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COMMISSION IMPLEMENTING DECISION

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, repealing Commission Implementing Decision (EU) X/X

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COMMISSION IMPLEMENTING DECISION (EU) .../...

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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, repealing Commission Implementing Decision (EU) 2023/2683

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 environment¹, and in particular Articles 6(5), 13(1) (e) and 13(4) 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. Pursuant to Directive (EU) 2019/904, the target for 2025 is at least 25% recycled plastic for PET bottles, calculated as an average for all PET bottles placed on the market on the territory of the Member State, and the target for 2030 is at least 30% recycled plastic for beverage bottles, calculated as an average for all beverage bottles placed on the market on the territory of the Member State. The Commission is to lay down the methodology for the calculation and verification of those recycled plastic content targets and the format in which Member States are to report data on recycled plastic content in PET bottles and in beverage bottles for each calendar year.
- (2) Commission Implementing Decision (EU) 2023/2683² laid down the methodology for the calculation, verification and reporting for recycled plastic in beverage bottles and in PET bottles, achieved through suitable recycling technologies or novel technologies according to Commission Regulation (EU) 2022/1616³. This regulation does not apply to the use of waste to manufacture substances included in the Union list of authorised substances in accordance with Article 5 of Regulation (EU) No 10/2011, and to manufacture substances subject to Article 6(1), (2), and (3)(a) thereof, when intended for subsequent

¹ OJ L 155, 12.6.2019, p. 1.

² Commission Implementing Decision (EU) 2023/2683 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 (OJ L, 2023/2683, 01.12.2023, p. 1).

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).

use in accordance with that Regulation. In particular, Commission Regulation (EU) 2022/1616 does not apply to plastic that has been obtained from recycling technologies, such as certain pyrolysis and gasification technologies, that break the plastic waste input down into monomers or smaller chemical building blocks of a high level of purity. In accordance with Article 7 of Commission Implementing Decision (EU) 2023/2683, this Implementing Decision addresses recycled plastic content resulting from additional types of recycling, including chemical recycling, during which the chemical structure of the material is changed. Economic operators have to apply Commission Implementing Decision (EU) 2023/2683 based on Commission Regulation (EU) 2022/1616 to (a) mechanical recycling that is a suitable recycling technology according to Commission Regulation (EU) 2022/1616; (b) other recycling technologies that are suitable recycling technologies or novel technologies in Regulation (EU) 2022/1616 and 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. For recycled plastic that is obtained by any other recycling technology, or that is produced from a mixture of pre- and post-consumer plastic waste, additional rules are needed to account for the amount of recycled post-consumer plastic waste in plastic bottles. Specific rules are needed for the case 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. In such cases, the application of a mass balance approach is appropriate.

- (3) During chemical recycling, the chemical structure of the input post-consumer plastic waste is disrupted, and the resulting material is generally not plastic until it is repolymerized. It is therefore referred to as 'eligible material', meaning material stemming from post-consumer plastic waste.
- (4) If mass balance accounting has been applied at one step in the supply chain, it also needs to be applied in all subsequent steps because the use of mass balance accounting at an earlier stage means that the proportion of the eligible material is not known for all the inputs and therefore cannot be known in the output.
- (5) At stages in the supply chain at which both input and output materials consist of polymers (e.g. after repolymerisation in case of chemical recycling), a mixing of materials with known proportions would result in outputs with known proportions. At these stages, an additional reallocation of attributed amounts is therefore not necessary and should not be allowed.
- (6) Member States are to collect from economic operators that place beverage bottles on their market data on the weight of the plastic and of the recycled plastic in those bottles. The weight of recycled plastic in the different parts of a bottle may have been calculated via different routes, for example, the weight of mechanically recycled PET in the body may have been calculated based on Commission Regulation (EU) 2022/1616 while the weight of chemically recycled polyolefins in the cap has been calculated via mass balance accounting.

