

# DECISIONS

## COMMISSION IMPLEMENTING DECISION (EU) 2021/1752

of 1 October 2021

### 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 the separate collection of waste single-use plastic beverage bottles

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 <sup>(1)</sup>, and in particular Articles 9(3) and 13(4) thereof,

Whereas:

- (1) Directive (EU) 2019/904 sets targets for the separate collection for recycling of waste single-use plastic beverage bottles listed in Part F of the Annex to that Directive ('waste single-use bottles'). Pursuant to Article 9(1) of Directive (EU) 2019/904, the target for 2025 is 77 % by weight of all such single-use bottles placed on the market and the target for 2029 is 90 %. The Commission is to lay down the methodology for the calculation and verification of those separate collection targets and the format in which the Member States are to report data on waste single use bottles that have been separately collected each year.
- (2) To ensure comparability of data, it is necessary to set out detailed rules for determining the points where the weight of the collected waste single-use bottles is measured. Those rules should take into account the existing separate collection practices and the amount of other materials and substances present in the collected waste in addition to such bottles.
- (3) In order to ensure the comparability of the data to be reported, it is necessary to provide detailed rules for how to apply the two alternative methods, referred to in Article 9(1) of Directive (EU) 2019/904, of determining the amount of such single-use bottles placed on the market.
- (4) In order to ensure accuracy of the data on the weight of the collected waste single-use bottles, the reporting format should ensure that all parameters relevant for the calculation of the amount of waste single-use bottles separately collected are identified and that a description of the methodologies applied for the calculation and verification of the data for those parameters is provided.
- (5) While the obligation to separately collect waste requires that waste be kept separate by type and nature, it should be possible to collect certain types of waste together provided that this does not impede high-quality recycling in line with the waste hierarchy in accordance with Article 10(2) and point (a) of Article 10(3) of Directive 2008/98/EC.
- (6) The methodology for the calculation and verification of the separate collection targets for waste single-use bottles referred to in Article 9(3) of Directive (EU) 2019/904 is closely linked to the format for reporting on such separate collection referred to in Article 13(4) of that Directive in view of the subject-matter of those measures and the context in which they are to apply. It is therefore appropriate to adopt this act on the basis of both of those provisions in order to ensure coherence between the rules on calculation, verification and reporting on separate collection of waste single-use bottles and facilitate access to those rules.
- (7) 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 <sup>(2)</sup>,

<sup>(1)</sup> OJ L 155, 12.6.2019, p. 1.

<sup>(2)</sup> 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).

HAS ADOPTED THIS DECISION:

#### *Article 1*

##### **Methodology for the calculation and reporting of the amount of separately collected waste single-use bottles**

1. The amount of separately collected waste single-use plastic beverage bottles listed in Part F of the Annex to Directive (EU) 2019/904 ('waste single-use bottles') shall be calculated by dividing the weight of the separately collected waste single-use bottles by the weight of such single-use bottles placed on the market ('single-use bottles placed on the market'). The resulting ratio shall be expressed in percent.
2. Member States shall apply the formulas laid down in Annex I to calculate the amount of separately collected waste single-use bottles.

#### *Article 2*

##### **Methodology for the determination of the weight of separately collected waste single-use bottles**

1. The weight of the waste single-use bottles shall include the weight of their caps and lids.
2. The weight of the waste single-use bottles shall not include the weight of any remaining beverage.
3. The weight of the waste single-use bottles may include the weight of labels and adhesives only if it is included also in the weight of the single-use bottles placed on the market.
4. The waste single-use bottles shall be considered as separately collected where either of the following conditions is fulfilled:
  - (a) the waste single-use bottles have been collected separately for recycling from any other waste;
  - (b) the waste single-use bottles have been collected together with other waste packaging fractions of municipal waste or with other non-packaging plastic, metal, paper or glass fractions of municipal waste collected separately for recycling, and
    - (i) the collection system does not collect waste likely to contain hazardous substances;
    - (ii) the collection of waste and the subsequent sorting are designed and carried out to minimise contamination of collected waste single-use bottles from waste plastics not originating from such bottles and other waste;
    - (iii) quality assurance systems are set up by the waste operators in order to verify that the conditions set out in points (i) and (ii) are fulfilled.
5. The quality assurance systems referred to in paragraph 4, point (b)(iii) shall:
  - (a) take account of the adequacy of personnel, their knowledge and skills, and the organisation of the premises and equipment to the extent necessary to ensure that collected waste single-use bottles comply with the conditions set out in paragraph 4, point (b)(i) and (ii);
  - (b) carry out the verifying operations accordance with pre-established instructions and procedures;
  - (c) be certified by an independent third party.
6. The weight of waste single-use bottles collected separately in accordance with paragraph 4, point (a), shall be measured at the point where they are collected or at the output of the sorting operations. The weight of such waste bottles may be calculated by counting the bottles provided that conversion factors are applied that take into account the weight of each bottle size, the polymer type of the bottles and the lids and caps as well as the losses in subsequent sorting operations.

