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COMMISSION

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COMMISSION IMPLEMENTING DECISION (EU) …/…

of XXX

laying down rules for the application of Directive (EU) 2019/904 of the European Parliament and of the Council as regards the calculation, verification and reporting of data on recycled plastic content in single-use plastic beverage bottles and repealing Commission Implementing Decision (EU) 2023/2683

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment[1], and in particular Article 6(5), second subparagraph, and Article 13(4), third subparagraph, thereof,

Whereas:

(1) Directive (EU) 2019/904 sets targets for the minimum recycled plastic content in single-use plastic beverage bottles listed in Part F of the Annex to that Directive, including PET bottles. Member States are to report separately data on recycled plastic content in beverage bottles and in PET bottles for each calendar year.

(2) Commission Implementing Decision (EU) 2023/2683 laid down the methodology for the calculation and verification of the recycled plastic content targets and the format for reporting data on recycled plastic content in beverage bottles. That methodology is based on data generated in accordance with Regulation (EU) 2022/1616 of the European Parliament and of the Council.[2]

(3) The only suitable recycling technologies in Regulation (EU) 2022/1616 are post-consumer mechanical recycling of PET and recycling from product loops in closed and controlled chains. To allow additional recycling technologies that are not covered by that Regulation to contribute to the attainment of the recycled content targets laid down in Directive (EU) 2019/904, it is necessary to establish additional rules for the calculation, verification and reporting of recycled plastic content derived from such additional recycling technologies. In particular, it is necessary to introduce so-called mass balance accounting, which requires substantial additions to the existing methodology. In the interest of clarity and legal certainty, and considering the number of new rules and changes in existing rules that are needed, Implementing Decision (EU) 2023/2683 should be repealed.

(4) As global efforts to curb plastic pollution ramp up, a market for recycled plastics, whether from mechanical or chemical recycling, and the related supply chain (such

[1] OJ L 155, 12.6.2019, p. 1, ELI: http://data.europa.eu/eli/dir/2019/904/oj).

[2] Commission Regulation (EU) 2022/1616 on recycled plastic materials and articles intended to come into contact with foods, and repealing Regulation (EC) No 282/2008 (OJ L 243, 20.9.2022, p. 3 ELI: http://data.europa.eu/eli/reg/2022/1616/oj).

as pyrolysis oil), is expected to develop globally. Clear rules are needed to ensure that recycled content can be reported in a transparent, verifiable and comparable manner, across all existing recycling technologies and processes. Union rules should provide a framework for the future international approach, with a view to ensure a global level playing field.

(5) Chemical recycling can treat plastic waste which is difficult or impossible to mechanically recycle and can deliver higher quality and technical performance of recycled outputs. To deliver the full potential of the circular economy, chemical recycling should complement mechanical recycling, which is in general preferable from an environmental point of view, where it delivers sufficient quality and technical performance of recycled outputs.

(6) With the objective of establishing a simple, predictable framework that enables all recycling technologies and processes capable of generating environmental benefits for the circular plastics economy to also attain economic viability, Union reporting rules on recycled content should cover all recycling technologies and processes. Such rules should also facilitate the Union chemicals industry's transition to circularity by encouraging the use of alternative feedstocks and reducing dependencies on virgin fossil resources.

(7) Recycled plastic in beverage bottles that is obtained through mechanical recycling that is a suitable recycling technology in the meaning of Commission Regulation (EU) 2022/1616[3] or through other recycling technologies that are suitable recycling technologies or novel technologies in the meaning of that Regulation, for which the proportion of material stemming from post-consumer plastic waste in the output is known and for which no other plastic waste than post-consumer plastic waste is used as input, should be accounted for the purposes of calculation, reporting and verification in accordance with Regulation (EU) 2022/1616.

(8) Recycled plastic that is obtained by any other recycling technology, including chemical recycling during which the chemical structure of the material is changed, or that is produced from a mixture of pre- and post-consumer plastic waste, should be taken into account in the calculation, verification and reporting of data on recycled plastic content in beverage bottles to be carried out under this Decision. Where plastic waste undergoes a recycling process whereby the polymers are broken down and the resulting substances, often combined with primary raw materials, are used to produce new polymers and possibly other products, it is necessary to apply mass balance accounting in order to ensure that the weight of the material stemming from post-consumer plastic waste at the input is equal to the weight of the material stemming from post-consumer plastic waste that is attributed to all outputs and losses.

