



Brussels, XXX  
[...] (2024) XXX draft

ANNEXES 1 to 5

## ANNEXES

to the

### **Commission Implementing Decision**

**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**

## 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.  $RC = R/W \times 100 \%$

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<sub>b</sub> means weight of recycled plastic used in the bodies of bottles placed on the market

R<sub>c</sub> means weight of recycled plastic used in the caps/lids of bottles placed on the market

R<sub>l</sub> 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<sub>b</sub> means weight of plastic used in the bodies of bottles placed on the market

W<sub>c</sub> means weight of plastic used in the caps/lids of bottles placed on the market

W<sub>l</sub> 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.  $R = R_{MS} - R_{out\ to\ other\ MS} - R_{exported}$

Where:

$R_{MS}$  means weight of recycled plastic used in bottles placed on the market in the Member State (including bottles that are imported or moved in from other Member States and bottles that are exported or moved out to other Member States after having been 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.  $R_{MS} = R_{man\ in\ MS} + R_{in\ from\ other\ MS} + R_{imported}$

Where:

$R_{man\ in\ MS}$  means weight of recycled plastic used in bottles manufactured and placed on the market in the 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

6.  $W = W_{MS} - W_{out\ to\ other\ MS} - W_{exported}$

Where:

$W_{MS}$  means weight of plastic used in bottles placed on the market in the Member State (including bottles that are imported or moved in from other Member States and bottles that are exported or moved out to other Member States after having been 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

7.  $W_{MS} = W_{man\ in\ MS} + W_{in\ from\ other\ MS} + W_{imported}$

Where:

$W_{man\ in\ MS}$  means weight of plastic used in bottles manufactured and placed on the market in the Member State

W<sub>in</sub> 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<sub>imported</sub> 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

As a bottle consists of its body, cap, lid, label and sleeve, if any, the summands in formulas 4 to 7 shall be calculated by applying the following formulas:

8.  $R_x = R_{x_b} + R_{x_c} + R_{x_l}$

Where:

x is to be replaced by either 'MS', or 'man in MS', or 'in from other MS', or 'imported', or 'out to other MS', or 'exported'

R<sub>x</sub> means any of the summands on the right side of the equation in formulas 4 and 5

R<sub>x\_b</sub> means weight of recycled plastic used in the body of R<sub>x</sub>

R<sub>x\_c</sub> means weight of recycled plastic used in the cap/lid of R<sub>x</sub>

R<sub>x\_l</sub> means weight of recycled plastic used in the label/sleeve of R<sub>x</sub>

9.  $W_x = W_{x_b} + W_{x_c} + W_{x_l}$

Where:

x is to be replaced by either 'MS', or 'man in MS', or 'in from other MS', or 'imported', or 'out to other MS', or 'exported'

W<sub>x</sub> means any of the summands on the right side of the equation in formulas 6 and 7

W<sub>x\_b</sub> means weight of plastic used in the body of W<sub>x</sub>

W<sub>x\_c</sub> means weight of plastic used in the cap/lid of W<sub>x</sub>

W<sub>x\_l</sub> means weight of plastic used in the label/sleeve of W<sub>x</sub>

## ANNEX II

### FORMAT FOR THE REPORTING OF DATA

#### 10. 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)

	PET bottles (C1)	beverage bottles other than PET bottles (C2)	beverage bottles (C1+C2)
<b>COUNTRY:</b>			
<b>REFERENCE YEAR:</b>			
<b>Weight of plastic used in bottles calculated in accordance with Article 3(1)</b>			
<b>Weight of plastic used in bottles placed on the market of the Member State (1)</b>			
<b>Weight of plastic used in bottles manufactured and placed on the market in the Member State (2)</b>	[mandatory if (1) W_MS is not reported ]	[mandatory if (1) W_MS is not reported ]	
<b>Weight of plastic used in bottles moved from other Member States and placed on the market (3)</b>	[mandatory if (1) W_MS is not reported ]	[mandatory if (1) W_MS is not reported ]	
<b>Weight of plastic used in bottles that have been imported and placed on the market (4)</b>	[mandatory if (1) W_MS is not reported ]	[mandatory if (1) W_MS is not reported ]	
<b>Adjustment of the weight of plastic used in bottles calculated in accordance with Article 3(2)</b>			
<b>Weight of plastic used in bottles moved to other Member States after having been placed on the market of the Member State (5)</b>			
<b>Weight of plastic used in bottles that have been exported after having been placed on the market of the Member State (6)</b>			
<b>Weight of plastic used in bottles placed on the market adjusted (7)</b>			

**Notes:****Dark shaded boxes: Reporting is voluntary**

- (1) Calculated in accordance with Article 3(1). W\_MS
- (2) Calculated in accordance with Article 3(1). W\_man in MS
- (3) Calculated in accordance with Article 3(1). W\_in from other MS
- (4) Calculated in accordance with Article 3(1). W\_imported
- (5) Calculated in accordance with Article 3(2). W\_out to other MS
- (6) Calculated in accordance with Article 3(2). W\_exported
- (7) 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.