7. The weight of waste single-use bottles collected separately in accordance with paragraph 4, point (b), shall be measured at the output of the sorting operations where they are separated from the other waste with which they were collected.

8. Where waste single-use bottles and other packaging waste of the same polymer are present at the output of a sorting operation, the weight of the waste single-use bottles shall be proportional to the share of waste single-use bottles at the input of a sorting operation. That share shall be determined based on representative sampling and subsequent compositional analysis or by use of electronic registries.

### *Article 3*

#### **Methodology for the determination of the weight of single-use bottles placed on the market**

1. The weight of single-use bottles placed on the market shall include only the weight of such bottles that were placed on the market after having been filled with beverage.

2. The weight of single-use bottles placed on the market may, where there are significant imports, exports or other movements within the Union of such bottles by operators or by natural persons for their own personal use, be adjusted in order to take account of such movements.

3. In cases where Member States determine the weight of single-use bottles placed on the market on the basis of the weight of the waste generated from such products as referred to in Article 9(1), second subparagraph, of Directive (EU) 2019/904, the weight of that waste shall include the following:

- (a) separately collected waste single-use bottles, irrespective of whether or not they meet the requirements set out in Article 2(4), points (a) and (b);
- (b) waste single-use bottles collected as mixed municipal waste;
- (c) waste single-use bottles disposed of as litter outside of waste collection systems, irrespective of whether or not they have subsequently been collected.

The weight of the bottles referred to in the first subparagraph, points (b) and (c), shall be calculated by applying the sampling methodology and the waste composition analysis set out in Article 4.

### *Article 4*

#### **Sampling methodology and waste composition analysis to calculate the weight of waste single-use bottles collected as mixed municipal waste or disposed of as litter**

1. The data collection for the waste composition analysis shall be based on surveys and a collection of representative samples. This data collection shall take into account:

- (a) seasonal variations of waste single-use bottles disposed as litter outside of waste collection systems;
- (b) variations in the levels of urbanisation;
- (c) variations in frequency, types and location of municipal waste collection.

2. The data collection and analysis referred to in paragraph 1 shall cover the entire territory of a given Member State.

*Article 5***Collection and reporting of data**

1. Collection of data to calculate the weight of waste single-use bottles and single-use bottles placed on the market in accordance with Article 2 and Article 3 shall be carried out every year. Member States shall, to the extent possible, use electronic registries to collect and report data.
2. Member States shall report the data referred to in Article 13(1), point (c), of Directive (EU) 2019/904 in the format laid down in Annex II to this Decision and submit the quality check report referred to in Article 13(2) of that Directive as regards those data in the format laid down in Annex III to this Decision.
3. The Commission shall publish the data reported by the Member States unless a Member State provides a justified request in the report referred to in paragraph 2 to withhold the publication of certain data.

*Article 6***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, 1 October 2021.