- (7) For the purposes of calculation and verification of recycled plastic content targets in single-use plastic beverage bottles, labels and sleeves should 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. Part F of the Annex to Directive (EU) 2019/904 specifies that beverage bottles include caps and lids. In contrast to caps and lids, labels and sleeves are not often littered separately from the bottle body, which explains why they are not mentioned explicitly as an element of the bottle in Directive (EU) 2019/904. As the bottle's body, cap or lid and label or sleeve are usually assembled at the filling stage, it is usually the filler who places the bottle on the market after having filled it with beverage. It is also possible that a bottle is placed on the market in an empty state, for example juice bottles that are bought from the producer by a retailer and filled with freshly squeezed juice by the end consumer at the point of sale.
- (8) The targets for the minimum recycled plastic content laid down in Directive (EU) 2019/904 are given as a percentage of the PET bottles and of all beverage bottles placed on the Member States' markets. Given that the objective of the targets, pursuant to recital 17 of that Directive, is to promote the market uptake of recycled plastic, with the ultimate aim to ensure the circular use of plastics, it is appropriate to consider only the plastic parts of the beverage bottles when setting out the rules for the calculation and verification of the recycled plastic content. As the non-plastic parts of a common single-use plastic beverage bottle are estimated to constitute at most 5 % of its weight, for instance by a paper label, the exclusion of non-plastic parts of the beverage bottles from the calculation has no significant impact on the assessment of whether the targets have been attained.
- (9) 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.

- (10) Pursuant to Directive (EU) 2019/904, Member States are to report to the Commission information on recycled plastic content in PET bottles and in all beverage bottles to demonstrate the attainment of the targets of recycled plastic 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 be obliged to 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 the plastic parts of the bottles themselves so that the proportion of the recycled plastic content can be calculated.
- (11) Commission 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. That reporting chain obliges economic operators that operate at early stages of the manufacturing chain, namely recyclers and converters, to provide a declaration of compliance. Converters that do not place the beverage bottles on the market and recyclers are not required to calculate the weight of recycled plastic in such bottles. The declaration of compliance is to be handed down to the economic operators at later stages of the manufacturing chain, including to the economic operators that place the beverage bottles on the market. Reporting obligations under Regulation (EU) 2022/1616 cover all plastic parts with recycled content of beverage bottles that are within the scope of Directive (EU) 2019/904. The economic operators that place beverage bottles on the market are therefore able to calculate the weight of recycled plastic in such bottles on the basis of the percentage of recycled plastic content indicated in the declaration of compliance for each part of the bottles.
- (12) The definitions of ‘plastic’ referred to in Regulation (EU) 2022/1616 and in Directive (EU) 2019/904 differ as they refer to different definitions of ‘polymer’; the first one is based on how the material has been manufactured while the second one is based on its present structural properties. Moreover, the definition of ‘plastic’ in Directive (EU) 2019/904 excludes natural polymers that have not been chemically modified. However, these differences are not relevant for the beverage bottles that are in the scope of Directive (EU) 2019/904. The definition of ‘recycled plastic’ in Regulation (EU) 2022/1616 differs from the definition introduced by this Decision in that, in theory, it may contain virgin plastic that has been added in the decontamination process. However, if any virgin material was added, this would be reflected in the information provided by recyclers and passed down in the value chain. It will not count towards the recycled plastic content as defined in this Decision. The differences in the definitions of ‘plastic’ and ‘recycled plastic’ are therefore not relevant for the purposes of this Decision.
- (13) The proportion of recycled plastic content in a beverage bottle is to be calculated when the bottle is being placed on the market of a Member State. This is the final calculation point. At present, the recycled plastic content

cannot be reliably analytically measured in a final bottle. Therefore, it is necessary to determine the recycled plastic content at earlier stages of the supply chain (calculation points) to allow for an accurate calculation at the final calculation point. A calculation point is required whenever material that has been (partly) obtained from eligible material is mixed with other material.