(9) During chemical recycling, the chemical structure of the input post-consumer plastic waste is broken, and the resulting material is generally not plastic until it is repolymerized. Material stemming from post-consumer plastic waste should

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[3] Commission Regulation (EU) 2022/1616 on recycled plastic materials and articles intended to come into contact with foods, and repealing Regulation (EC) No 282/2008 (OJ L 243, 20.9.2022, p. 3 ELI: http://data.europa.eu/eli/reg/2022/1616/oj).

therefore be referred to as ‘eligible material'. Depending on the stage within the recycling process, ‘eligible material’ can have the status of waste or non-waste.

(10) Where mass balance accounting is applied at a given step in the supply chain, it should also be applied at all subsequent steps as its use at an earlier stage implies that the proportion of the eligible material is not known in all individual inputs and therefore cannot be known in the output.

(11) At stages in the supply chain at which both input and output materials consist of polymers, such as after repolymerisation in the case of chemical recycling, a mixing of materials with known proportions would result in outputs with known proportions. At such stages, an additional reallocation of attributed amounts of eligible material is therefore not necessary and should not be allowed.

(12) Pursuant to Directive (EU) 2019/904, Member States are to report to the Commission information on recycled plastic content in beverage bottles and in PET bottles to demonstrate the attainment of the targets for such content. While recycled content refers to the amount of recycled material, the targets are expressed as percentages, namely, as the proportion of recycled plastic in the beverage bottles and in PET bottles. To demonstrate the attainment of the targets, Member States should therefore report not only the sum of the weight of recycled plastic content in beverage bottles and in PET bottles, but also the sum of the weight of all plastic parts of the bottles in order to make it possible to calculate the proportion of recycled plastic content.

(13) Given that the objective of the targets is to promote the market uptake of recycled plastic, with the aim to ensure the circular use of plastics, it is appropriate to consider only the plastic parts when calculating the weight of the beverage bottles. As the non-plastic parts of a common beverage bottle are estimated to constitute at most 5 % of its weight, for instance in the form of a paper label, the exclusion of non-plastic parts of the beverage bottles from the calculation is considered to have no significant impact on the assessment of whether the targets have been attained.

(14) It should be possible to calculate the weight of recycled plastic contained in the different parts of a beverage bottle by means of different routes. For example, the weight of mechanically recycled PET in the body of the bottle should be calculated in accordance with Regulation (EU) 2022/1616, whereas the weight of chemically recycled polyolefins used in the cap should be calculated via mass balance accounting.

(15) Directive (EU) 2019/904 specifies that beverage bottles include caps and lids. However, for the purposes of calculation and verification of recycled plastic content targets, labels and sleeves should also be considered as parts of beverage bottles. Firstly, a beverage bottle, in the format in which it is commonly sold to consumers, consists of its body, cap, lid, and a label or a sleeve. Labels and sleeves are used to communicate information to consumers including for branding and advertising purposes. While sleeves commonly provide a 360 degree coverage around the bottle, other labels commonly cover only a smaller part of the bottle. Secondly, labels and sleeves are often attached to the bottle at the same production stage as caps and lids. The weight of labels and sleeves should therefore be included in the weight of beverage bottles, and any recycled plastic contained in labels and sleeves should be included in the weight of recycled plastic in beverage bottles.

(16) For the purpose of calculating and verifying recycled plastic content in beverage bottles and reporting on it, the term 'recycled plastic' should be defined. Recycled plastic should only include material that has been post-consumer plastic waste before entering recycling as there are already sufficient market incentives for the recycling of pre-consumer plastic waste. Moreover, Directive (EU) 2019/904 aims to reduce the impact of certain plastic products on the environment and pre-consumer plastic waste is usually not leaked into the environment. Post-consumer plastic waste needs to be understood as waste generated from plastic products that have been placed on the market of a Member State or of a third country. Plastic waste resulting from plastic packaging of products that have been placed on the market but have passed their expiry date before being sold to consumers should therefore be considered to be post-consumer plastic waste. Consequently, plastic materials and waste generated during production or manufacturing processes, including all secondary processing, testing, storage and transfers prior to the product being placed on the market should not be considered post-consumer waste.

