

Special report

EU revenue based on non-recycled plastic packaging waste

A challenging start hindered by data that is not sufficiently comparable or reliable



EUROPEAN
COURT
OF AUDITORS

Contents

	Paragraph
Executive summary	I-VIII
Introduction	01-17
The new own resource based on non-recycled plastic packaging waste	01-07
Calculation and collection of the plastic-based own resource	08-10
Calculation of plastic packaging waste generated and recycled	11-15
Roles and responsibilities	16-17
Audit scope and approach	18-24
Observations	25-94
The introduction of the new own resource did not go smoothly, resulting in inaccurate estimates	25-60
Member states were not sufficiently prepared, and Commission support was relevant but not timely	25-41
Inconsistent definition of <i>plastic</i> and legal uncertainty hampered harmonised introduction of the own resource	42-53
In the first year of implementation, the forecasted plastic-based own resource was under-estimated by €1.1 billion and GNI-based contributions had to compensate in order to balance the EU budget	54-60
Problems with data comparability and reliability are yet to be addressed	61-94
Member states use different compilation methods and do not balance the results obtained	61-66
The measurement of the amount recycled is not taken at the point of entry to the recycling operation	67-71
There is a risk that the data on recycled quantities might be unreliable, due to a lack of checks on the processing of waste received by recyclers	72-88
The Commission's inspections follow well-established processes, but are not sufficient to address the highest risks to data compilation	89-94
Conclusions and recommendations	95-98

Annexes

Annex I – Member states' net contributions to the plastic-based own resource in 2023 and corresponding reductions

Abbreviations

Glossary

Replies of the Commission

Timeline

Audit team

Executive summary

I The European Union's own resources are the main sources of revenue for the EU budget. In January 2021, the EU introduced a new own resource based on non-recycled plastic packaging waste generated by member states. The aim was to diversify the EU's revenue sources and contribute to its environmental objectives by providing an incentive for member states to reduce this type of waste. In 2023, revenue from the plastic-based own resource amounted to €7.2 billion, 4.0 % of the EU's total revenue.

II The objective of our audit was to examine the framework set up by the Commission, in cooperation with the member states, for managing this own resource. In particular, we assessed whether the Commission and member states were sufficiently prepared for the introduction of the new own resource, and whether they could ensure the comparability and reliability of the data for calculating the new own resource.

III This audit aimed to identify at an early stage the areas for improving the calculation process. The conclusions of this audit are also expected to provide the Commission with lessons learnt relevant to the management of new own resources to be introduced in the coming years.

IV We conclude that the member states were not sufficiently prepared for the implementation of the own resource based on non-recycled plastic packaging waste and that, even though the Commission's actions to monitor and support the implementation were useful for improving data quality, they were not timely. We also conclude that the data used for own resources purposes was not sufficiently comparable and reliable used for own resource purposes. This also affects the data that is used for reporting on the achievement of the recycling targets set by the Packaging and Packaging Waste Directive.

V We found that the member states were late in transposing key legal aspects. We also noted that the definition of *plastic* varied in different EU legal documents. Combined with the late adoption of key legal requirements, this prevented the harmonised introduction of the own resource.

VI Furthermore, member states did not apply key data compilation procedures, such as using the two compilation methods for waste generated and balancing the results. They did not use the measurement point specified by the legislation to calculate the amounts recycled, or make use of average loss rates based on harmonised rules.

VII In addition, although the Commission's inspections followed well-established processes, they were not sufficient to address the highest risks to data compilation. We identified a risk that, due to the lack of checks on recycling processes, plastic packaging waste declared as recycled might not in fact be recycled in all cases. The member states were not in a position to ensure that conditions for the recycling of plastic packaging waste exported outside the EU were broadly equivalent to EU recycling processes.

VIII We recommend that the Commission:

- apply the lessons learnt from the introduction of the plastic-based own resource;
- improve data comparability and reliability;
- mitigate the risk of waste sent to recyclers not subsequently being recycled.

Introduction

The new own resource based on non-recycled plastic packaging waste

01 The European Union's own resources are the main sources of revenue for the EU budget. Until 2021, there were three own resources: traditional own resources (mainly from customs duties levied on imports to the EU), the value added tax (VAT)-based own resource and the gross national income (GNI)-based own resource.

02 In January 2021, the EU introduced a new own resource based on non-recycled plastic packaging waste generated by member states (the "plastic-based own resource")¹. This was the first major change in the EU's own resource system since 1988, when the gross national product (GNP)-based own resource was introduced (changed later to GNI). The plastic-based own resource is also the first step in the roadmap to introduce new own resources to ensure the repayment of the EU recovery instrument. The roadmap is annexed to the interinstitutional agreement between the Council, Parliament and Commission for the 2021-2027 Multiannual Financial Framework².

03 The [Own Resources Decision](#) mentions that the introduction of this new own resource provides an incentive to reduce the consumption of single-use plastics, foster recycling and boost the circular economy. It also indicates that the new own resources should better support the objectives of Union policies and reduce member states' contributions based on GNI³.

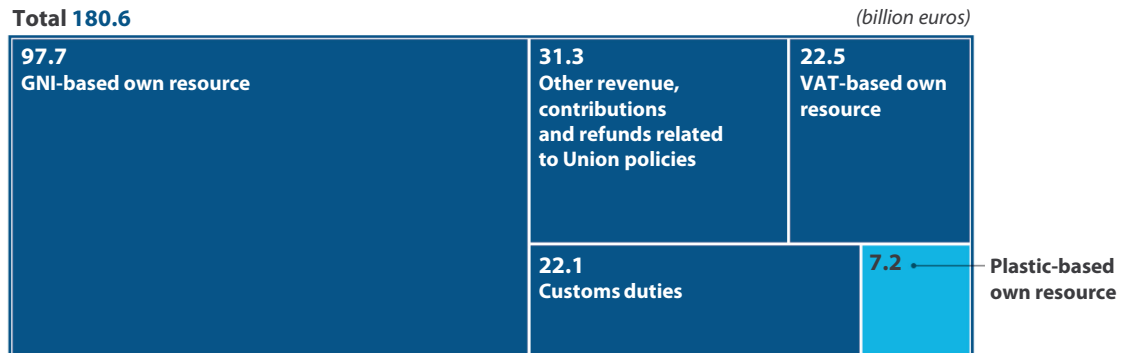
04 In 2023, revenue from the plastic-based own resource amounted to €7.2 billion, 4.0 % of the EU's total revenue (see [Figure 1](#)). The breakdown of the contributions by member state is presented in [Annex I](#).

¹ [Council Decision 2020/2053](#) ("Own Resources Decision").

² [Interinstitutional agreement](#) between the European Parliament, the Council of the European Union and the European Commission on budgetary discipline, including a roadmap towards the introduction of new own resources.

³ Recitals 6 and 7 of the [Own Resources Decision](#).