## 11. 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)**

	PET bottles (C1)	beverage bottles other than PET bottles (C2)	beverage bottles (C1+C2)
<b>COUNTRY:</b>			
<b>REFERENCE YEAR:</b>			
<b>Weight of recycled plastic used in bottles calculated in accordance with Article 4(1)</b>			
<b>Weight of recycled plastic used in bottles placed on the market of the Member State (1)</b>			
<b>Weight of recycled plastic used in bottles manufactured and placed on the market in the Member State (2)</b>	[mandatory if (1) R_MS is not reported ]	[mandatory if (1) R_MS is not reported ]	
<b>Weight of recycled plastic used in bottles moved from other Member States and placed on the market (3)</b>	[mandatory if (1) R_MS is not reported ]	[mandatory if (1) R_MS is not reported ]	
<b>Weight of recycled plastic used in bottles that have been imported and placed on the market (4)</b>	[mandatory if (1) R_MS is not reported ]	[mandatory if (1) R_MS is not reported ]	
<b>Adjustment of the weight of recycled plastic used in bottles calculated in accordance with Article 4(2)</b>			

<b>Weight of recycled plastic used in bottles moved to other Member States after having been placed on the market of the Member State (5)</b>			
<b>Weight of recycled plastic used in bottles that have been exported after having been placed on the market of the Member State (6)</b>			
<b>Weight of recycled plastic used in bottles placed on the market adjusted (7)</b>			
<b>Proportion of recycled plastic content in bottles, expressed in percent (8)</b>			
<p><b>Notes:</b></p> <p><b>Dark shaded boxes: Reporting is voluntary</b></p> <p>(1) Calculated in accordance with Article 4(1). R_MS</p> <p>(2) Calculated in accordance with Article 3(1). R_man in MS</p> <p>(3) Calculated in accordance with Article 4(2). R_in from other MS</p> <p>(4) Calculated in accordance with Article 4(2). R_imported</p> <p>(5) Calculated in accordance with Article 4(2). R_out to other MS</p> <p>(6) Calculated in accordance with Article 4(2). R_exported</p> <p>(7) Calculated in accordance with Article 4(2). R</p> <p>(8) Calculated in accordance with Article 2. RC</p> <p>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.</p>			

## 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

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

*(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 of the Member State.

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*(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.

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*(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.

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*(Add rows as appropriate)*

## 4. DATA VERIFICATION AND CONTROL SYSTEM

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

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

### 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.

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*(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**

Potential factors affecting reliability of data	PET bottles placed on the market (yes/no)	Beverage bottles placed on the market other than PET bottles (yes/no)	Recycled plastic used in PET bottles placed on the market (yes/no)	Recycled plastic used in beverage bottles placed on the market other than PET bottles (yes/no)	Description of how the accuracy of data is affected	Description of the methodologies that have been applied to minimise the impact of inaccurate data
Sampling errors (1) (e.g. coefficients of variation)						
Coverage errors (2) (e.g. de-minimis rules, regional coverage)						
Measurement errors (3) (e.g. measurement unit)						
Data collection test instruments (4) (e.g. testing of questionnaires)						
Processing errors (5) (e.g. identification of errors, correction of errors)						
Non-response errors (6)						
Model assumption errors (7)						
Other (please specify)						
<p>(1) Describe the estimated coefficients of variation and the methodologies applied for variance estimation.</p> <p>(2) Describe the type and size of coverage errors.</p> <p>(3) Describe the instruments to reduce potential risks and avoid errors.</p> <p>(4) Describe the instruments and methodologies applied to secure quality and relevant data collection instruments.</p> <p>(5) Describe the processing steps between data collection and production of statistics and list any processing errors identified and their extent.</p> <p>(6) Describe the unit and item non-response rates for the main variables and the imputation methods (if any).</p> <p>(7) Describe the type and size of model assumption errors.</p>						

**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**

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*(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)

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*(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.

Variations in the weight of beverage bottles or PET bottles placed on the market	Variation (%)	Main reason for variation

*(Add rows as appropriate)*

Variations in the weight of the recycled plastic used in beverage bottles or PET bottles placed on the market	Variation (%)	Main reason for variation

*(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.