(17) Regulation (EU) 2022/1616 establishes a reporting chain throughout consecutive manufacturing steps that includes reporting of the percentage of recycled plastic in each batch of material that contains recycled plastic and is intended to come into contact with foods. To keep administrative burden on economic operators minimal, that information should also be used for the calculation of recycled content in beverage bottles, even if the definitions of 'plastic' and 'recycled plastic' that are applicable for Regulation 2022/1616 slightly differ to those that are applicable for this Decision. Economic operators that place beverage bottles on the market should calculate the weight of recycled plastic in such bottles based on the percentage of recycled plastic content indicated in the declarations of compliance under Regulation (EU) 2022/1616.

(18) For the purposes of Article 13(1), point (e) of Directive (EU) 2019/904, the proportion of recycled plastic in a beverage bottle is to be calculated when it is placed on the market of a Member State ('the final calculation point'). Currently, the recycled plastic content cannot be analytically measured in a reliable manner at the final calculation point. Therefore, it is necessary to determine the recycled plastic content at earlier stages of the supply chain, through additional calculation points, to allow for an accurate calculation at the final calculation point. A calculation point is required whenever material that has been at least partly obtained from eligible material changes its chemical or physical composition, in particular when that material is mixed with other material, such as virgin polymers, virgin additives or material stemming from plastic waste that is not post-consumer plastic waste.

(19) Economic operators in the recycled plastic supply chain who apply mass balance accounting should not be allowed at any time to overdraw their account of attributed amounts of eligible material, meaning that the account should not have a negative balance. A negative balance of attributed amounts would imply that the economic operators have sold more eligible material than they have actually produced or purchased.

(20) For the application of mass balance accounting, it is necessary to establish rules on how the input eligible material can be allocated to the outputs in case of multi-output processes. The rules laid down in this Decision reflect the so-called 'fuel-use excluded' approach, meaning that at each calculation point economic operators should deduct eligible material that is processed into fuels or losses from the

calculation of recycled content, in order to comply with Article 3(17) of Directive 2008/98/EC of the European Parliament and of the Council[4]. This applies also for dual-use outputs, i.e. intermediate outputs that can be further processed into both fuels and non-fuel products, that are in liquid or gaseous form. Dual-use outputs in solid form, such as char that is formed during pyrolysis, should be taken completely out of the calculation of recycled content because they are expected not to be processed into high-value non-fuel products in practice at a relevant scale in the foreseeable future.

(21) Attributed amounts of eligible material should not be shifted across different facilities of a company or across different companies as this would add complexity to calculation and verification of attributed amounts. That should however not prevent physically moving material with attributed amounts between different facilities of a company or between different companies without reallocating their attributed amounts, provided that the material is accompanied by the necessary documentation to ensure traceability and provide the basis for calculation in case of subsequent mixing with other materials.

(22) In order to ensure the environmental benefits of meeting minimum targets for recycled plastic content and to prevent circumvention that could undermine those benefits, Member States should introduce provisions to verify the data and information they collect from the economic operators placing beverage bottles on the market. To minimise administrative burden, those provisions should depend on how the data and information was obtained. Where recycled plastic content is calculated on the basis of Regulation (EU) 2022/1616, Member States should limit additional verification to the transmission of information by economic operators placing beverage bottles on the market. Where recycled plastic content data is obtained by other means, in particular mass balance accounting, a new verification system should be established. Economic operators should produce and provide, for each batch of material containing attributed amounts of eligible material, a declaration to their customers that includes relevant information on the attributed amounts. Economic operators that do not introduce any material changes should only transmit the declaration they receive from their suppliers. In addition, operators processing material consisting of chemical building blocks but not polymers at the input stage, the output stage, or both, should be subject to third-party verification. This verification should cover all information relevant for the allocation of eligible material under mass balance accounting, such as process-specific amounts and categorization of inputs and outputs, boiling point curves, and evidence that eligible material remains on the recycling pathway. The certificates issued by verifiers should be handed down the supply chain, usually up to the fillers, in order to enable Member States to collect them from the economic operators placing beverage bottles on the market.

(23) Where the processing of materials with attributed amounts occurs in a third country and the resulting material is imported, Member States should verify the accuracy of the information accompanying the material.