Figure 1 – EU revenue sources in 2023

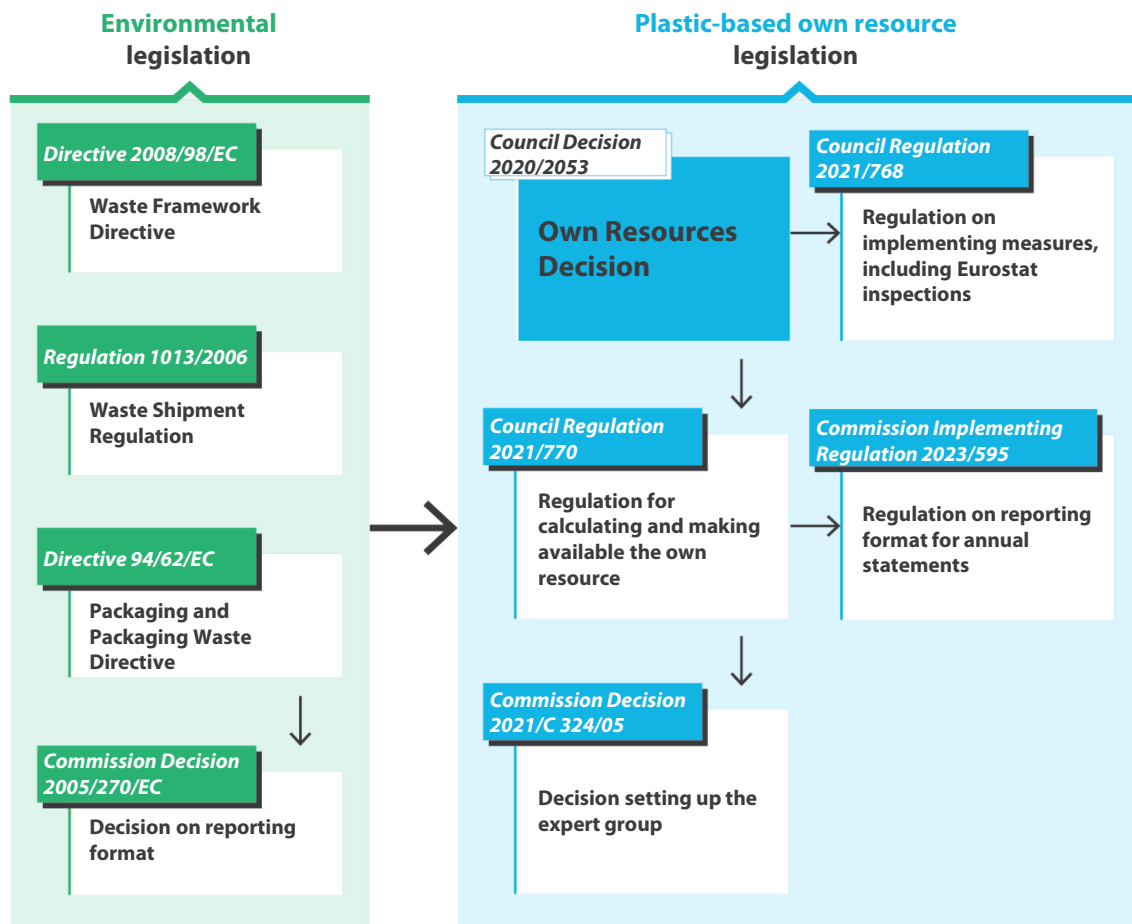


Note: This figure does not include the budget revenue associated with the NextGenerationEU recovery instrument, due to its exceptional and temporary nature.

Source: ECA, based on the consolidated accounts of the EU.

05 Figure 2 gives an overview of the legal framework, which is composed of environmental legislation and legislation for the plastic-based own resource.

Figure 2 – Legal framework



Source: ECA.

06 The Waste Framework Directive⁴ defines the basic concepts and definitions related to waste management, including waste, recycling and recovery. The Packaging and Packaging Waste Directive⁵ sets out definitions, recycling targets, and other provisions specifically applicable to packaging and packaging waste. The Directive also requires member states to compile and report data on plastic packaging waste. Since 1997, this data is used to check if recycling targets set in the directive have been achieved. The Waste Shipment Regulation⁶ determines the rules on transporting waste within the EU and exporting it to non-EU countries.

07 The Own Resources Decision sets out the calculation method for the plastic-based own resource. Other legislation⁷ stipulates further important details concerning the implementation of this own resource. In our [Opinion 3/2022](#) on the Commission's proposal for the procedures for making available three new own resources we suggested consolidating and aligning rules across all own resources⁸.

Calculation and collection of the plastic-based own resource

08 The plastic-based own resource consists of a national contribution calculated at €0.8 per kilogram of non-recycled plastic packaging waste. The 17 member states whose 2017 GNI per capita was below the EU average benefited from a fixed lump-sum reduction to avoid an excessively regressive impact on national contributions⁹. The reduction was calculated by multiplying the member state's 2017 population by 3.8 kilograms and by €0.8. [Figure 3](#) illustrates the calculation method.

⁴ [Directive 2008/98/EC](#).

⁵ [Packaging and Packaging Waste Directive, 94/62/EC](#).

⁶ [Regulation \(EC\) No 1013/2006](#).

⁷ [Council Regulation 2021/768](#) (control and supervision measures), [Commission Implementing Regulation \(EU\) 2023/595](#) (reporting requirements) and [Council Regulation 2021/770](#) (procedure for making available the own resource).

⁸ Paragraphs 42 to 44.

⁹ Recital 7 of the [Own Resources Decision](#).

Figure 3 – Calculation of member states' contributions

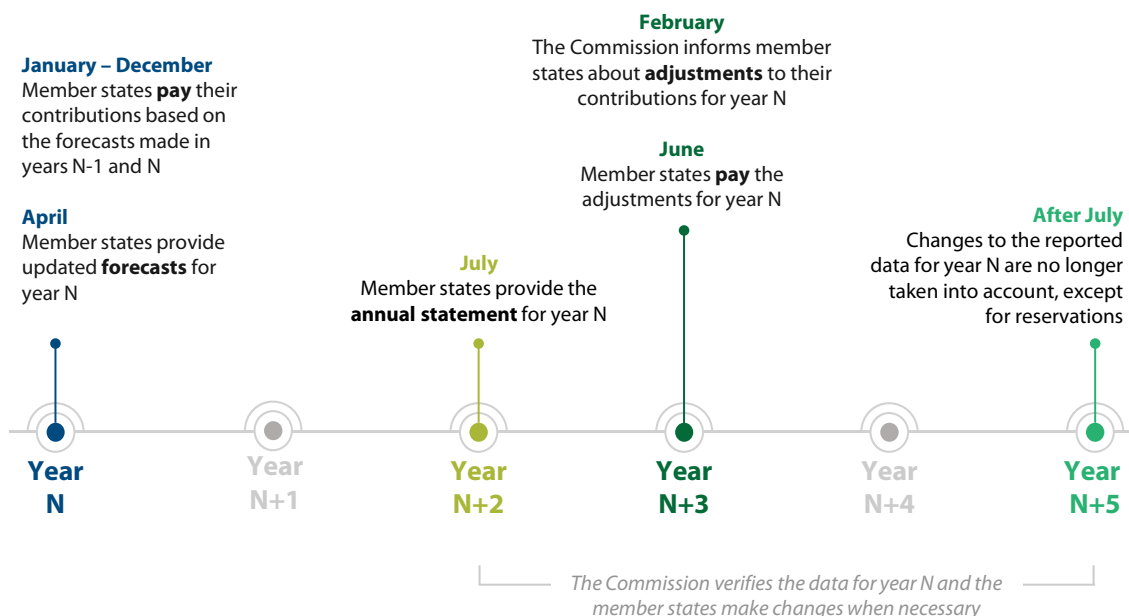


Source: ECA, based on the Own Resources Decision.

09 These calculations are based on the statistical data on the total plastic packaging waste generated and recycled every year, as reported by member states. Since the relevant data is available two years after the year concerned, the Commission first calculates the contributions based on forecasts agreed with the member states. This is a standard practice that is also applied for the VAT- and GNI-based own resources.