- (14) At the beginning of the recycling process, the input is post-consumer plastic waste including polymers, additives, and contaminants. A conversion factor has to be calculated using process-specific operational data that is representative for the considered mass balancing period. This might be data from the directly preceding mass balancing period. In some cases, older data might be more representative.
- (15) Economic operators of the recycled plastic supply chain who apply mass balance accounting are not allowed at any time to overdraw their account of attributed amounts of eligible material so that it becomes negative, i.e. smaller than zero. A negative account of attributed amounts would imply that the related economic operator sold more eligible material than they have actually produced or purchased.
- (16) For the application of mass balance accounting, it is necessary to establish rules on how the eligible material can be allocated to the outputs in case of multi-output processes. To do so, it is useful to group the possible outputs of the considered processes into different categories, namely outputs that (i) already are or will be further processed into non-fuel materials (including plastics), (ii) already are or will be further processed into fuels, (iii) so-called dual-use outputs, which can be further processed into both fuels and non-fuel products, and (iv) losses, which include all outputs that the economic operator disposes of, i.e. does not sell at a positive price. In order to apply the principles of the waste hierarchy in a strict way, the allocation rule is based on the so-called ‘fuel-use excluded’ approach. This means that attributed amounts can be shifted among outputs of the non-fuel material output category, but not from the categories of fuels and losses. The category of dual-use outputs is by default considered as fuels. However, for liquid dual-use outputs, the operator can calculate the share that will be further processed along the recycling pathway and allocate attributed amounts accordingly. This share is represented by so-called “dual-use factors”. This complies with Article 3(17) of Directive 2008/98/EC, which defines ‘recycling’ as any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes, including the reprocessing of organic material but excluding energy recovery and the reprocessing into materials that are to be used as fuels.
- (17) The economic operator can determine the dual-use factors based on the reasoning that the share of a liquid dual-use output that can be fed into a steam-cracker (the lighter fractions) is following the recycling pathway, whereas the residual share (the heavier fractions) will become fuels or losses. The share that can be fed into a given steam cracker is equal to the share that boils at temperatures below the maximum acceptable boiling point of the steam cracker, which is typically around 350°C. If known, the operator can take into account the maximum acceptable boiling points of the targeted steam crackers, otherwise the operator has to use the conservative estimate of 330°C.

- (18) In order to increase the transparency of the process, the ‘fuel-use excluded’ allocation rule is complemented by additional provisions to ensure that the attributed amount does not exceed the amount of eligible material that can theoretically be present in a product (so-called “chemical traceability”). Firstly, there has to be a chemical link between the input eligible material and the outputs with attributed amounts, i. e. taking into account the specific chemical reactions, it must be feasible to obtain the outputs with attributed amounts from the eligible inputs. Secondly, the exclusion of overcompensation, i. e. for an output consisting of different components, of which only some can be chemically linked to eligible input, the possible attributed amount is limited to the share of those components in the output to which there is such a chemical link.
- (19) Attributed amounts cannot be shifted across different sites of a company or across different companies. This does not prevent that materials with attributed amounts may be physically moved between different sites of a company or between different companies without reallocating their attributed amounts, provided that they are accompanied by the necessary documentation to ensure traceability and provide the basis for calculation in case of subsequent mixing with other materials.
- (20) In order to ensure the expected environmental benefits resulting from the achievement of minimum recycled plastic content targets, and to avoid circumvention which could undermine the achievement of these objectives, Member States have to introduce provisions to verify the data and information they collect from the economic operators who place beverage bottles on the market. These provisions depend on the route by which this data and information has been obtained. When using the methodology based on Regulation (EU) 2022/1616, the plastic input waste needs to comply with Article 6(1) thereof. Throughout collection and pre-processing, the waste is verified via quality assurance systems pursuant to Article 6(3) of Regulation (EU) 2022/1616. These quality assurance systems will need to be certified according to Article 6(3)(c) of Regulation (EU) 2022/1616 upon its entering into force. As all parts of beverage bottles are materials intended to come into contact with food, Regulation (EU) 2017/625⁴ applies to beverage bottles, including official controls of the percentage of recycled plastic that recyclers and converters have to provide in the declaration of compliance in accordance with Regulation (EU) 2022/1616. For recycled plastic content that has been calculated on the basis of these declarations of compliance, Member States

⁴ Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation) (OJ L 95, 7.4.2017, p. 1).

should only introduce additional verification provisions regarding the transmission of information to the Member States by the economic operators that place beverage bottles on the market. This way, no additional burden is imposed on the economic operators at the previous stages of the supply chain. For data and information on recycled plastic content obtained via a different route, in particular via mass balance accounting, a new verification system is established in this Implementing Decision. Economic operators, except those who do not introduce any material changes, have to provide a declaration related to recycled content to their suppliers for each batch of material that includes relevant information on the attributed amount of eligible material. In addition, operators processing material in which the polymers have been broken down, require third-party certification based on audits. The certificates are to be handed down the supply chain so that Member States can collect them from the economic operators placing beverage bottles on the market.

- (21) 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.
- (22) 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/EC⁵, which are also based on weight and material.
- (23) Regulation (EU) 2025/40⁶ introduces recycled content requirements for plastic packaging, including for single-use plastic beverage bottles in Article 7 and, when these requirements will apply, will repeal the recycled content targets of Directive (EU) 2019/904 as well as the related reporting obligations, pursuant to Article 67(2) and (3).
- (24) Each plastic waste stream should be processed by that recycling technology that minimizes 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 generally preferable to chemical recycling technologies, if they produce recyclates with similar characteristics for quality, and waste that can be recycled mechanically should generally not enter into chemical recycling. 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 will review the methodology established in this Decision, including the allocation rules, when preparing the

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).