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[4] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance), OJ L 312, 22.11.2008, p. 3–30, ELI: http://data.europa.eu/eli/dir/2008/98/oj

(24) The rules for the calculation and verification of the recycled plastic content targets and the format for reporting data and information on recycled plastic content are closely linked as they refer to the same recycled plastic in the same bottles. In order to ensure coherence, the rules for calculation and verification of the content targets and the format for reporting data and information should be laid down in one legal act.

(25) The format for reporting data and information takes into consideration the measurement methods and reporting formats for packaging and packaging waste set out in Commission Decision 2005/270/EC[5], which are also based on weight and material.

(26) The monitoring of recycled plastic content in single-use beverage bottles constitutes a cross-border digital public service in the meaning of Regulation (EU) 2024/903[6] This Decision introduces new binding requirements affecting the aforementioned digital public service, and, as such, is subject to the interoperability assessment obligation under Article 3 of Regulation (EU) 2024/903. Accordingly, an interoperability assessment has been carried out, and the resulting report is to be published on the Interoperable Europe Portal.

(27) Plastic waste should be processed by the recycling technology that to the greatest extent reduces the negative impact on the environment, taking into account the required quality of the recyclate and the economic viability of the different technologies. Taking this into account, mechanical recycling technologies are in general preferable to chemical recycling technologies from an environmental point of view, and waste that can be recycled mechanically should in general not enter into chemical recycling if mechanical recycling can produce recyclates with similar quality or performance characteristics. In order to account for technological developments in the recycling sector, including but not limited to the roll out of chemical recycling technologies to full commercial scale, the Commission should review the methodology, including the rules for allocation of attributed amounts, established in this Decision, also to align with the provisions in Article 7(8) of Regulation (EU) 2025/40.

(28) The measures provided for in this Decision are in accordance with the opinion of the Committee established by Article 39 of Directive 2008/98/EC,

HAS ADOPTED THIS DECISION:

Article 1

Definitions

For the purposes of this Decision, the following definitions apply:

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[5] Commission Decision 2005/270/EC of 22 March 2005 establishing the formats relating to the database system pursuant to Directive 94/62/EC of the European Parliament and of the Council on packaging and packaging waste, OJ L 86, 5.4.2005, p. 6, ELI: http://data.europa.eu/eli/dec/2005/270/oj

[6] Regulation (EU) 2024/903 of the European Parliament and of the Council of 13 March 2024 laying down measures for a high level of public sector interoperability across the Union (Interoperable Europe Act) OJ L, 2024/903, 22.3.2024, ELI: http://data.europa.eu/eli/reg/2024/903/oj

(1) ‘recycled plastic’ means plastic which was post-consumer plastic waste before recycling, and which has been produced by recycling as defined in Article 3, point (17), of Directive 2008/98/EC;

(2) ‘beverage bottle’ means a single-use plastic beverage bottle with a capacity of up to three litres, including its cap, lid, label and sleeve, if any, but excluding the following bottles:

(a) glass or metal beverage bottles that have caps and lids made from plastic;

(b) beverage bottles intended and used for food for special medical purposes as defined in Article 2(2), point (g), of Regulation (EU) No 609/2013 of the European Parliament and of the Council[7]that is in liquid form;

(3) ‘PET bottle’ means a beverage bottle which is manufactured from polyethylene terephthalate as the major component;

(4) ‘economic operator’ means any of the following operators, that are part of the supply chain leading to the placing of beverage bottles on the market or that place beverage bottles on the market:

(a) recycler as defined in Article 2(3), point (16), of Regulation (EU) 2022/1616;

(b) converter as defined in Article 2(3), point (17), of Regulation (EU) 2022/1616;

(c) food business operator as defined in Article 3 of Regulation (EC) No 178/2002 of the European Parliament and of the Council[8];

(d) any natural or legal person established in the Union that places a product from a third country on the market of a Member State;

(e) any natural or legal person dealing on a professional basis with either the collection or treatment of waste or both

(5) ‘post-consumer plastic waste’ means post-consumer plastic waste as defined in Article 3(48) of Regulation (EU) 2025/40;

(6) 'recycling technology’ means recycling technology as defined in Article 2(3), point (1), of Regulation (EU) 2022/1616;

(7) ‘eligible material’ means post-consumer plastic waste and material stemming from post-consumer plastic waste;

[7] Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control and repealing Council Directive 92/52/EEC, Commission Directives 96/8/EC, 1999/21/EC, 2006/125/EC and 2006/141/EC, Directive 2009/39/EC of the European Parliament and of the Council and Commission Regulations (EC) No 41/2009 and (EC) No 953/2009 (OJ L 181 29.6.2013, p. 35, ELI: http://data.europa.eu/eli/reg/2013/609/oj).