10 The Commission adjusts the calculations of member states' contributions once the statistical data is available. Each year, the Commission collects the amounts due from the member states that underpaid in proportion to their share of the EU GNI, for distribution among those that overpaid. *Figure 4* shows the main milestones for the calculation and collection of member states' contributions to the plastic-based own resource.

Figure 4 – Milestones for the calculation and collection of member states' contributions for a given year N



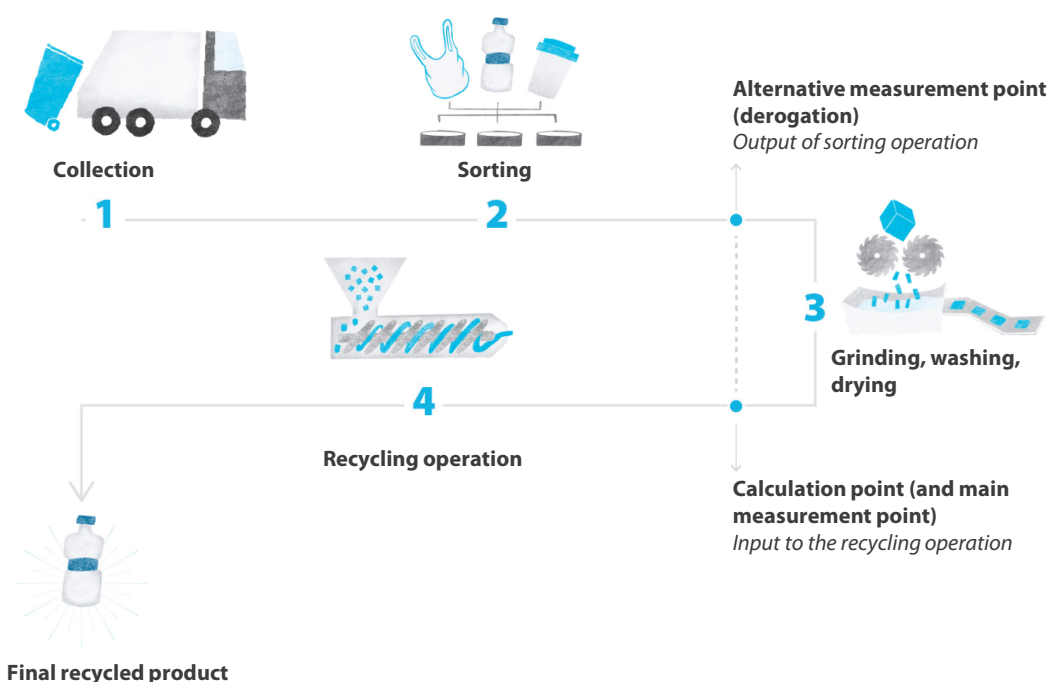
Source: ECA, based on [Council Regulation 2021/770](#).

Calculation of plastic packaging waste generated and recycled

11 In line with the implementing regulation establishing the form of the annual statement¹⁰, member states are required to use two methods to estimate the plastic packaging waste generated. The first is the “placed-on-the-market” approach, which is mostly based on data from plastic packaging producers. The second is the waste analysis approach, which is based on information on the amounts and types of materials in a particular waste stream. Based on the results of both methods, member states must provide a single estimate of the waste generated. This is termed “balancing” the two methods.

12 The Packaging and Packaging Waste Directive¹¹ includes the requirement that the weight of the packaging waste recycled must be that measured as the waste enters the recycling operation (“calculation point”). As a derogation from this requirement, the legislation allows measurement at the exit of the sorting operation, provided that the waste is subsequently recycled and the weight of materials or substances removed by operations preceding the recycling is deducted. See [Figure 5](#) for details.

Figure 5 – Calculation of plastic packaging waste recycled



Source: ECA, based on Figure A 1: Plastics calculation point, p. 67 of the Commission guidance for the compilation and reporting of data on packaging and packaging waste according to Decision 2005/270/EC, March 2023 version.

¹⁰ Commission Implementing Regulation (EU) 2023/595.

¹¹ Article 6a(2) of Directive (EU) 2018/852 amending the Packaging and Packaging Waste Directive.

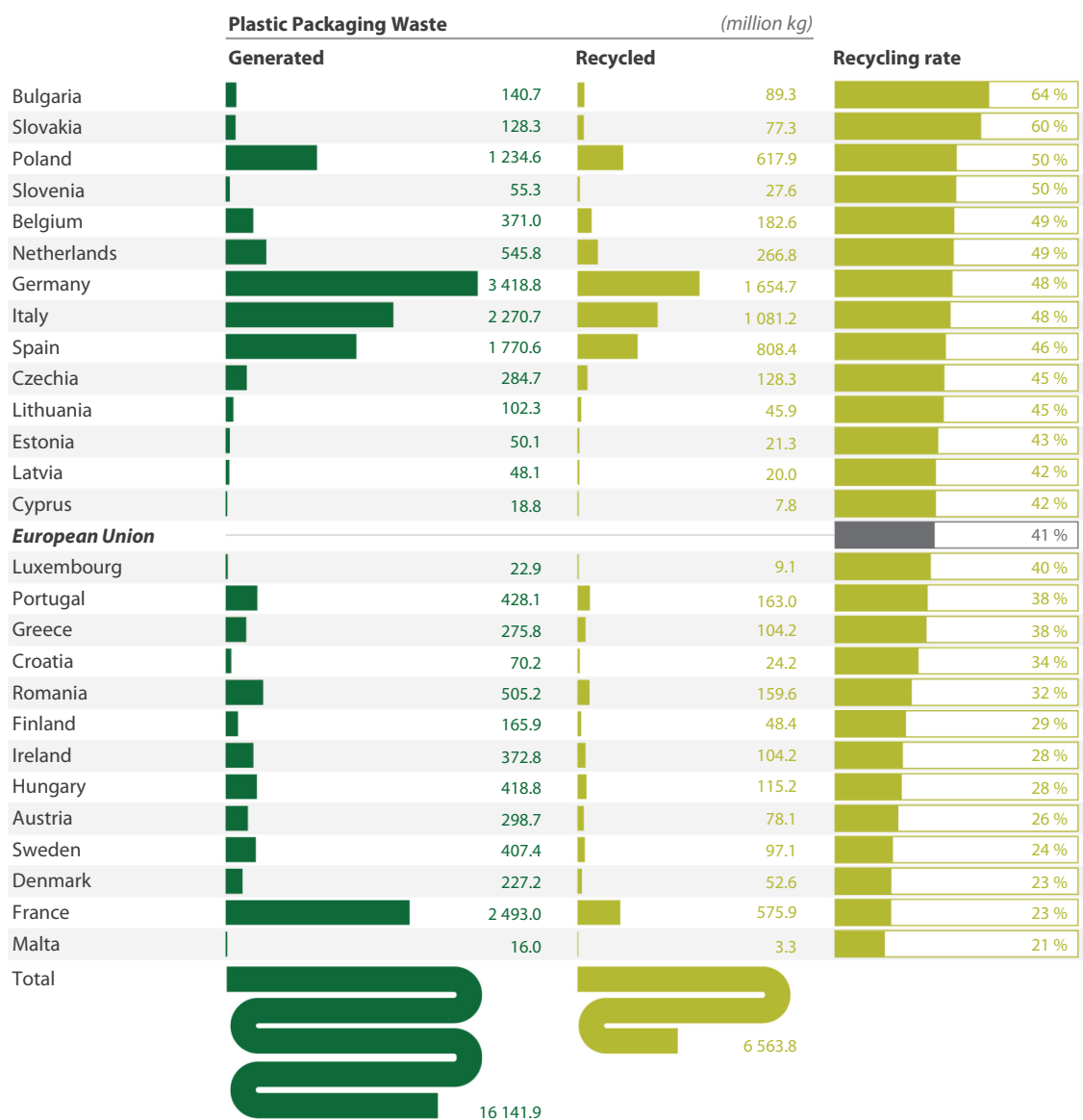
13 If member states use the derogation regarding measurement at the calculation point, they may use average loss rates to estimate the weight of materials or substances removed before recycling. Average loss rates may be used only where reliable data cannot be otherwise obtained and must be calculated based on the rules to be established by the Commission in a delegated act. The Waste Framework Directive required the Commission to adopt a delegated act on average loss rates by 31 March 2019¹².

