COMMISSION IMPLEMENTING DECISION (EU) 2023/2683
of 30 November 2023
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

(Text with EEA relevance)

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. 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 the Member States are to report data on recycled plastic content in PET bottles and in beverage bottles each year.

(2) 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.

(3) 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. The only part of a common single-use plastic beverage bottle that might not be made of plastic is expected to be its label, which might be of paper. As the weight of the label is estimated to be at most 5 % of the weight of the bottle, 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.

(4) 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. 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-consumption 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.

(5) 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.

(6) Commission Regulation (EU) 2022/1616 (1) 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. As the objective of this Decision is to enable uniform calculation and verification of the recycled content targets established in Directive (EU) 2019/904, the calculation needs to be done in a consistent manner across Member States. Member States should therefore base the calculation of the recycled plastic content in beverage bottles on the data generated in accordance with Regulation (EU) 2022/1616. Moreover, such methodology minimises administrative burden on economic operators and Member States. Member States should therefore collect from economic operators that place beverage bottles on their market data on the weight of the plastic parts of those bottles and the weight of recycled plastic contained therein.

(7) 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.

---

(8) As all parts of beverage bottles are materials intended to come into contact with food, Regulation (EU) 2017/625 of the European Parliament and of the Council (1) 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. Therefore, Member States should only be required to introduce additional verification provisions regarding the transmission of information to the Member States by the economic operators that place beverage bottles on the market, required by this Decision.

(9) Recycled plastic in beverage bottles is either subject to Regulation (EU) 2022/1616, or to Commission Regulation (EU) No 10/2011 (2), depending on the recycling technology by which it is obtained. Under Regulation (EU) 2022/1616 the only suitable recycling technology that at present can be used to obtain recycled plastic for beverage bottles is mechanical recycling of post-consumer PET waste. Plastic resulting from chemical recycling technologies that break down the input waste into substances listed in Annex I to Regulation (EU) No 10/2011, and which is subsequently used in the manufacture of new plastic in accordance with that Regulation, cannot be distinguished from virgin material. Therefore, compliance documentation issued in accordance with that Regulation presently does not indicate the amount of recycled content therein. This Decision takes only into account recycled plastic in beverage bottles that is in the scope of Regulation (EU) 2022/1616.

(10) In order to take into account also recycled plastic in beverage bottles that has not been obtained by mechanical recycling of PET waste, the Commission plans to draft an amendment of this Decision to include a methodology to calculate, verify and report recycled plastic content in beverage bottles that is based on the application of certain chain of custody models as defined in ISO 22095-2020 (Chain of custody — General terminology and models). In particular, controlled blending, which allows to account also for non-mechanically recycled PET, is a possible chain of custody model. In addition, a mass balance approach may be included as an admissible chain of custody model to also account for plastic in non-PET bottles resulting from feedstock recycling.

(11) 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.

(12) 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 (3), which are also based on weight and material.

(13) 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 Council (4),

HAS ADOPTED THIS DECISION:

Article 1

Definitions

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

(1) ‘post-consumer plastic waste’ means waste, as defined in Article 3(1) of Directive 2008/98/EC, that is plastic and that has been generated from plastic products that have been placed on the market;

(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) ‘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), point (g), of Regulation (EU) No 609/2013 of the European Parliament and of the Council (7) that is in liquid form;

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

(5) ‘economic operator’ means any of the following operators provided that they place beverage bottles on the market:

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


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 by the weight of the plastic parts of beverage bottles placed on the market. 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 by the weight of the plastic parts of PET bottles placed on the market. 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 the plastic parts of beverage bottles

1. The weight of the plastic parts of beverage bottles placed on the market shall be calculated as the sum of the weight of the plastic parts of beverage bottles collected from economic operators.

2. The weight of the plastic parts of beverage bottles placed on the market may be adjusted to take account of imports, exports or movements to and from other Member States of beverage bottles by applying formula 5 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 shall be calculated as the sum of the weight of recycled plastic in beverage bottles collected from economic operators.