*For the Commission*  
*The President*  
Ursula VON DER LEYEN

---

## FORMULAS FOR THE CALCULATION OF THE AMOUNT OF SEPARATELY COLLECTED WASTE SINGLE-USE BOTTLES

$$A_{SCB} = (W_{SCB \text{ apart}} + W_{SCB \text{ blended}}) / (W_{BPM} + W_{EWG}) \times 100 \%$$

Where:

$A_{SCB}$	means the amount of separately collected for recycling waste single-use bottles as referred to in Article 1
$W_{SCB \text{ apart}}$	means the weight of waste single-use bottles collected separately for recycling from any other waste in accordance with Article 2(4), point (a)
$W_{SCB \text{ blended}}$	means the weight of waste single-use bottles collected separately for recycling together with other wastes in accordance with Article 2(4), point (b)
$W_{BPM}$	means the weight of single-use bottles placed on the market as referred to in Article 3(1) and (2)
$W_{EWG}$	means the weight of single-use bottles placed on the market and determined on the basis of the weight of the waste generated by such products as referred to in Article 3(3)

$$W_{BPM} = W_{BPM \text{ gross}} - W_{B \text{ out}} + W_{B \text{ in}}$$

$W_{BPM \text{ gross}}$	means the weight of single-use bottles placed on the market as referred to in Article 3(1)
$W_{B \text{ out}}$	means the weight of single-use bottles placed on the market that have been exported or moved to other Member States by operators or by natural persons for their own personal use as referred to in Article 3(2)
$W_{B \text{ in}}$	means the weight of single-use bottles placed on the market that have been imported or received from other Member States by operators or by natural persons for their own personal use as referred to in Article 3(2)

$$W_{B \text{ out}} = W_{B \text{ out moved to other MS}} + W_{B \text{ out exp}} + W_{B \text{ out moved to other MS by natural persons}} + W_{B \text{ out by natural persons}}$$

$W_{B \text{ out moved to other MS}}$	means the weight of single-use bottles placed on the market that have been moved to other Member States by operators
$W_{B \text{ out exp}}$	means the weight of single-use bottles placed on the market that have been exported by operators
$W_{B \text{ out moved to other MS by natural persons}}$	means the estimated weight of single-use bottles placed on the market that have been moved to other Member State by natural persons for their own personal use
$W_{B \text{ out by natural persons}}$	means the estimated weight of single-use bottles placed on the market that have been exported by natural persons for their own personal use

$$W_{B \text{ in}} = W_{B \text{ in from other MS}} + W_{B \text{ in imported}} + W_{B \text{ in moved from other MS by natural persons}} + W_{B \text{ in by natural persons}}$$

$W_{B \text{ in from other MS}}$	means the weight of single-use bottles placed on the market that have been received from other Member States by operators
$W_{B \text{ in imported}}$	means the weight of single-use bottles placed on the market that have been imported by operators
$W_{B \text{ in moved from other MS by natural persons}}$	means the estimated weight of single-use bottles placed on the market that have been moved from other Member State by natural persons for their own personal use
$W_{B \text{ in by natural persons}}$	means the estimated weight of single-use bottles placed on the market that have been imported by natural persons for their own personal use

$$W_{EWG} = TW_{SCB} + W_{other\ SCB} + W_{MSW} + W_{litter}$$

- $TW_{SCB}$  means the weight of waste single-use bottles collected separately for recycling in accordance with the requirements set out in Article 2(4), points (a) and (b) as referred to in Article 3(3), point (a)
- $W_{other\ SCB}$  means the weight of waste single-use bottles collected separately for recycling not in accordance with the requirements set out in Article 2(4), points (a) and (b) as referred to in Article 3(3), point (a)
- $W_{MSW}$  means the weight of waste single-use bottles collected as mixed municipal waste as referred to in Article 3(3), point (b)
- $W_{litter}$  means the weight of littered waste single-use bottles as referred to in Article 3(3), point (c)
-