⁶ Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC

implementing acts pursuant to Article 7(8) of Regulation (EU) 2025/40. When adopting the implementing acts under Regulation (EU) 2025/40, the Commission shall assess the available recycling technologies, taking into account their economic and environmental performance, including the quality of the output, the availability of the waste, the energy needed and the emissions of greenhouse gases and other relevant environmental impacts. Pursuant to 7(9) of Regulation (EU) 2025/40, the Commission shall provide sustainability criteria for plastic recycling technologies via delegated acts.

- (25) 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 of the European Parliament and of the Council⁷,

HAS ADOPTED THIS DECISION:

Article 1

Definitions

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

- (1) ‘post-consumer plastic waste’ as defined in Art 3(48) of Regulation (EU) 2025/40;
- (2) ‘recycled plastic’ means plastic which was post-consumer plastic waste before recycling, as defined in Article 3(17) of Directive 2008/98/EC, and which has been produced by recycling;
- (3) ‘eligible material’ means post-consumer plastic waste and material stemming from post-consumer plastic waste, such as recycled plastic and material for which the recycling process has not yet been completed;
- (4) ‘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, excluding:
 - glass or metal beverage bottles that have caps and lids made from plastic;
 - beverage bottles intended and used for food for special medical purposes as defined in Article 2(2)(g), of Regulation (EU) No 609/2013 of the European Parliament and of the Council⁸ that is in liquid form;
- (5) ‘PET bottle’ means a beverage bottle which is manufactured from polyethylene terephthalate as the major component;
- (6) ‘economic operator’ means any of the following operators:

⁷ 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).

⁸ 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).

- recycler as defined in Article 2(3), point 16, of Regulation (EU) 2022/1616;
 - converter as defined in Article 2(3), point 17, of Regulation (EU) 2022/1616;
 - food business operator as defined in Article 3 of Regulation (EC) No 178/2002 of the European Parliament and of the Council⁹;
 - importer;
 - other waste management operator;
- (7) ‘importer’ means any natural or legal person established within the Union who places a product from a third country on the market of a Member State;
- (8) ‘waste management operator’ means any natural or legal person dealing on a professional basis with the collection and/or treatment of waste;
- (9) ‘mass balance accounting’ means a set of calculation rules to determine the attributed amount of outputs throughout a supply chain in which eligible material entering the process is mixed with other material and the actual amount of eligible material in the individual outputs is unknown;
- (10) ‘attributed amount’ means the amount of eligible material entering a process that is attributed to the outputs of the considered process for a mass balancing period;
- (11) ‘recycling technology’ means a recycling technology as defined in Article 2(3), point 1, of Regulation (EU) 2022/1616;
- (12) ‘certifier’ means a natural or legal person, regardless of its legal form, approved by the competent authorities of a Member State to conduct certification procedures;
- (13) ‘certification’ means the process by which a certifier verifies and attests that an economic operator meets the requirements of this Implementing Decision regarding data and calculations related to the recycled content of beverage bottles;
- (14) ‘output category’ means a grouping of outputs:
- (a) non-fuels: outputs other than losses that are or will be reprocessed into materials other than fuels, including plastic;
 - (b) fuels: outputs other than losses that are fuels or that will be reprocessed into materials that are to be used as fuels;
 - (c) dual-use outputs: outputs other than losses that can be reprocessed either into fuels or materials other than fuels;
 - (d) losses: outputs that are disposed of, with ‘disposal’ as defined in Article 3(19) of Directive 2008/98/EC
- (15) ‘batch’ means batch as defined in Article 2(3), point 20, of Regulation (EU) 2022/1616;

⁹ 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).

- (16) ‘chemical building blocks’ means chemicals that form the base for polymers, as defined in point 5 of Article 3 of Regulation (EC) No 1907/2006. This includes monomers and other reactants such as initiators for polymerisation;
- (17) ‘mechanical recycling’ means a recycling technology, as in Article 2(3), point 1, of Regulation (EU) 2022/1616, that recovers collected plastic waste through mechanical and physical processes, typically sorting, grinding, washing, separating materials, drying, extruding and re-crystallisation to produce plastic without changing the chemical structure of the plastic waste input;
- (18) ‘supply chain’ means the series of processes or activities involved in the production and distribution of beverage bottles;
- (19) ‘site’ means a distinct geographic location under the management control of an organisation covering activities, products and services, including all infrastructure, equipment and materials;
- (20) ‘calculation point’ means a point in the supply chain at which for a given material its content of eligible material is determined;
- (21) ‘entity’ means an economic operator that has its own separate legal and financial existence.

