted towards the attainment of the targets. The calculation of the recycling targets should be based on the weight of municipal waste which enters recycling. As a general rule, the actual measurement of the weight of municipal waste counted as recycled should be at the point where municipal waste enters the recycling operation. Nevertheless, in order to limit administrative burdens, Member States should, under strict conditions and by way of derogation from the general rule, be allowed to establish the weight of municipal waste recycled on the basis of measuring the output of any sorting operation. Losses of materials which occur before the waste enters the recycling operation, for instance due to sorting or other preliminary operations, should not be included in the waste amounts reported as recycled. Those losses can be established on the basis of electronic registries, technical specifications, detailed rules on the calculation of average loss rates for various waste streams or other equivalent measures. Member States should report on such measures in the quality check reports accompanying the data on waste recycling which they report to the Commission. The average loss rates should preferably be established at the level of individual sorting facilities and should be linked to the different main types of waste, different sources (such as household or commercial), different collection schemes and different types of sorting processes. Average loss rates should only be used in cases where no other reliable data are available, in particular in the context of shipment and

export of waste. Losses in weight of materials or substances due to physical or chemical transformation processes inherent in the recycling operation whereby waste materials are actually reprocessed into products, materials or substances should not be deducted from the weight of the waste reported as recycled.

- (47) With the alignment of the definitions contained in European Parliament and Council Directive 94/62/EC<sup>(15)</sup>, Directive 2000/53/EC, Directive 2006/66/EC, Directive 2008/98/EC, and Directive 2012/19/EU, the provision in Article 6 of Directive 2008/98/ EC on considering waste that ceases to be waste for the purposes of the recovery and recycling targets set in those Directives is no longer necessary. Materials that cease to be waste through a recovery or recycling operation are to be counted for the attainment of the respective recovery or recycling targets set in those Directives in line with the applicable calculation methods. Where waste materials cease to be waste as a result of a preparatory operation before being actually reprocessed, such materials can be counted as recycled provided that they are destined for subsequent reprocessing into products, materials or substances, whether for the original or other purposes. End-ofwaste materials which are to be used as fuels or other means to generate energy, which are backfilled or disposed of, or which are to be used in any operation that has the same purpose as recovery of waste other than preparing for re-use and recycling, should not be counted towards the attainment of the recycling targets.
- (48) Where the calculation of the recycling rate is applied to aerobic or anaerobic treatment of biodegradable waste, the amount of waste that enters aerobic or anaerobic treatment can be counted as recycled provided that such treatment generates output which is to be used as a recycled product, material or substance. While the output of such treatment is most commonly compost or digestate, other output could also be taken into account provided that it contains comparable quantities of recycled content in relation to the amount of the treated biodegradable waste. In other cases, in line with the definition of recycling, the reprocessing of biodegradable waste into materials which are to be used as fuels or other means to generate energy, which are disposed of, or which are to be used in any operation that has the same purpose as recovery of waste other than preparing for re-use and recycling, should not be counted towards the attainment of the recycling targets.
- (49) Member States should be able, for the purposes of calculating whether the preparing for re-use and recycling targets are attained, to take into account the recycling of metals that are separated after incineration of municipal waste. In order to ensure a uniform calculation of this data, the Commission should adopt detailed rules on the quality criteria for recycled metals and on the calculation, verification and reporting of data.
- (50) In the case of exports of waste from the Union for preparing for re-use or recycling, Member States should make effective use of the inspection powers provided for in Article 50(4c) of Regulation (EC) No 1013/2006 to require documentary evidence to ascertain whether a shipment is destined for recovery operations which are in compliance with Article 49 of that Regulation and therefore managed in an environmentally sound manner at a facility operating in accordance with human health and environmental protection standards that are broadly equivalent to standards

established in Union legislation. In carrying out that task, Member States could cooperate with other relevant actors, such as the competent authorities in the country of destination, independent third-party verification bodies or organisations implementing extended producer responsibility obligations on behalf of producers of products established under extended producer responsibility schemes, which could carry out physical and other checks of facilities in third countries. In the quality check report accompanying the data on the attainment of the targets, Member States should report on the measures to implement the obligation to ensure that waste exported from the Union is treated in broadly equivalent conditions to those required under relevant Union environmental law.