2. If the weight of the plastic parts of 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 imports, exports or movements to and from other Member States of beverage bottles by applying formula 4 of Annex I.

Article 5

Obligation to collect data from economic operators and verification of data

1. Member States shall collect from economic operators data on the weight of the plastic parts of beverage bottles placed on the market and on the weight of recycled plastic in those bottles.

2. Member States shall ensure that the collected data on the weight of recycled plastic in beverage bottles has been calculated by economic operators by multiplying for each part of each bottle the percentage of its recycled plastic content with its weight and adding up the results.

3. The percentage of recycled content in a bottle part shall be the percentage that is stated in the declaration of compliance in field 2.1.4 of part B of Annex III to Regulation (EU) 2022/1616.

4. Member States shall check the data reported by the economic operators based on the assessed reliability of the data.

Article 6

Collection and reporting of data by Member States

1. Member States shall calculate the weight of the plastic parts of 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 as provided for 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 7

Additional types of recycling

By 31 March 2024, the Commission shall propose an amendment of this Decision that establishes a methodology to calculate, verify and report on recycled plastic content in beverage bottles that considers recycled plastic resulting from additional types of recycling as defined in Article 3(17) of Directive 2008/98/EC.

Article 8

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, 30 November 2023.

For the Commission

The President

Ursula VON DER LEYEN
ANNEX I

Formulas to calculate the proportion of recycled plastic content in beverage bottles and in PET bottles

The formulas in this Annex shall apply to both beverage bottles and PET bottles.

The term ‘bottle’ shall mean ‘beverage bottle’ if the formulas are applied to beverage bottles and shall mean ‘PET bottle’, if they are applied to PET bottles.

The proportion of recycled plastic content in bottles placed on the market as referred to in Article 2 shall be calculated by applying the following formula:

1. $RC = \frac{R}{W} \times 100\%$

   Where:

   $RC$ means proportion of recycled plastic content in bottles placed on the market as referred to in Article 2
   $R$ means weight of recycled plastic used in bottles placed on the market as referred to in Article 4
   $W$ means weight of plastic used in bottles placed on the market as referred to in Article 3

   As a bottle consists of its body, cap, lid, label and sleeve, if any, the weight of recycled plastic used in bottles shall be calculated by applying the following formula:

2. $R = R_b + R_c + R_l$

   Where:

   $R_b$ means weight of recycled plastic used in the bodies of bottles placed on the market
   $R_c$ means weight of recycled plastic used in the caps/lids of bottles placed on the market
   $R_l$ means weight of recycled plastic used in the labels/sleeves of bottles placed on the market.

   As a bottle consists of its body, cap, lid, label and sleeve, if any, the weight of plastic used in bottles shall be calculated by applying the following formula:

3. $W = W_b + W_c + W_l$

   Where:

   $W_b$ means weight of plastic used in the bodies of bottles placed on the market
   $W_c$ means weight of plastic used in the caps/lids of bottles placed on the market
   $W_l$ means weight of plastic used in the labels/sleeves of bottles placed on the market.

If a Member State adjusts the weight of plastic used in beverage bottles placed on the market in accordance with Article 3(2) and the weight of recycled plastic in beverage bottles placed on the market in accordance with Article 4(2) to take account of imports, exports or movements to and from other Member States of bottles, the following formulas shall be used:

4. $R = R_{MS} + R_{in} \text{ from other MS} + R_{imported} - R_{out} \text{ to other MS} - R_{exported}$

   Where:

   $R_{MS}$ means weight of recycled plastic used in bottles manufactured and placed on the market in the same Member State
   $R_{in}$ from other MS means weight of recycled plastic used in bottles moved in from other Member States and placed on the market in the Member State
   $R_{imported}$ means weight of recycled plastic used in bottles that have been imported, i.e. moved into the Union from third countries, and placed on the market in the Member State
   $R_{out}$ to other MS means weight of recycled plastic used in bottles moved out to other Member States after having been placed on the market in the Member State
R_exported means weight of recycled plastic used in bottles that have been exported, i.e. moved out of the Union to third countries, after having been placed on the market in the Member State.