[8] Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1, ELI: http://data.europa.eu/eli/reg/2002/178/oj).

(8) ‘supply chain’ means the series of processes or activities involved in the production and distribution of beverage bottles;

(9) ‘calculation point’ means a point in the supply chain at which the content of eligible material for a given material is determined;

(10) ‘batch’ means batch as defined in Article 2(3), point (20), of Regulation (EU) 2022/1616;

(11) ‘mass balance accounting’ means a set of calculation rules used to determine the attributed amount throughout a supply chain, where the eligible material is used together with other material as input into the process and the actual amount of eligible material in the individual outputs is unknown;

(12) ‘mass balancing period’ means the timeframe in which the amounts of eligible material are entering and leaving a given facility;

(13) ‘attributed amount’ means the weight of eligible material that enters a process and that is allocated to the outputs of the process for a mass balancing period;

(14) ‘output category’ means a grouping of outputs into the following categories: non-fuels, fuels, dual-use output and losses, where:

‘non-fuels’ means outputs other than losses, that are or will be reprocessed into materials other than fuels, including plastic;

‘fuels’ means outputs other than losses, that are fuels, including outputs that are consumed to provide energy for the process itself, or that will be reprocessed into materials that are to be used as fuels;

‘dual-use outputs’ means outputs, other than losses, ~~that can~~ be reprocessed either into fuels or materials other than fuels;

‘losses’ means outputs that are disposed of within the meaning of Article 3(19) of Directive 2008/98/EC;

(15) ‘chemical building blocks’ means chemicals that form the base for polymers, as ~~defined~~ in Article 3, point ~~(5),~~ of Regulation (EC) No 1907/2006, including monomers and other reactants such as initiators for polymerisation;

(16) ‘facility’ means a manufacturing plant, under the management control of an economic operator, where activities, products and services are managed, including all associated infrastructure, equipment and materials;

(17) ‘verification’ means the process by which a verifier attests that an economic operator meets the requirements regarding calculation of data on to the recycled content of beverage bottles;

(18) ‘verifier’ means a conformity assessment body as defined in Article 2, point (13), of Regulation (EC) 765/2008 of the European Parliament and of the Council[9];

(19) ‘recycling pathway’ means a process which preserves the potential of eligible material being processed into a non-fuel;

[9] Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30, ELI: http://data.europa.eu/eli/reg/2008/765/oj)

(20) ‘mechanical recycling’ means a recycling technology that recovers collected plastic waste through mechanical and physical processes, including by sorting, grinding, washing, separating materials, drying, extruding and re-crystallisation to produce plastic without changing the chemical structure of the plastic waste input.

(21) ‘maximum acceptable boiling point’ means, in a case where the eligible material or parts thereof will be fed into one single steam cracker, the maximum acceptable boiling point of that steam cracker or, in a case where the eligible material or parts thereof will be processed by different steam crackers, the weighted average of the maximum acceptable boiling points of all the individual steam crackers.

Article 2

Methodology for the calculation of the proportion of recycled plastic content in beverage bottles

1. The proportion of recycled plastic content in beverage bottles shall be calculated by dividing the weight of recycled plastic in beverage bottles placed on the market of a Member State in a given year by the weight of the plastic in beverage bottles placed on the market of that Member State in that year. The resulting ratio shall be expressed as a percentage.

2. The proportion of recycled plastic content in PET bottles shall be calculated by dividing the weight of recycled plastic in PET bottles placed on the market of a Member State in a given year by the weight of the plastic in PET bottles placed on the market of that Member State in that year. The resulting ratio shall be expressed as a percentage.

3. The calculations referred to in paragraphs 1 and 2 shall be performed using the formulas set out in Annex I.

Article 3

Methodology for the determination of the weight of plastic in beverage bottles

1. The weight of plastic in beverage bottles shall be the sum of the weight of plastic in beverage bottles placed on the market of a Member State The data for those beverage bottles shall be collected in accordance with Article 5.

2. The weight of plastic in beverage bottles placed on the market of a Member State may be adjusted to take account of exports or movements of beverage bottles to other Member States. The adjustment shall be performed by applying formula 6 set out in Annex I.