14 Member states must ensure that waste exported from the EU for recycling counts towards the recycling targets only if the exporter proves that the treatment of waste outside the EU took place in conditions broadly equivalent to those required under EU environmental law¹³. Plastic packaging waste imported to a member state for recycling should be subtracted from that member state's overall recycled amount. *Figure 6* shows the recycling rates based on the data reported by member states in 2023 for the own resource for the year 2021.

¹² Article 11a(10) of [Directive \(EU\) 2018/851](#) amending the Waste Framework Directive.

¹³ Article 11a(8) of [Directive \(EU\) 2018/851](#) amending the Waste Framework Directive and Article 6a(8) of [Directive \(EU\) 2018/852](#) amending the Packaging and Packaging Waste Directive.

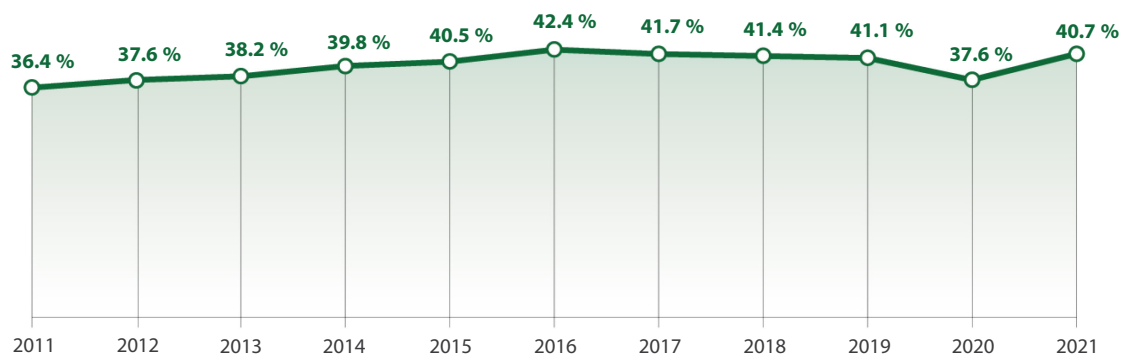
Figure 6 – Reported plastic packaging recycling rates for 2021



Source: ECA, based on member states' annual statements for 2021.

15 *Figure 7* shows that the average recycling rate has remained relatively stable over the past decade. However, in the ECA review on EU action to tackle the issue of plastic waste, we noted that several aspects can affect data comparability over time¹⁴.

Figure 7 – Average recycling rate in the EU in the past decade



Source: ECA, based on Eurostat published data for 2011-2020 and on the member states' annual statements for 2021 provided in 2023.

Roles and responsibilities

16 The member states are responsible for compiling and reporting the relevant statistical data used to calculate the plastic-based own resource¹⁵. Member states must also designate representatives to assist and advise the Commission in matters related to this statistical field, as part of the “statistics on plastic packaging waste” (SPPW) expert group. As regards environmental legislation, member states must fulfil their obligations under EU law, which include incorporating relevant EU legislation into national law (transposition) and applying it¹⁶.

¹⁴ Paragraphs 44 and 45 of [Review No 04/2020: EU action to tackle the issue of plastic waste](#).

¹⁵ [Council Regulation \(EU, Euratom\) 2021/770](#).

¹⁶ Article 4(3) of the [Treaty on European Union](#). For more details see also [ECA review 07/2018 “Putting EU law into practice: The European Commission’s oversight responsibilities under Article 17\(1\) of the Treaty on European Union”](#).

17 At the Commission, the Statistical Office of the EU (Eurostat), the Directorate-General for Budget (DG BUDG) and the Directorate-General for Environment (DG ENV) are the directorates-general responsible for this own resource. Their respective roles and responsibilities are set out in a memorandum of understanding, which includes the key arrangements included in *Figure 8*.

Figure 8 – Commission roles and responsibilities



Eurostat

- checks member states' data on plastic packaging waste;
- carries out inspections in member states;
- informs DG BUDG about reservations;
- directs the work of the SPPW expert group;
- proposes measures to ensure data quality.



DG ENV

- proposes legislation on waste;
- monitors the implementation of waste legislation;
- informs Eurostat and DG BUDG about legislative issues, including potential infringements.



DG BUDG

- calculates and collects contributions from member states;
- calculates and collects adjustments to contributions;
- sets and lifts reservations on data quality.

Source: ECA, based on the memorandum of understanding between Eurostat, DG BUDG and DG ENV.

Audit scope and approach

18 The objective of our audit was to examine the framework set up by the Commission, in cooperation with the member states, for managing this own resource. In particular, we assessed whether:

- the Commission and member states were sufficiently prepared for the introduction of the new own resource;
- the Commission and the member states could ensure the comparability and reliability of the data for calculating the new own resource.

19 Through this audit (carried out from June 2023 to February 2024) we also aimed to identify at an early stage the areas for improving the calculation process. The conclusions of this audit are also expected to provide the Commission with lessons learnt that can be relevant to the management of any other own resources which may be introduced in the coming years.

20 We drew our audit criteria from the relevant legislation, [better regulation guidelines](#) and existing Commission practices for the GNI- and VAT-based own resources, which are also based on statistical data.

21 The main aspects of our approach included:

- a desk review of relevant legislation and key documents from the Commission and the “statistics on plastic packaging waste” (SPPW) expert group (procedures, guidance documents, templates, working papers, minutes of meetings with member states);
- interviews with Eurostat, DG BUDG and DG ENV;
- analysis of the data provided by member states for the forecasts used to calculate the 2021 contributions, the quality reports provided under the Packaging and Packaging Waste Directive and the annual statements sent by member states in 2023.

22 We surveyed the 27 national authorities responsible for data compilation to obtain their views on the Commission's management of the own resource. We received 26 replies, which we used as an additional source of information. We followed up on the information collected through the survey by organising remote interviews with the authorities concerned in six member states.

23 We visited three member states: Romania, Italy and the Netherlands. These were selected based on the information available in Eurostat and with a view to collecting information in member states with different levels of plastic generated per capita, different recycling rates and amounts exported to be recycled. In addition, we were present as observers during Eurostat's verification visit to Poland, to gather information on how Eurostat implements its verification framework through inspections.

24 This audit did not cover whether the introduction of the plastic-based own resource led to a reduction in plastic waste generated or an increase in the amount recycled. Nor did we conduct a legal analysis of whether issues related to the transposition of the EU law into national legislation should trigger infringement procedures.

Observations

The introduction of the new own resource did not go smoothly, resulting in inaccurate estimates

Member states were not sufficiently prepared, and Commission support was relevant but not timely

25 To ensure that the introduction of the plastic-based own resource went smoothly and that the comparability and reliability of the calculation data were sufficient, the definitions and calculation methodologies introduced by the Packaging and Packaging Waste Directive should have been transposed in a timely manner by the member states. The [better regulation guidelines](#) recommend that the Commission examine national implementing measures carefully to ensure full compliance and initiate remedial action where appropriate.