5. \( W = W_{MS} + W_{in \ from \ other \ MS} + W_{imported} - W_{out \ to \ other \ MS} - W_{exported} \)

Where:

- \( W_{MS} \) means weight of plastic used in bottles manufactured and placed on the market in the Member State
- \( W_{in \ from \ other \ MS} \) means weight of plastic used in bottles moved in from other Member States and placed on the market in the Member State
- \( W_{imported} \) means weight of plastic used in bottles that have been imported, i.e. moved into the Union from third countries, and placed on the market in the Member State
- \( W_{out \ to \ other \ MS} \) means weight of plastic used in bottles moved out to other Member States after having been placed on the market in the Member State
- \( W_{exported} \) means weight of plastic used in bottles that have been exported, i.e. moved out of the Union to third countries, after having been placed on the market in the Member State

As a bottle consists of its body, cap, lid, label and sleeve, if any, the summands in formulas 4 and 5 shall be calculated by applying the following formulas:

6. \( R_x = R_x_b + R_x_c + R_x_l \)

Where:

- \( x \) is to be replaced by either ‘MS’, or ‘in from other MS’, or ‘imported’, or ‘out to other MS’, or ‘exported’
- \( R_x \) means any of the summands on the right side of the equation in formula 4
- \( R_x_b \) means weight of recycled plastic used in the body of \( R_x \)
- \( R_x_c \) means weight of recycled plastic used in the cap/lid of \( R_x \)
- \( R_x_l \) means weight of recycled plastic used in the label/sleeve of \( R_x \)

7. \( W_x = W_{x_b} + W_{x_c} + W_{x_l} \)

Where:

- \( x \) is to be replaced by either ‘MS’, or ‘in from other MS’, or ‘imported’, or ‘out to other MS’, or ‘exported’
- \( W_x \) means any of the summands on the right side of the equation in formula 5
- \( W_{x_b} \) means weight of plastic used in the body of \( W_x \)
- \( W_{x_c} \) means weight of plastic used in the cap/lid of \( W_x \)
- \( W_{x_l} \) means weight of plastic used in the label/sleeve of \( W_x \)
ANNEX II

FORMAT FOR THE REPORTING OF DATA

1. Format for reporting of data calculated based on the methodology set out in Article 3

Table 1

Weight of plastic used in beverage bottles and of PET bottles placed on the market calculated in accordance with Article 3 (in tonnes)

<table>
<thead>
<tr>
<th>COUNTRY:</th>
<th>PET bottles (C1)</th>
<th>beverage bottles other than PET bottles (C2)</th>
<th>beverage bottles (C1+C2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REFERENCE YEAR:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weight of plastic used in bottles calculated in accordance with Article 3(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of plastic used in bottles manufactured and placed on the market in the Member State (1)</td>
</tr>
<tr>
<td>Adjustment of the weight of plastic used in bottles calculated in accordance with Article 3(2)</td>
</tr>
<tr>
<td>Weight of plastic used in bottles moved from other Member States and placed on the market (2)</td>
</tr>
<tr>
<td>Weight of plastic used in bottles that have been imported and placed on the market (3)</td>
</tr>
<tr>
<td>Weight of plastic used in bottles moved to other Member States after having been placed on the market in the Member State (4)</td>
</tr>
<tr>
<td>Weight of plastic used in bottles that have been exported after having been placed on the market in the Member State (5)</td>
</tr>
<tr>
<td>Weight of plastic used in bottles placed on the market adjusted (6)</td>
</tr>
</tbody>
</table>

Notes:
- Dark shaded boxes: Reporting is voluntary
- (1) Calculated in accordance with Article 3(1), W_MS
- (2) Calculated in accordance with Article 3(2), W_in from other MS
- (3) Calculated in accordance with Article 3(2), W_imported
- (4) Calculated in accordance with Article 3(2), W_out to other MS
- (5) Calculated in accordance with Article 3(2), W_exported
- (6) Calculated in accordance with Article 3(2), W