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 parts of 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 parts of PET bottles placed on the market of that Member State in that year. The resulting ratio shall be expressed as a percentage.
3. The formulas of Annex I shall be used to calculate the proportion of recycled plastic content in beverage bottles and in PET bottles.

Article 3

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

1. The weight of plastic in beverage bottles placed on the market of a Member State shall be calculated as the sum of the weight of plastic in the beverage bottles placed on the market of that Member State. The data for these bottles shall be collected according to 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 to other Member States of beverage bottles by applying formula 6 of 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 placed on the market of a Member State shall be calculated as the sum of the weight of recycled plastic in the beverage bottles placed on the market of that Member State. The data for these bottles shall be collected according to Article 5.
2. If 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 to other Member States of beverage bottles by applying formula 4 of Annex I.

Article 5

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

1. Member States shall collect data that has been verified in accordance with Article 8 of this Decision from economic operators who place bottles on their market on the weight of plastic and recycled plastic in beverage bottles placed on their market and add up the results respectively.
2. For recycled plastic, as referred to in paragraph 1, for which no other plastic waste than post-consumer plastic waste is used as input and that is obtained through the application of one of the following recycling technologies,
 - (a) mechanical recycling that is listed as a suitable recycling technology in Regulation (EU) 2022/1616,
 - (b) any other recycling technology that is a suitable recycling technology or a novel technology in Regulation (EU) 2022/1616, for which the proportion of eligible material in the output is known,

Member States shall ensure that data on the weight of the recycled plastic is calculated by economic operators by multiplying the percentage of recycled plastic content, as stated in the respective declaration of compliance in Annex III to Regulation (EU) 2022/1616, by the weight of the respective bottle part.

3. For recycled plastic, as referred to in paragraph 1, to which paragraph 2 does not apply, 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 and that the collected data on the weight of recycled plastic is calculated by economic operators who place beverage bottles on their market as the sum of the weight of recycled plastic in each part of each bottle that they place on the market of the respective Member State.
4. For recycled plastic, as referred to in paragraph 1, that is partly obtained through the application of a recycling technology listed in paragraph 2 (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 from the stage at which the mixing occurs onwards. Before the mixing occurs, paragraphs 2 and 3 shall apply, respectively.

Article 6

Calculation of weight of eligible material

1. Calculation points shall be established whenever material stemming, wholly or partly, from post-consumer plastic waste is mixed with any other material, such as virgin polymers or virgin additives or material stemming from plastic waste that is not post-consumer plastic waste. The weight of recycled plastic in a beverage bottle shall be calculated when it is being placed on the market, based upon the data obtained at the calculation points for each of its parts.
2. If at a calculation point, the proportions of the eligible material in the outputs are known, and if no mass balance accounting has been applied previously, the weight of eligible material shall be calculated for each batch of each output by multiplying its percentage in the output by the weight of the batch. Where inputs have different percentages of eligible material, the percentage shall be calculated as a weighted average.
3. If at a calculation point, paragraph 2 does not apply, mass balance accounting shall be used according to the rules laid down in Article 7.

Article 7

Mass balance accounting rules

1. The attributed amount generated within each mass balancing period shall be calculated, on the basis of process-specific operational data that is representative for the respective mass balancing period, as follows:
 - (i) The weight of the input eligible material is allocated to the different outputs. The economic operator may provide certified evidence of the specific distribution of the eligible material across the different outputs. Only in absence of such evidence, the relative share of eligible material in each output shall be assumed to be equal to the relative share of the eligible material in the input.
 - (ii) For each output, the weight of the allocated input eligible material is multiplied by a dual-use factor to obtain the attributed amount of this output. The dual-use factor represents the share of the output that is further processed along the recycling pathway. It represents the possibility to become a non-fuel.
 - (a) For outputs of the output category “non-fuels”, the dual-use factor shall be equal to 1.
 - (b) For outputs of the output category “fuels” and “losses”, the dual-use factor shall be equal to 0.
 - (c) For outputs of the output category “dual-use outputs”, the dual-use factor shall be equal to 0 unless the economic operator calculates it pursuant to

the method laid down in Annex VI. This method is applicable to dual-use outputs in liquid form. The dual-use factor shall be certified.