26 As non-compliance could have an impact on the calculation of the member states' contributions, it is important that the Commission analyse any issues it detects regarding transposition or national legislation in a timely manner. It should then use its analysis to identify high-risk member states and data compilation areas for verifications.

Most member states were late in transposing the Packaging and Packaging Waste Directive, and the Commission's follow up of transposition issues will take years

27 The amendment to the Packaging and Packaging Waste Directive notes that data comparability and reliability needed improving¹⁷. The amendment introduced a set of new definitions and calculation rules for transposition into member state legislation by 5 July 2020. Therefore, when the Commission proposed the plastic-based own resource in May 2018¹⁸, there was a recognised need to improve data quality. Our Opinion on the Commission's proposal for the Own Resources Decision also highlighted this need¹⁹.

¹⁷ Recital 22 of the [Directive \(EU\) 2018/852](#) amending the Waste Framework Directive.

¹⁸ Commission proposal for a Council Decision on the system of own resources of the European Union [COM\(2018\) 325 final](#).

¹⁹ Paragraph 40 and Box 2 of our [Opinion 5/2018](#).

28 We identified the provisions of the Packaging and Packaging Waste Directive that are relevant for the calculation of the plastic-based own resource²⁰, and analysed whether the Commission had verified that member states had transposed these provisions correctly into their own legislation.

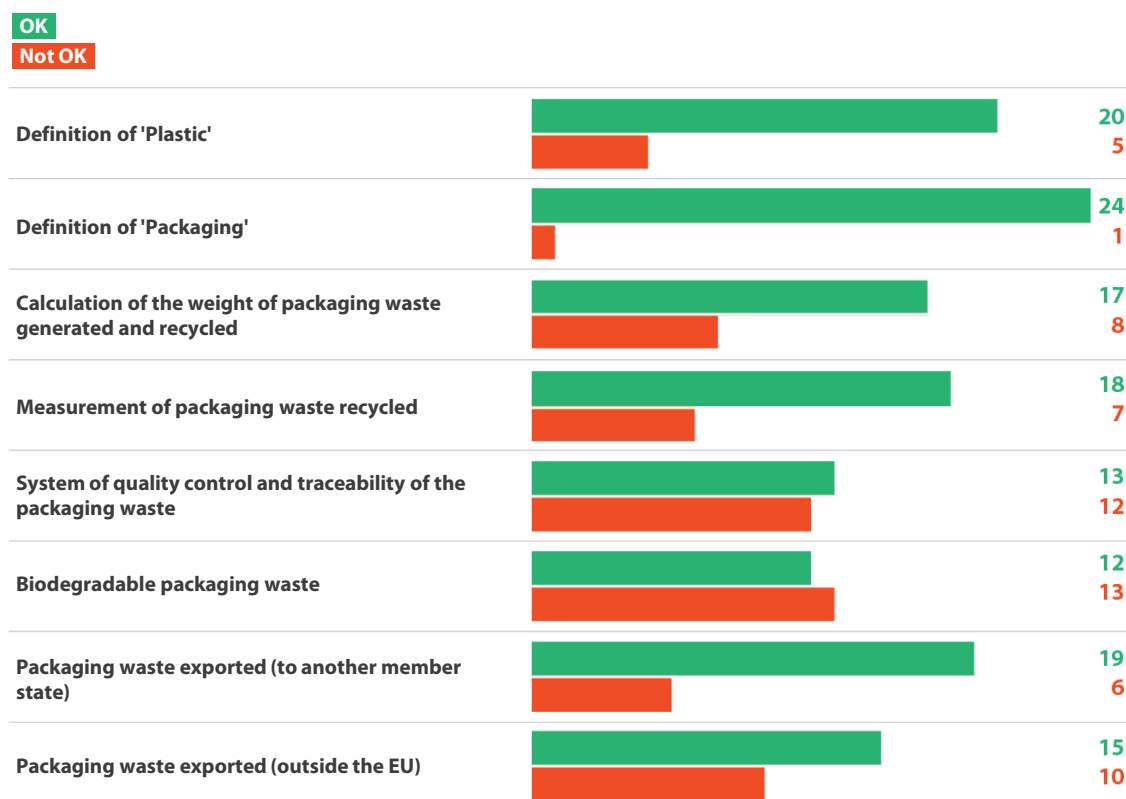
29 We noted that five member states had informed the Commission that they had transposed the directive within the deadline. Twenty-two member states either had not informed the Commission that they had transposed the directive or had informed the Commission that they had not transposed the directive. The Commission initiated infringement procedures for these 22 member states. Following the notification of the transposition by the member states, 12 of these procedures were closed in 2021, a further seven in 2022 and two in 2023. The remaining procedure was still open at the time of the audit, since the member state concerned (Croatia) had not informed the Commission that it had transposed the directive.

30 After each member state notified the Commission that transposition was complete, the Commission instructed an external contractor to carry out conformity checks. In September 2022, the external contractor provided the Commission with conformity studies showing the results of the checks for 23 member states. In February and March 2023, the contractor provided the Commission with two more conformity studies. Spain had only notified the Commission that transposition was complete in 2023, so the corresponding conformity study was due to be finalised in 2024.

31 We analysed the results of the 25 conformity studies carried out by the external contractor. We checked if all the key provisions and definitions relevant to the compilation of data for the calculation of the plastic-based own resource had been correctly transposed. We found that for 17 of these member states, at least one key provision relevant to the calculation of the own resource had not been appropriately transposed (see [Figure 9](#)).

²⁰ Article 3(1)(a) and 2, and article 6(a)(1-5), (7) and (8) of the Packaging and Packaging Waste Directive, [94/62/EC](#).

Figure 9 – Results of the outsourced conformity checks on provisions relevant for the calculation of the plastic-based own resource, by number of member states



Note: At the time of the audit, the Commission had not received the results of the conformity study for two member states.

Source: ECA, based on the conformity check reports from the external contractor.

32 The Commission acted appropriately when member states did not notify it that transposition was complete. However, it did not immediately analyse the impact of the transposition-related issues identified by the external contractor on the calculation of the plastic-based own resource. Therefore, the results of the conformity checks were not taken into consideration in the prioritisation exercise conducted by the Commission regarding the checks of member states' data compilation.

33 The Commission uses the results of the conformity checks during its inspections in the member states. However, as these inspections are expected to last from 2023 to 2026, the follow-up of potential serious issues identified in the conformity checks is not carried out in a timely manner. Issues affecting the calculation of the own resource identified during the inspections result in a reservation which the Commission lifts once the detected issues are resolved. Experience from other own resources shows that it can take several years before reservations are lifted. Therefore, member states may continue to use different definitions and inappropriate compilation

methodologies for a long time. These differences may affect the calculation of member states' contributions.

The Commission took several steps to support member states, but mostly after the introduction of the new own resource

34 To address potential issues with the implementation of the new own resource, the Commission should establish an implementation strategy²¹. Cooperating with member states to implement EU law should be a key element of the Commission's implementation strategy. The Commission should also aim to provide support to member states. For this to be successful, the Commission should have timely and relevant information on the application of EU legislation by the member states and be ready to take corrective action if necessary.

35 The Commission used several methods to assess the member states' capacity to implement the legislation related to the plastic-based own resource. As we mentioned in paragraph **30**, the Commission monitored the transposition of the relevant legislation into the member states' own legal systems. It also conducted informal visits to 17 member states to briefly present the implementation of the plastic-based own resource, and to exchange information on the way member states compile the amount. However, these actions mostly took place after the introduction of the own resource in January 2021, by which time the member states were already meant to have implemented the measures and systems for managing the new own resource. The Commission indicated to us that the constraints imposed by the COVID-19 pandemic limited its actions to support and monitor the member states' preparation for the implementation of this new own resource.