Article 4

Methodology for the determination of the weight of recycled plastic in beverage bottles

1. The weight of recycled plastic in beverage bottles shall be the sum of the weight of recycled plastic in beverage bottles placed on the market of a Member State. The data for those beverage bottles shall be collected in accordance with Article 5.

2. Where the weight of plastic in beverage bottles placed on the market is adjusted in accordance with Article 3(2), the weight of recycled plastic in beverage bottles shall also be adjusted in order to take account of exports or movements of beverage bottles to other Member States. The adjustment shall be performed by applying formula 4 set out in Annex I.

Article 5

Obligation to collect data from economic operators who place beverage bottles on the market

1. Member States shall collect data from all economic operators who place beverage bottles on their market, on the weight of plastic and recycled plastic contained in such bottles, and shall add up the results separately for plastic and for recycled plastic.

2. Member States shall ensure that economic operators calculate the weight of the recycled plastic referred to in paragraph 1 for the different parts of the beverage bottles and add up the results, using the following methodology:

   The percentage of recycled plastic, as stated in the respective declaration of compliance set out in Annex III to Regulation (EU) 2022/1616, shall be multiplied by the weight of the respective bottle part, where no other plastic waste than post-consumer plastic waste is used as input and all recycled plastic is obtained through the application of one of the following recycling technologies:

   (a) mechanical recycling that is listed as a suitable recycling technology pursuant to Regulation (EU) 2022/1616;

   (b) any other recycling technology that is a suitable recycling technology or a novel technology pursuant to Regulation (EU) 2022/1616, for which the proportion of eligible material in the output is known.

3. Where the methodology set out in paragraph 2 of this Article is not applicable, the methodology laid down in Article 6 shall be used.

4. For recycled plastic referred to in paragraph 1 that is partly obtained through the application of any of the recycling technologies set out in paragraph 2, point (a) and (b), and partly by other recycling technologies, Member States shall ensure that economic operators established on their territory apply the methodology laid down in Article 6 at each stage of the supply chain starting from the stage at which the mixing of recycling technologies occurs. Before the mixing occurs, the methodology laid down in paragraphs 2 and 3 shall apply, respectively.

Article 6

Calculation of the weight of eligible material

1. Calculation points shall be established whenever the chemical or physical composition of the material stemming, wholly or partly, from post-consumer plastic waste is changed, including where it is mixed with any other material. The weight of recycled plastic in a beverage bottle shall be calculated at the point when it is placed on the market, based upon the data obtained at the calculation points for each of its parts.

2. Where at a calculation point, the proportions of the eligible material in the outputs are known, and where no mass balance accounting has been applied previously, the weight of the eligible material shall be calculated for each batch of each output by multiplying the percentage of the eligible material in the output by the weight of the batch.

3. Where at a calculation point, paragraph 2 of this Article does not apply, mass balance accounting shall be used in accordance with Article 7.

Article 7
Mass balance accounting

1. The attributed amounts shall be determined on the basis of process-specific operational data that is representative for the respective mass balancing period, in accordance with paragraphs 2, 3 and 4.

2. The calculation of the weight of eligible material in the inputs shall be determined based on one of the following sources:

   (a) the declarations received from economic operators other than the economic operator at the calculation point in accordance with Article 8(3), where such other economic operators provide the eligible material;

   (b) the internal documentation of the economic operator at the calculation point.

3. Where the calculation point is the first calculation point that is located on the recycling pathway before eligible material enters a steam cracker and where the input eligible material is in liquid form, the weight of the eligible material that is fed into a steam cracker shall be determined in accordance with the following steps:

   (a) establish the maximum acceptable boiling point;

   (b) determine the weight of the input eligible material that is evaporated at the maximum acceptable boiling point established in (a), in accordance with a standard test method for boiling range distribution of petroleum fractions by gas chromatography, such as EN 15199-4:2021 or equivalent;

   (c) determine the weight of the total input material that is evaporated at the maximum acceptable boiling point, in accordance with a standard test method for boiling range distribution of petroleum fractions by gas chromatography, such as EN 15199-4:2021 or equivalent. The total input material may be a blend of eligible and non-eligible material;

   (d) if the share of total input material that is not evaporated at the maximum acceptable boiling point undergoes a processing step after the present calculation point and before entering the steam cracker in which the boiling point curve of the input material is changed, the following steps shall be performed in each such processing step:

      (i) determine the weight of the eligible material in the outputs that is evaporated at the maximum acceptable

boiling point established in point (a), in accordance with a standard test method for boiling range distribution of petroleum fractions by gas chromatography, such as EN 15199-4:2021 or equivalent, and add this weight to the weight determined in step (b);

(ii) determine the weight of the outputs that is evaporated at the maximum acceptable boiling point, in accordance with a standard test method for boiling range distribution of petroleum fractions by gas chromatography, such as EN 15199-4:2021 or equivalent, and add this weight to the weight determined in step (c);

(e) calculate the ratio of the weight determined in accordance with point (b) and adjusted in accordance with point (d) and the weight determined in accordance with point (c) and adjusted in accordance with point (d) or consider the ratio as equal to the ratio of the weight of the input eligible material and the weight of the total input material where the economic operator provides verifiable evidence that the step in point (b) or (d)(i) is technically not feasible;

(f) determine the weight of material that, on the basis of verifiable evidence provided by the economic operator at the calculation point, is fed into the steam cracker or crackers referred to in point (a);

(g) multiply the ratio determined in point (e) with the weight of material determined in point (f), the result of which shall be the weight of eligible material that is considered to enter the steam cracker or crackers;

(h) the next calculation point in which the attribution of input eligible material to the different outputs is to be determined shall be at the output of the steam cracker or crackers.

4. Where the calculation point is not located on the recycling pathway before eligible material enters a steam cracker or crackers and/or where the input eligible material is not in liquid form, the following steps shall be taken:

(a) the weight of the input eligible material shall be allocated to the different outputs in such a way that the relative share of eligible material in each output is equal to the relative share of the eligible material in the input;

(b) each output shall be classified according to its output category;

(c) for each output, the weight of the allocated input eligible material shall be multiplied by a dual-use factor, which represents the share of the output that remains on the recycling pathway, to obtain the attributed amount of that output, as follows:

(i) for outputs of the output category “non-fuels”, the dual-use factor shall be equal to 1;

(ii) for outputs of the output category “fuels” and “losses”, the dual-use factor shall be equal to 0

(iii) for outputs of the output category “dual-use outputs”, the dual-use factor shall be:

(1) equal to 0 where the output is solid;

(2) equal to the share for which the economic operator provides verifiable evidence that it remains on the recycling pathway where the output is liquid or gaseous.

5. After having distributed attributed amounts pursuant to paragraphs 2, 3 and 4, the economic operator may reallocate the attributed amounts among the different outputs subject to the following conditions:

(a) attributed amounts are attributed only to outputs for which it is possible to prove that there is a feasible chemical process in which chemical building blocks constituting those outputs can come from the used input eligible material.

(b) the attributed amount of a specific output does not exceed the share of those parts of the output that can come from the used input eligible material;

(c) the inputs or the outputs, or both are chemical building blocks but not polymers.

6. The maximum mass balancing period is three months. A positive account of attributed amounts may be carried over into the next period. A negative account of attributed amounts shall not be permitted at any time.

7. Mass balance accounting shall be applied for each facility. Attributed amounts shall not be transferred between different facilities of a company or between different companies.

8. The weight of recycled plastic of which Member States collect data from economic operators in accordance with Article 5(1) shall be equal to the attributed amounts that have been allocated to the material that is used in the beverage bottles placed on the market.

Article 8

Verification

1. Member States shall verify the data collected in accordance with Article 5(1) following a risk-based approach. Member States shall only report data that is calculated, collected, and verified in accordance with the provisions laid down in this Decision. Member States are responsible for verifying the data they report to the Commission in accordance with Article 9.

2. For data calculated in accordance with Article 5(3) or 5(4), paragraphs 3 to 9 shall apply.

3. Economic operators shall provide a declaration related to recycled content, accompanying each batch of material provided to their customers, issued in accordance with the template set out in Annex V. Economic operators shall keep the

declarations received from their suppliers for at least five years. Economic operators that do not cause material changes to the material shall not be required to generate a declaration but only to pass on the declarations received from their suppliers to their customers.