- (51) In order to ensure better, more timely and more uniform implementation of this Directive and anticipate any implementation weaknesses, a system of early warning reports should be established to detect shortcomings and allow taking action ahead of the deadlines for meeting the targets.
- (52) Industrial waste, certain parts of commercial waste and extractive waste are extremely diversified in terms of composition and volume, and very different depending on the economic structure of a Member State, the structure of the industry or commerce sector that generates the waste and the industrial or commercial density in a given geographical area. Hence, for most industrial and extractive waste, an industry-oriented approach using Best Available Techniques reference documents and similar instruments to address the specific issues related to the management of a given type of waste has been considered a suitable solution. However, industrial and commercial packaging waste should continue to be covered by the requirements of Directives 94/62/EC and 2008/98/EC, including their respective improvements. With a view to exploring further the potential to increase the preparing for re-use and recycling of commercial waste, non-hazardous industrial waste and other key waste streams, the Commission should consider the setting of targets for those waste streams.
- (53) With a view to ensuring that the objectives of Union waste law continue to be met, it is important that the Commission reviews the disposal operations listed in Annex I to Directive 2008/98/EC. That review should be carried out in the light of Article 13 of that Directive while taking into account relevant information, such as developments at international level, in particular in relation to the Basel Convention of 22 March 1989 on the control of transboundary movements of hazardous wastes and their disposal<sup>(16)</sup>.
- (54) Hazardous waste that is produced by households, such as hazardous waste from paints, varnishes, solvents or cleaning products, should also be collected separately in order to avoid contamination of municipal waste with hazardous waste fractions that could lower recycling quality and to ensure the environmentally sound management of that hazardous waste. In that regard, specific collection obligations are already in place for waste electrical and electronic equipment and waste batteries and accumulators produced by households.
- (55) The separate collection of waste oils and preventing their mixing with other kinds of waste or substances are essential to ensure that their treatment delivers the best overall environmental outcome. In treating waste oils, priority should be given to regeneration

or alternatively to other recycling operations delivering an equivalent or a better overall environmental outcome than regeneration. With a view to further improving the management of waste oils, the Commission should consider, and, if appropriate, propose measures to improve the treatment of waste oils, including quantitative targets on their regeneration. During that review, attention should be paid to the treatment options regarding the regeneration of waste oils as well as to the quality and final use of the regenerated and recycled products.

- (56) In order to avoid waste treatment which locks in resources at the lower levels of the waste hierarchy, to enable high-quality recycling and to boost the uptake of quality secondary raw materials, Member States should ensure that bio-waste is separately collected and undergoes recycling in a way that fulfils a high level of environmental protection and the output of which meets relevant high quality standards.
- (57) This Directive sets long-term objectives for the Union's waste management and gives economic operators and Member States a clear direction for the investments needed to achieve those objectives. In developing their national waste management plans and planning investments in waste management infrastructure, Member States should assess and take into account the required investments and other financial means, including for local authorities. That assessment should be included in the waste management plan or other strategic documents. In that context, Member States should make sound use of investments, including through Union Funds, by prioritising prevention including re-use, preparing for re-use and recycling, in line with the waste hierarchy. The Commission should assist competent authorities in developing an effective financial framework, including through the use of Union Funds where appropriate, to implement the requirements of this Directive in accordance with the waste hierarchy and to support innovation in technologies and waste management.
- (58) Proper management of hazardous waste still presents a problem in the Union, and data on its treatment are partly missing. It is therefore necessary to strengthen record keeping and traceability mechanisms through the establishment of electronic registries for hazardous waste in Member States. Electronic data collection should be extended to other types of waste, where appropriate, in order to simplify record-keeping for businesses and administrations and improve the monitoring of waste flows in the Union.
- (59) Implementation reports prepared by Member States every three years have not proved to be an effective tool for verifying compliance or ensuring good implementation, and are generating unnecessary administrative burdens. It is therefore appropriate to repeal provisions obliging Member States to produce such reports. Instead, compliance monitoring should be exclusively based on the data which Member States report every year to the Commission.
- (60) Data reported by Member States are essential for the Commission to assess compliance with Union waste law by Member States. The quality, reliability and comparability of data should be improved by introducing a single entry point for all waste data, deleting obsolete reporting requirements, benchmarking national reporting methodologies and introducing a data quality check report. Therefore, when reporting on the attainment of the targets set out in legislative acts of the Union on waste, Member States should use the