36 Another important method of obtaining feedback from member states is through the SPPW expert group (see paragraph **16**). At the meetings of the expert group, member states have the opportunity to bring up any issues they are facing or areas that require further clarification.

37 The SPPW expert group was formally created following the adoption of Council Regulation 2021/770. Its meetings started in November 2021. The three member states we visited informed us that the expert group meetings were useful for improving data compilation quality and harmonisation. However, there was little time to adequately prepare for the introduction of the plastic-based own resource in January 2021.

²¹ [Better regulation guidelines](#), Chapter V, No 2.

38 The annual statements are used to adjust the amounts previously paid by the member states based on the forecasts (see paragraph 10). The figures form the basis of an SPPW expert group opinion confirming the appropriateness of the data to be used for own resource purposes. The statistical data included in these annual statements is also part of the Commission's verifications of the member states' compilation processes.

39 We found that Greece did not submit its annual statement for 2021 on time. The statement, containing the statistical data on the weight of plastic packaging waste generated and amount recycled, was due by 31 July 2023²² (see [Figure 4](#)). Greece only sent an initial version of the annual statement to the Commission on 24 November 2023.

40 The Commission was aware of the Greek authorities' difficulties in compiling data on plastic waste as Greece had already failed to deliver the data required by the Packaging and Packaging Waste Directive for the year 2020 in June 2022. Although the Commission sent several warnings to the Greek authorities (including to the permanent representation) on the importance of the own resource data, Greece missed the deadline for sending its annual statement. This shows that the member state was unprepared for compiling data on non-recycled plastic packaging waste.

41 Due to this delay, the data from Greece was not included in the opinion issued in October 2023 by the SPPW expert group on the quality of data on non-recycled plastic packaging waste to be used for own resource purposes. Therefore, the data was not used for the adjustment exercise and the resulting impact will be only reflected in subsequent years (see paragraph 10).

Inconsistent definition of *plastic* and legal uncertainty hampered harmonised introduction of the own resource

42 To achieve a harmonised application of EU legislation, it is essential for the EU provisions to be clear, consistent²³ and unambiguous. It is also essential for key legislation to be approved in a timely manner, allowing member states to adapt their legislation and systems to comply with the requirements.

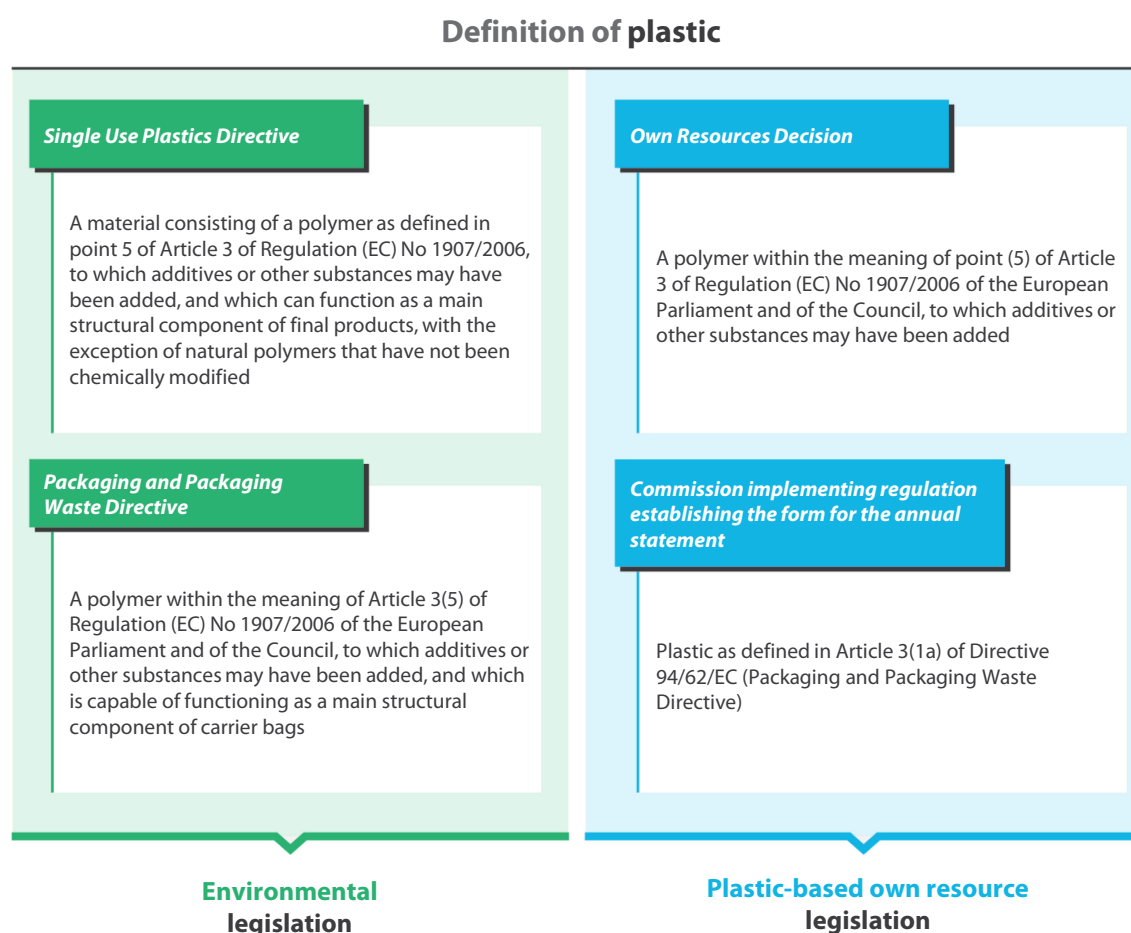
²² Article 5(5) of [Regulation 2021/770](#).

²³ Tool #28, section 3.2 of the [Better Regulation toolbox](#) - July 2023 edition.

The definition of *plastic* differs between the various legal acts

43 We checked the key definitions used for compiling the data for own resource purposes such as packaging waste and recycling, and found that they were generally clear and consistent across the different pieces of sectoral legislation. However, we noted that the definition of *plastic* varied (see [Figure 10](#)).

Figure 10 – The definition of *plastic* differs between the various legal acts



Source: ECA, based on the legislation mentioned.

44 All definitions of *plastic* were based on [Regulation \(EC\) No 1907/2006](#) concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, but certain details were added in other legislation. The implementing decision requires the use of the definition from the Packaging and Packaging Waste Directive, which is not referred to in the own resource decision. The definition from the Packaging and Packaging Waste Directive stipulates that polymers should be capable of functioning as a main structural component of carrier bags, thereby reducing the scope of the definition. The

Single Use Plastic Directive²⁴ has an even narrower scope, as it excludes natural polymers that have not been chemically modified.

45 The differing scope of the definitions has led to confusion in the member states. The conformity checks on the transposition of the directives show that three member states transposed the definition from the Single Use Plastic Directive instead of the required definition from the Packaging and Packaging Waste Directive.

Key legal features of plastic waste management were updated too late or had not been adopted

46 We checked whether the key legislation was introduced in a timely manner to allow member states to conduct their compilation procedures properly. We found that legal requirements regarding the calculation point and balancing were adopted too late for member states to take them into account when drawing up their forecasts of non-recycled plastic packaging waste for 2021 and compiling data for the annual statements presented in 2023. In addition, we noted that, at the time of the audit, the required legislation on average loss rates had not yet been adopted.