4. Economic operators that process material consisting of chemical building blocks but not polymers at the input stage, the output stage, or at both stages, and calculate data in accordance with Article 6(3) shall comply with all of the following requirements:

(a) have a system for safekeeping and review of all evidence related to the calculations they make or rely on;

(b) have a functioning system to calculate attributed amounts in accordance with Article 6(3);

(c) keep all evidence necessary to demonstrate compliance with this Decision and with Directive (EU) 2019/904 for at least five years, or longer where it is required by the Member State;

(d) accept responsibility for preparing any information related to the verification of the evidence referred to in point (c);

(e) be subject to an annual verification at facility-level performed by a verifier in accordance with paragraph 4 of this Article.

By way of derogation from the first subparagraph, point (e), the verification shall take place every three years for micro, small and medium-sized enterprises within the meaning of the Annex to Commission Recommendation 2003/361/EC[10].

5. The verifier shall select and appoint a verification team. Verification shall be conducted on-site and in accordance with the applicable standard, the reference of which has been published in the *Official Journal of the European Union* pursuant to Regulation (EC) No 765/2008, and shall include at least the following elements:

(a) identification of the activities undertaken by the economic operator which are relevant to targets' attainment;

(b) identification of the relevant systems of the economic operator and its overall organisation with respect to the targets' attainment and checks of the effective implementation of relevant control systems;

(c) an analysis of the risks which could lead to a material misstatement, based on the auditor's professional knowledge and the information submitted by the economic operator, which takes into consideration the overall risk profile of the activities, depending on the level of risk of the economic operator and the supply chain, in particular the risks at the immediate upstream and downstream stages;

(d) a verification plan which corresponds to the risk analysis and the scope and complexity of the economic operator's activities, and which defines the sampling methods to be used with respect to that operator's activities;

[10] Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises, OJ L 124, 20.5.2003, p. 36, ELI: http://data.europa.eu/eli/reco/2003/361/oj

(e) implementation of the verification plan by gathering evidence in accordance with the defined sampling methods referred to in point (d), including all relevant additional evidence;

(f) a request to the operator to provide any missing elements of audit trails, an explanation of variations, or the revision of claims or calculations

(g) a list of all inputs per facility that are relevant with regard to the attainment of the targets, as well as a description of the relevant material handled and the details of all suppliers thereof;

(h) a list of all outputs per facility that are relevant to attainment of the targets, as well as a description of the relevant material handled and the details of all customers thereof;

(i) all relevant information on the allocation of eligible material to the outputs pursuant to Article 7;

(j) any discrepancies between bookkeeping system and inputs, outputs and balances.

6. The verification team shall have the competence, experience and the generic and specific skills necessary for conducting the verification activities, taking into account the scope of the audit.

7. The verifier and its personnel shall satisfy the following requirements:

(a) abide by principles of professional ethics, encompassing integrity, objectivity, professional competence, and due diligence;

(b) possess comprehensive understanding of the entities whose annual calculations and declarations are under audit;

(c) demonstrate proficiency in evaluating the reliability of the underlying data and information;

(d) maintain independence from the economic operator.

8. Certificates issued in the context of the verification shall have all the following characteristics:

(a) include, at least, the elements set out in Annex IV;

(b) be valid for one year, except for micro, small and medium-sized enterprises within the meaning of the Annex to Recommendation 2003/361/EC, for which they shall be valid for three years;

(c) be recognised by all Member States.

9. Economic operators shall provide a copy of the certificates to the subsequent economic operator within the supply chain. Member States shall collect the declaration referred to in paragraph 3 from the economic operators placing bottles on the market together with the certificates referred to in paragraph 9.

Article 9

Collection and reporting of data by Member States

1. Member States shall calculate annually the weight of the plastic in beverage bottles placed on the market in accordance with Article 3, the weight of recycled plastic in beverage bottles placed on the market in accordance with Article 4 and the resulting proportion of recycled plastic content in beverage bottles placed on the market in accordance with Article 2.

2. Member States shall report the data referred to in paragraph 1 in the format laid down in Annex II to this Decision and shall submit the quality check report referred to in Article 13(2) of Directive (EU) 2019/904 as regards those data in the format laid down in Annex III to this Decision.

Article 10

Revision clause

The Commission shall review this Decision by 1 January 2030.

Article 11

Repeal

Implementing Decision (EU) 2023/2683 is repealed.

References to the repealed Decision shall be construed as references to this Decision.

Article 12

Entry into force

This Decision shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Done at Brussels,

For the Commission
The President
Ursula VON DER LEYEN