most recent rules developed by the Commission and methodologies developed by the respective national competent authorities responsible for implementing this Directive.

- (61) To facilitate adequate interpretation and implementation of the requirements set out in Directive 2008/98/EC, it is appropriate to develop and periodically review guidelines concerning those requirements and to ensure the exchange of information and sharing of best practices among Member States on the practical implementation and enforcement of those requirements. Such guidelines, information exchange and sharing of best practices should, *inter alia*, facilitate a common understanding and application in practice of the definition of 'waste', including the term 'discard', and should take into account circular business models in which, for instance, a substance or object is transferred from one holder to another holder without the intention to discard.
- (62) In order to supplement or amend Directive 2008/98/EC, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of Articles 7(1), 9(8), 11a(10), 27(1), 27(4), 38(2) and 38(3) of that Directive, as amended by this Directive. It is of particular importance that the Commission carries out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making<sup>(17)</sup>. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (63) In order to ensure uniform conditions for the implementation of Directive 2008/98/EC, implementing powers should be conferred on the Commission in respect of Articles 5(2), 6(2), 8(5), 9(7), 11a(9), 33(2), 35(5) and 37(7) thereof as amended by this Directive. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council<sup>(18)</sup>.
- (64) Since the objectives of this Directive, namely to improve waste management in the Union, and thereby to contribute to the protection, preservation and improvement of the quality of the environment, the health of the oceans and the safety of seafood by reducing marine litter, and to the prudent and rational utilisation of natural resources across the Union, cannot be sufficiently achieved by the Member States, but can rather, by reason of the scale and effects of the measures, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.
- (65) Directive 2008/98/EC should therefore be amended accordingly.
- (66) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents<sup>(19)</sup>, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the

components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

(67) This Directive has been adopted taking into account the commitments set out in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making and it should be implemented and applied in accordance with the guidance contained in that Agreement,

HAVE ADOPTED THIS DIRECTIVE:

- (1) OJ C 264, 20.7.2016, p. 98.
- (2) OJ C 17, 18.1.2017, p. 46.
- (3) Position of the European Parliament of 18 April 2018 (not yet published in the Official Journal) and decision of the Council of 22 May 2018.
- (4) Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).
- (5) Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).
- (6) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).
- (7) Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/ EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC (OJ L 229, 1.9.2009, p. 1).
- (8) Commission Decision 2014/955/EU of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council (OJ L 370, 30.12.2014, p. 44).
- (9) Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (OJ L 190, 12.7.2006, p. 1).
- (10) Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles (OJ L 269, 21.10.2000, p. 34).
- (11) Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/ EEC (OJ L 266, 26.9.2006, p. 1).
- (12) Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).
- (13) Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy (Marine Strategy Framework Directive) (OJ L 164, 25.6.2008, p. 19).
- (14) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).
- (15) European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste (OJ L 365, 31.12.1994, p. 10).
- (16) OJ L 39, 16.2.1993, p. 3.
- (17) OJ L 123, 12.5.2016, p. 1.
- (18) Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).
- (**19**) OJ C 369, 17.12.2011, p. 14.