47 The **calculation point** for recycled waste is a key factor in ensuring that the data compiled by member states is comparable (see paragraph 12). The requirement to use a new calculation point was first introduced by the Packaging and Packaging Waste Directive published in May 2018, but the details concerning its application by the member states were set out in Implementing Decision (EU) 2019/665²⁵ (see [Figure 5](#)). This calculation point was set to ensure that only waste that enters the recycling operation is taken into account²⁶. Before the adoption of this new requirement, the weight of the waste had to be measured on exiting the sorting facility.

48 However, this implementing decision was published in April 2019, leaving very little time for member states to introduce this change before preparing the 2021 forecasts. By allowing the option of using the previous methodology to calculate the amounts recycled when providing the 2021 and 2022 forecasts, the EU legislation²⁷ acknowledges that it would be difficult for member states to introduce the changes

²⁴ [Directive \(EU\) 2019/904](#) on the reduction of the impact of certain plastic products on the environment (Single Use Plastics Directive).

²⁵ Article 2(1)(d) of [Commission Decision 2005/270/EC](#) establishing the formats relating to the database system for the Packaging and Packaging Waste directive.

²⁶ Recital No. 3 of [Commission Implementing Decision \(EU\) 2019/665](#).

²⁷ Article 15 of [Regulation 2021/770](#).

required in a timely manner. This difficulty was confirmed by the member states we visited and those we contacted remotely. They explained to us that the non-adjustment of the calculation point for the amounts recycled was one of the reasons for the significant differences between the forecasts and the final amounts estimated.

49 Another important feature for ensuring that the data produced by the member states is comparable and reliable is **balancing** the two methods used to estimate the plastic packaging waste generated (see paragraph [11](#)).

50 This issue was referred to in Commission Implementing Decision (EU) 2019/665 published in April 2019 (new article 6(f)). However, the legal requirement to balance the results of two methods to estimate waste generated was only introduced in March 2023. It was therefore too late to take this into account when submitting the 2021 data in July 2023.

51 The amendment to the Packaging and Packaging Waste Directive published in May 2018 required the Commission to adopt the necessary delegated acts to ensure uniform application of plastic packaging waste calculations, with an adoption deadline of 31 March 2019. One such act was the delegated act required by the Waste Framework Directive setting **average loss rates**. These are crucial for ensuring that member states using the derogation concerning the calculation point (see paragraphs [12](#) and [13](#)) compile their statistical data consistently.

52 We noted that the Commission had presented a proposal for a delegated act concerning average loss rates in August 2021. However, this was not adopted as the Council presented an objection in December 2021 (in accordance with Article 38(a)(6) of Directive 2008/98/EC). The objection involved concerns that the scope of the delegated act exceeded the Commission's mandate, particularly regarding the publication of information on average loss rates for each waste treatment facility. The Commission did not submit another proposal addressing the reasons for the Council's objection. As a result, member states that apply the derogation concerning the calculation point are using loss rates based on methodologies that are not harmonised.

53 The late adoption of the requirement to balance two compilation methods and of the calculation point definition, together with the lack of harmonised rules on average loss rates, adversely affected the comparability and reliability of the member states' data. This means that the resulting national contributions to the plastic-based own resource may not be calculated on the same basis.

In the first year of implementation, the forecasted plastic-based own resource was under-estimated by €1.1 billion and GNI-based contributions had to compensate in order to balance the EU budget

54 Good-quality forecasts are fundamental for collecting the right amount of each own resource. They also reduce the impact of adjustments on member states' contributions in subsequent years (see paragraphs [09](#) and [10](#)). The Commission should provide adequate support and guidance to enable member states to produce reliable forecasts²⁸.

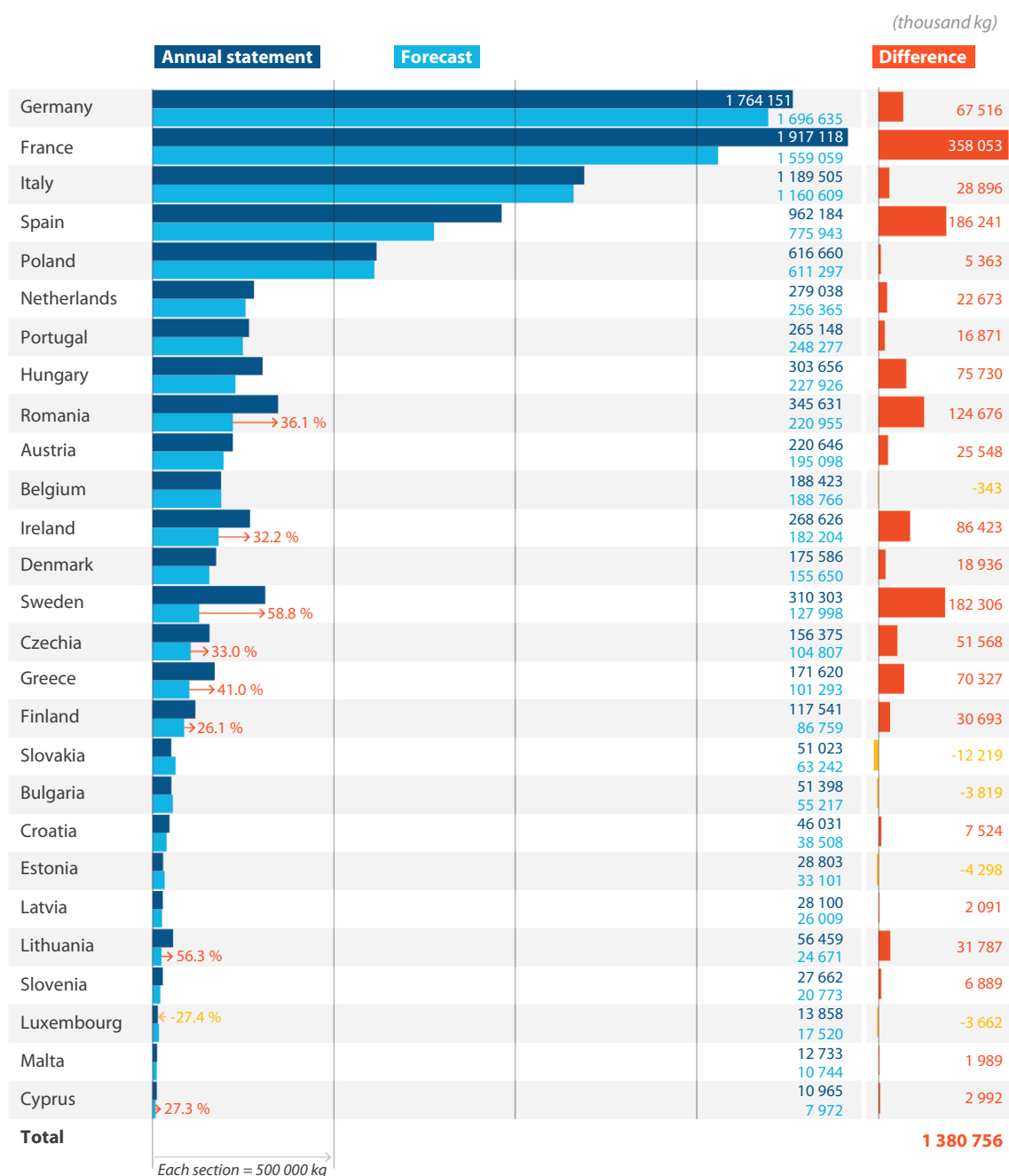
55 We analysed the forecasting tool created by the Commission to support member states in preparing forecasts. We also examined the results of the forecasting process conducted by the member states and the Commission in 2021, the first implementation year.