To demonstrate compliance with the targets in Article 6(5), point (a), of Directive (EU) 2019/904 and to fulfil the reporting requirements laid down in Article 13(1), point (e), of Directive (EU) 2019/904, column 1 (C1) must be filled in. To demonstrate compliance with the targets in Article 6(5), point (b), of Directive (EU) 2019/904 and to fulfil the reporting requirements laid down in Article 13(1), point (e), of Directive (EU) 2019/904, either columns 1 (C1) and 2 (C2), or columns 1 (C1) and 3 (C1 + C2) must be filled in. The remaining column may be filled in on a voluntary basis.
2. Format for reporting of data calculated based on the methodology set out in Article 4

Table 2

Weight of recycled plastic used in beverage bottles and PET bottles placed on the market calculated in accordance with Article 4 (in tonnes) and proportion of recycled plastic content (in percent)

<table>
<thead>
<tr>
<th></th>
<th>PET bottles (C1)</th>
<th>beverage bottles other than PET bottles (C2)</th>
<th>beverage bottles (C1+C2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUNTRY:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REFERENCE YEAR:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weight of recycled plastic used in bottles calculated in accordance with Article 4(1)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of recycled plastic used in bottles manufactured and placed on the market in the Member State (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjustment of the weight of recycled plastic used in bottles calculated in accordance with Article 4(2)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of recycled plastic used in bottles moved from other Member States and placed on the market (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of recycled plastic used in bottles that have been imported and placed on the market (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of recycled plastic used in bottles moved to other Member States after having been placed on the market in the Member State (4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of recycled plastic used in bottles that have been exported after having been placed on the market in the Member State (5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight of recycled plastic used in bottles placed on the market adjusted (6)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Proportion of recycled plastic content in bottles, expressed in percent (7)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Notes:
Dark shaded boxes: Reporting is voluntary
(1) Calculated in accordance with Article 4(1), R_MS
(2) Calculated in accordance with Article 4(2), R_in from other MS
(3) Calculated in accordance with Article 4(2), R_imported
(4) Calculated in accordance with Article 4(2), R_out to other MS
(5) Calculated in accordance with Article 4(2), R_exported
(6) Calculated in accordance with Article 4(2), R
(7) Calculated in accordance with Article 2, RC

To demonstrate compliance with the targets in Article 6(5), point (a), of Directive (EU) 2019/904 and to fulfill the reporting requirements laid down in Article 13(1), point (c), of Directive (EU) 2019/904, column 1 (C1) must be filled in. To demonstrate compliance with the targets in Article 6(5), point (b), of Directive (EU) 2019/904 and to fulfill the reporting requirements laid down in Article 13(1), point (e), of Directive (EU) 2019/904, either columns 1 (C1) and 2 (C2), or columns 1 (C1) and 3 (C1+C2) must be filled in. The remaining column may be filled in on a voluntary basis.
ANNEX III

FORMAT FOR THE QUALITY CHECK REPORT

1. General information

1.1. Member State:

1.2. Organisation submitting the data and the quality check report:

1.3. Contact name:

1.4. Contact email address:

1.5. Contact phone number:

1.6. Reference year:

1.7. Delivery date/version:

1.8. Link to data publication by the Member State (if any)

2. Description of the institutions involved in the data collection

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>Description of role and key responsibilities</th>
<th>Date of data submission</th>
<th>Reference time period</th>
<th>Sources of data (clarify the relative proportion of the overall data derived from each source and include links to all references, publications etc.)</th>
</tr>
</thead>
</table>

(Add rows as appropriate)

3. Description of methods used

3.1. Description of the scope of the calculation of recycled plastic content in beverage bottles as transposed in national law

A description of the level at which attainment towards the targets laid down in Article 6(5) of Directive (EU) 2019/904 is calculated. For example, the targets might be mandatory requirements for each single beverage bottle placed on the market, or as an average for beverage bottles placed on the market by each economic operator, or as an average for beverage bottles placed on the market in the Member State.