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*(Add rows as appropriate)*

**ANNEX IV**

**MODEL FORM FOR CERTIFICATES**

**Certificate of compliance with Commission Implementing Decision  
2024/XXX**

[company name]

[company address]

meets all the requirements laid down in Article 8 paragraph 4 of Commission Implementing Decision 2024/XXX on [...] in the following sites:

..... (designation) ..... (address)

..... (designation) ..... (address)

(...).

No evidence has been found of non-compliance with the rules laid down in Article 6 of the same Commission Implementing Decision 2025/XXX between xx/xx/20xx and xx/xx/20xx

Period of validity: [xx/xx/20xx – xx/xx/20xx]

Name of certifier:

Address of certifier:

[Signature of certifier]

## ANNEX V

### **Part A: Declaration related to recycled content to be filled at the point of origin of waste**

<b>1. Economic operator</b>	
1.1. Name:	
2.1. Headquarter's Address:	
3.1. Waste management site address:	
4.1. Date:	
<b>2. Material</b>	
1.1. Name or specification of material/Tradename:	
2.1. Batch number:	
3.1. Total weight [in kg]:	
4.1. Weight of post-consumer plastic waste as defined in Article 1(1) of Commission Implementing Decision 2024/XX [in kg]:	
5.1. Percentage of post-consumer plastic waste as defined in Article 1(1) of Commission Implementing Decision 2024/XX [= ratio of 2.4 and 2.3]:	

### **Part B: Declaration related to recycled content to be filled by recyclers, converters, food business operators and importers**

<b>1. Economic operator</b>	
1.1. Name:	
1.2. Headquarter's Address:	
1.3. Production site address:	
1.4. Date:	
<b>2. Material</b>	
2.1. Name or specification of material/Tradename:	
2.2. Batch number:	
2.3. Total weight [in kg]:	
2.4. Weight of material stemming from post-consumer plastic waste as defined	

in Article 1(1) and calculated in compliance with Article 6 of Commission Implementing Decision 2024/XX [in kg]:		
2.5. Percentage of material stemming from post-consumer plastic waste as defined in Article 1(1) and calculated in compliance with Article 6 of Commission Implementing Decision 2024/XX [= ratio of 2.4 and 2.3]:		
<b>3. Recycling technologies</b>		
3.1. Recycling technologies that have been applied to the material		
Recycling technology:	Share of material resulting from this technology:	
<i>(add rows as appropriate)</i>		
3.2. Is the material in scope of Regulation (EU) 2022/1616?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If Yes: Present/actual recycled content as declared in the respective declaration of compliance pursuant to Annex III of Regulation (EU) 2022/1616:	
3.3. Is the material in scope of Regulation (EU) No 10/2011?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If Yes: Present recycled content declared in the respective declaration of compliance pursuant to Art. 15 of Regulation (EU) No 10/2011:	
<b>4. Mass balance accounting</b>		
4.1. Has mass balance accounting been applied to the material at this or at previous stages?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

4.2. If yes, list of economic operators at previous steps of the supply chain that have been certified pursuant to Art. 8(x) of Commission Implementing Decision XX		
Identity and address of the business operator:	Identity of the certifier:	Certification valid until:
<i>(add rows as appropriate)</i>		

**Attachments:**

- Copy of the declaration of compliance pursuant to Regulation (EU) 2022/1616 or pursuant to Regulation (EU) No 10/2011
- If mass balance accounting has been applied, copies of certificates of economic operators pursuant to Art. 8(4) of Commission Implementing Decision XX listed under point 4.2.

## ANNEX VI

### **Dual-use factors**

For a dual-use output in liquid form, a dual-use factor as referred to Art 7(ii)(c.2) may be calculated as follows:

- (i) Establish the maximum acceptable boiling point of the steam cracker into which parts of the dual-use output will be fed. In case the dual-use output in question is further processed by different steam crackers, the maximum acceptable boiling point shall be calculated as the weighted average of the maximum acceptable boiling points of the individual steam crackers. For shares of the dual-use output for which the related steam cracker is not yet known, the lowest acceptable boiling point of the known steam crackers shall be used. If no verifiable information is available, the maximum acceptable boiling point shall be set at 330°C.
- (ii) Establish the share of the dual-use output in question that is evaporated at the maximum acceptable boiling point, according to a relevant ASTM standard, such as ASTM D2887 or equivalent. This is the dual-use factor.

Dual-use factor = (weight of the dual-use output fraction with boiling point  $\leq$  max acceptable boiling point) / total weight of the dual-use output