## FORMAT FOR THE REPORTING OF DATA

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

Table 1

## Weight of single-use bottles placed on the market calculated in accordance with Article 3 (in tonnes)

<b>COUNTRY:</b>	
<b>REFERENCE YEAR:</b>	
<b>Weight of single-use bottles in tonnes calculated in accordance with Article 3(1)</b>	
Weight of single use bottles placed on the market <sup>(1)</sup>	
<b>Adjustment of the weight of single-use bottles calculated in accordance with Article 3(2)</b>	
Weight of single use bottles placed on the market that have been imported by operators <sup>(2)</sup>	
Weight of single use bottles placed on the market that have been received from other Member States by operators <sup>(3)</sup>	
Weight of single use bottles placed on the market that have been exported by operators <sup>(4)</sup>	
Weight of single use bottles placed on the market that have been moved to other Member States by operators <sup>(5)</sup>	
Estimated weight of single use bottles placed on the market that have been exported by natural persons for their own personal use <sup>(6)</sup>	
Estimated weight of single use bottles placed on the market that have been imported by natural persons for their own personal use <sup>(7)</sup>	
Estimated weight of single use bottles placed on the market that have been moved to other Member State by natural persons for their own personal use <sup>(8)</sup>	
Estimated weight of single use bottles placed on the market that have been moved from other Member State by natural persons for their own personal use <sup>(9)</sup>	
Weight of single use bottles placed on the market adjusted <sup>(10)</sup>	

**Weight of single-use bottles placed on the market determined on the basis of the weight of waste generated from such products calculated in accordance with Art 3(3)**

Weight of waste single-use bottles collected separately for recycling in accordance with the requirements set out in Article 2(4)(a) and (b) <sup>(1)</sup>	
Weight of waste single use bottles collected separately not in accordance with the requirements set out in Article 2(4)(a) and (b) <sup>(12)</sup>	
Weight of waste single-use bottles collected as mixed municipal waste <sup>(13)</sup>	
Weight of littered waste single-use bottles <sup>(14)</sup>	

**Notes:**

Dark shaded boxes: Reporting is voluntary

<sup>(1)</sup> Calculated in accordance with Article 3(1). ( $W_{BPM\ gross}$ )<sup>(2)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ in\ imported}$ )<sup>(3)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ in\ from\ other\ MS}$ )<sup>(4)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ out\ exp}$ )<sup>(5)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ out\ moved\ to\ other\ MS}$ )<sup>(6)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ out\ by\ natural\ persons}$ )<sup>(7)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ in\ by\ natural\ persons}$ )<sup>(8)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ out\ moved\ to\ other\ MS\ by\ natural\ persons}$ )<sup>(9)</sup> Calculated in accordance with Article 3(2). ( $W_{B\ in\ moved\ from\ other\ MS\ by\ natural\ persons}$ )<sup>(10)</sup> Calculated in accordance with Article 3(2). ( $W_{BPM}$ )<sup>(11)</sup> Calculated in accordance with Article 3(3), point (a). ( $TW_{SCB}$ )<sup>(12)</sup> Calculated in accordance with Article 3(3), point (a). ( $W_{other\ SCB}$ )<sup>(13)</sup> Calculated in accordance with Article 3(3), point (b). ( $W_{MSW}$ )<sup>(14)</sup> Calculated in accordance with Article 3(3), point (c). ( $W_{litter}$ )**II. Format for reporting of data calculated based on the methodology set out in Article 2(4)**

Table 2

**Weight of separately collected for recycling waste single-use bottles calculated in accordance with Article 2(4) (in tonnes)**

<b>COUNTRY:</b>	
<b>REFERENCE YEAR:</b>	
a) Weight of waste single use bottles collected separately from any other waste <sup>(1)</sup>	
b) Weight of waste single use bottles collected together with other wastes <sup>(2)</sup>	

**Notes:**<sup>(1)</sup> Calculated in accordance with Article 2(4), point (a). ( $W_{SCB\ apart}$ )<sup>(2)</sup> Collected together with other waste packaging fractions of municipal waste or with other non-hazardous, non-packaging plastic, metal, paper or glass fractions of municipal waste collected separately for recycling and calculated in accordance with Article 2(4), point (b). ( $W_{SCB\ blended}$ )



## ANNEX III

## FORMAT FOR THE QUALITY CHECK REPORT

## I. General Information

1.1. Member State:	
1.2. Organisation submitting the data and the description:	
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):	

## II. Description of the institutions involved in the data collection

Name of institution	Description of key responsibilities

Add rows as appropriate.

## III. Description of methods used

## 3.1. Single-use bottles placed on the market (Annex II, Table 1)

## 3.1.1. Description of the methodology for surveys and composition analysis

Where the weight of single-use bottles placed on the market is determined based on the weight of the waste generated from such products, a description of the methodology used for the sampling and the waste composition analysis referred to in Article 4.