2. Starting from the distribution of attributed amounts pursuant to paragraph 1, the economic operator may reallocate the attributed amounts among the different outputs subject to the following conditions:
 - (i) Attributed amounts can be attributed only to outputs for which it is possible to prove that there is a chemical process feasible where chemical building blocks constituting these outputs can come from the used input eligible material. The attributed amount of a specific output cannot exceed the share of those parts of the output that can come from the used input eligible material.
 - (ii) The inputs, the outputs, or both are chemical building blocks but not polymers. 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.
3. Mass balance accounting shall be applied at site-level. Attributed amounts shall not be transferred between different sites of a company or between different companies.
4. The weight of recycled plastic on which Member States collect data from economic operators according to Article 5(1) shall correspond 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) that has been calculated in accordance with Article 5(2) and the data collected on the weight of the respective bottle parts based on the assessed reliability of the data. Paragraphs 2 to 11 of this Article shall not apply to this data.
2. For data calculated in accordance with Article 5(3) or 5(4), and collected in accordance with Article 5(1), Member States shall ensure that the following paragraphs are complied with.
3. Economic operators shall provide a declaration related to recycled content, issued in accordance with the model form set out in Annex V, accompanying each batch of material to their customers. Economic operators shall keep the declarations received from their suppliers for at least five years. Economic operators who do not cause material changes to the material shall not be obliged to generate a declaration but to pass on the declarations received from their suppliers to their customers. Member States shall control the accuracy of declarations on a risk basis.
4. Economic operators who process material consisting of chemical building blocks but not polymers at the input stage, the output stage, or both, and calculate data in accordance with Article 6(3) shall be certified, at site level, by complying with all of the following requirements:
 - (a) have a documentation management system;

- (b) have an auditable system for safekeeping and reviewing all evidence related to the calculations they make or rely on;
 - (c) have a functioning system to calculate attributed amounts according to Article 6;
 - (d) keep all evidence necessary to comply with this Decision and Directive (EU) 2019/904 for a minimum of 5 years, or longer where it is required by the Member State;
 - (e) accept responsibility for preparing any information related to the auditing of such evidence;
 - (f) have been audited in accordance with paragraph 7 of this Article;
5. Certifiers shall be accredited by a national accreditation body and in accordance with Regulation (EC) No 765/2008 or recognised by a competent authority.
6. Certificates issued in accordance with the rules established in this Decision shall:
- (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 Commission Recommendation 2003/361/EC, which shall be valid for three years; and
 - (c) be recognised by all Member States.
7. The certifier shall select and appoint the audit team. Audits shall be conducted on-site and in accordance with ISO 19011 or equivalent, and 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) 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. That analysis shall take into consideration the overall risk profile of the activities, depending on the level of risk of the economic operator and the supply chain, above all at the immediately 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;
 - (e) implementation of the verification plan by gathering evidence in accordance with the defined sampling methods, plus all relevant additional evidence, upon which the verifier's conclusion will be based;
 - (f) a request to the operator for the provision of any missing elements of audit trails, an explanation of variations, or the revision of claims or calculations, before reaching a final verification conclusion;

- (g) list of all inputs per site and the description of material handled and details of all suppliers;
 - (h) list of all outputs per site and the description of material handled and details of all customers;
 - (i) conversion factors applied;
 - (j) any discrepancies between bookkeeping system and inputs, outputs and balances.
8. The audit team shall have the competence, experience and the generic and specific skills necessary for conducting the audit taking into account the scope of the audit.
9. Auditors shall adhere to the following requirements:
- (a) they must abide by principles of professional ethics, encompassing integrity, objectivity, professional competence, and due diligence;
 - (b) they must possess comprehensive understanding of the entities whose annual calculations and declarations are under audit;
 - (c) they must demonstrate proficiency in evaluating the reliability of the underlying data and information;
 - (d) they must maintain independence from the economic operator.
10. Economic operators shall pass a copy of the certificates on 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 6.
11. Member States are ultimately responsible for verifying the data they report to the Commission according to Article 9.

Article 9

Collection and reporting of data by Member States

1. Member States shall calculate 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 every year.
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 Implementing Decision by 1 January 2030.

Article 11

Repeal

Commission Implementing Decision (EU) 2023/2683 is repealed.

Article 12

Entry into force

This Decision shall enter into force on the third 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