(Add rows as appropriate)

3.2. Methodologies for the collection and compilation of data

A description of the methodologies applied to collect and compile the data for all the tools used for data gathering.

(Add rows as appropriate)
3.3. **Additional assumptions**

A description of any additional assumptions or adjustment factors that have been used for the calculation, the approach used for their estimation and any supporting evidence.

*(Add rows as appropriate)*

4. **Data verification and control system**

4.1. **Verification of data on beverage bottles and PET bottles**

<table>
<thead>
<tr>
<th>Verification and control procedures</th>
<th>Applied for data on PET bottles placed on the market (yes/no)</th>
<th>Applied for data on beverage bottles placed on the market other than PET bottles (yes/no)</th>
<th>Additional comments, if relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data completeness checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time-series checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit checks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2. **Verification of data on recycled plastic content in beverage bottles and PET bottles**

Description of the methodology used for the quality assurance and verification of the data on recycled plastic content in beverage bottles and PET bottles.

*(Add rows as appropriate)*

4.3. **Description of main factors affecting the accuracy of the data reported on beverage bottles and PET bottles placed on the market and on recycled plastic used in beverage bottles and PET bottles placed on the market**

<table>
<thead>
<tr>
<th>Potential factors affecting reliability of data</th>
<th>PET bottles placed on the market (yes/no)</th>
<th>Beverage bottles placed on the market other than PET bottles (yes/no)</th>
<th>Recycled plastic used in PET bottles placed on the market (yes/no)</th>
<th>Recycled plastic used in beverage bottles placed on the market other than PET bottles (yes/no)</th>
<th>Description of how the accuracy of data is affected</th>
<th>Description of the methodologies that have been applied to minimise the impact of inaccurate data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling errors ('')(e.g. coefficients of variation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coverage errors ('')(e.g. de-minimis rules, regional coverage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement errors ('')(e.g. measurement unit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Data collection test instruments (*) (e.g. testing of questionnaires)

Processing errors (*) (e.g. identification of errors, correction of errors)

Non-response errors (*)

Model assumption errors (*)

Other (please specify)

(*) Describe the estimated coefficients of variation and the methodologies applied for variance estimation.
(1) Describe the type and size of coverage errors.
(*) Describe the instruments to reduce potential risks and avoid errors.
(*) Describe the instruments and methodologies applied to secure quality and relevant data collection instruments.
(1) Describe the processing steps between data collection and production of statistics and list any processing errors identified and their extent.
(1) Describe the unit and item non-response rates for the main variables and the imputation methods (if any).
(1) Describe the type and size of model assumption errors.

4.4. Explanation of the scope and validity of surveys to collect data on beverage bottles and PET bottles placed on the market and recycled plastic used in beverage bottles and PET bottles placed on the market

(Add rows as appropriate)

4.5. Differences in the data reported for the previous reference years

Significant methodological changes in the calculation method used for the current reference year in relation to the calculation method used for previous reference years, if any (in particular retrospective revisions, their nature and whether a break in the series has to be flagged for a certain year)

(Add rows as appropriate)

4.6. Explanation for the difference in tonnage

This section has to be filled if the reported data shows a greater than 10 % variation in relation to the data submitted for the previous reference year.

Reasons for the difference or the underlying cause for the differences in the weight of beverage bottles or PET bottles placed on the market or in the weight of recycled plastic used in beverage bottles or PET bottles placed on the market.

<table>
<thead>
<tr>
<th>Variations in the weight of beverage bottles or PET bottles placed on the market</th>
<th>Variation (%)</th>
<th>Main reason for variation</th>
</tr>
</thead>
</table>

(Add rows as appropriate)
Variations in the weight of the recycled plastic used in beverage bottles or PET bottles placed on the market

<table>
<thead>
<tr>
<th></th>
<th>Variation (%)</th>
<th>Main reason for variation</th>
</tr>
</thead>
</table>

(Add rows as appropriate)

5. **Confidentiality**

Reasons for the request not to publish the reported data or certain information provided in this report, together with a list of the specific parts requested not to be published.

(Add rows as appropriate)