	Methodology used	Variations taken into account
Waste single-use bottles collected as mixed municipal waste		
Waste single-use bottles disposed of as litter		

## 3.1.2. Description of any significant inconsistencies between the weight of single-use bottles placed on the market and the weight of packaging waste generated or any other related issues

Where appropriate, a description of corrective measures planned or taken.

Add rows as appropriate

### 3.2. Information on separately collected waste single-use bottles (Annex II, Table 2)

#### 3.2.1. Description of the methods and sources for determining the weight of separately collected waste single-use bottles

Explain the practices that are taken into account for calculating the share of separately collected waste single-use bottles, and the methods for determining that waste single-use bottles collected together with other waste are of comparable quality to waste single-use bottles collected separately from any other waste. Include the documentation of the quality assurance systems and of the third party verification that are set up by the waste operators to verify that the conditions set out in Article 2(4)(b), points (i) and (ii), are fulfilled.

Add rows as appropriate

## IV. Data verification and control system

### 4.1 Verification of data on separately collected waste single-use bottles

Verification and control procedures	Applied for data on					Additional comments, if relevant
	Single-use bottles placed on the market (yes/no)	Waste single-use bottles (yes/no)	Waste single-use bottles collected separately from other waste as referred to in Article 2(4), point (a) (yes/no)	Waste single-use bottles collected together with other waste as referred to in Article 2(4), point (b) (yes/no)	Adjustment to account for other materials captured by separate collection, that are not part of the single-use bottles <sup>(1)</sup> (yes/no)	
Data completeness checks						
Cross-checks						
Time-series checks						
Audit checks						
Other (specify)						

<sup>(1)</sup> Labels, adhesives, residues of beverages that the bottles contained and any other material that is not part of the single-use bottle or of its caps and lids.

4.2 **Description of main factors affecting the accuracy of the data reported on waste single-use bottles, single-use bottles placed on the market and/or waste single-use bottles separately collected**

Potential factors affecting reliability of data	Factors			Description of how the accuracy of data is affected and which methodologies have been applied to minimise the impact of inaccurate data
	Single-use bottles placed on the market (yes/no)	Waste single-use bottles (yes/no)	Waste single-use bottles separately collected (yes/no)	
Sampling errors <sup>(1)</sup> (e.g. coefficients of variation)				
Coverage errors <sup>(2)</sup> (e.g. de-minimis rules, regional coverage)				
Measurement errors <sup>(3)</sup> (e.g. measurement unit, material that is not part of an empty single-use bottle including its caps and lids)				
Data collection test instruments <sup>(4)</sup> e.g. testing of questionnaires)				
Processing errors <sup>(5)</sup> (e.g. identification of errors, correction of errors)				
Non-response errors <sup>(6)</sup>				
Model assumption errors <sup>(7)</sup>				
Other (please specify)				

<sup>(1)</sup> Describe the estimated coefficients of variation and the methodologies applied for variance estimation.

<sup>(2)</sup> Describe the type and size of coverage errors.

<sup>(3)</sup> Describe the instruments to reduce potential risks and avoid errors.

<sup>(4)</sup> Describe the instruments and methodologies applied to secure quality and relevant data collection instruments.

<sup>(5)</sup> Describe the processing steps between data collection and production of statistics and list any processing errors identified and their extent.

<sup>(6)</sup> Describe the unit and item non-response rates for the main variables and the imputation methods (if any).

<sup>(7)</sup> Describe the type and size of model assumption errors.

**4.3 Explanation of the scope and validity of surveys to collect data on waste single-use bottles, single-use bottles placed on the market and or waste single-use bottles separately collected**

---



---

*Add rows as appropriate*

**4.4 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*

**4.5 Explanation for the difference in tonnage**

Where 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 waste single-use bottles, single-use bottles placed on the market and/or waste single-use bottles separately collected.

Waste single-use bottles, single-use bottles placed on the market and/or waste single-use bottles separately collected	Variation (%)	Main reason for variation

*Add rows as appropriate*

**V. Confidentiality**

Justification for the request to withhold the publication of certain data in this report, together with a list of the specific parts requested to be withheld.

**VI. Main national websites, reference documents and publications**

Name and url of the main websites, reference documents and publications related to this data collection.

---



---

*Add rows as appropriate*