56 The forecasting tool developed by the Commission uses growth rates to forecast the amount of plastic packaging waste generated and linear progression to the recycling targets to forecast the amount recycled. Most member states (24 of the 26 that replied to our survey) considered that the Commission had provided adequate support in the forecasting exercise.

57 We analysed the data reported in the annual statements provided by the member states in 2023 (data for 2021), and compared it with the data forecast for 2021 and used to determine member state contributions for that year (see [Figure 11](#)).

²⁸ [Better regulation guidelines](#), Chapter V, No. 3.

Figure 11 – Difference between forecast amounts and final amounts presented in the annual statements



Source: ECA, based on forecasts and annual statements.

58 The majority of the member states (22) forecasted an amount lower than the amount calculated using the final data. For nine member states, the discrepancy with the figures in the annual statements was 25 % or above, and in two cases it was over 50 %.

59 During the information visits and contact with member states, we asked why the differences were so great. The member states mentioned a combination of reasons, including:

- the late change in legislation (particularly concerning the calculation point), which could not be taken into consideration in the forecasts (see paragraph 48);
- the poor quality of the data compiled in the years used as a basis for the forecasts; and
- the difficulty of estimating the impact of the COVID-19 pandemic on consumption patterns.

60 The total amount of non-recycled plastic packaging waste forecast for 2021 was 1.4 billion kilograms less than the amounts calculated and reported for that year in 2023. As a result, the amount collected for the plastic-based own resource in 2021 was €1.1 billion less than the amount based on the estimates reported in the annual statements. This amounts to 19 % of the €5.9 billion collected for the plastic-based own resource in 2021. The total amount of the EU budget was not affected, as the GNI-based own resource compensated for the difference (see paragraph 10).

Problems with data comparability and reliability are yet to be addressed

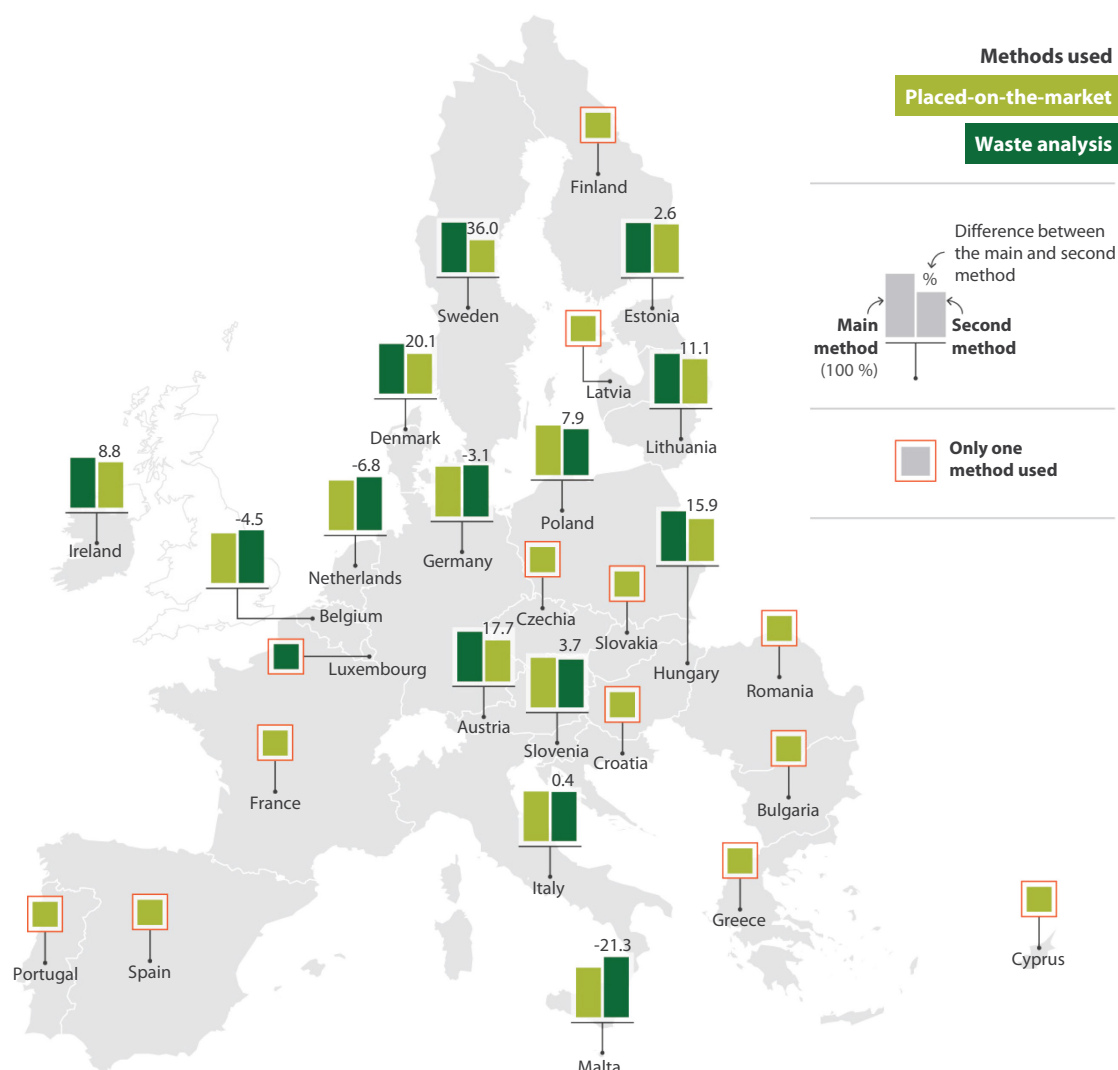
Member states use different compilation methods and do not balance the results obtained

61 The member states are required to use two different primary compilation methods to estimate the amount of plastic packaging waste generated in a given year (see paragraphs 11 and 49-53). These are the “placed-on-the-market” and waste analysis methods. Member states are also required to balance the results obtained from the two methods to improve data comparability and reliability.

62 The two approaches used to estimate plastic packaging waste generated may not produce the same result. The “placed-on-the-market” approach may underestimate the amount of packaging waste generated, while waste analysis tends to overestimate the amount. The real amount is therefore expected to lie somewhere between the two results²⁹.

63 We analysed the annual statements and checked if the member states were balancing the two methods as required. *Figure 12* provides an overview of the methods used by member states.

Figure 12 – Methods used by member states for estimating plastic packaging waste generated



Source: ECA, based on data submitted by the member states in the annual statements.

²⁹ Page 131 of Packaging and Packaging Waste Directive guidance 2023.

64 As shown in [Figure 12](#), 19 member states used the “placed-on-the-market” method as their main compilation method and eight used the waste analysis method. Only 14 member states presented figures based on both methods. In six of these cases, there was a difference of more than 10 % between the two methods. None of the member states balanced the two methods as required by the legislation. Instead, all member states submitted the data to be used for the calculation of their contribution based only on the main method. As most of the member states (19 out of 27) used the “placed-on-the-market” method, which tends to underestimate the amount of packaging waste, it is likely that the figures used for the own resource were also underestimated.

65 All nine member states with which we held discussions (three visited and six interviewed remotely based on their replies to our survey) said that they needed more time to use a second method and balance the two methods. Five of these member states mentioned they needed more support and guidance in this area from the Commission.

66 The lack of systematic use of the two methods, together with the fact that when member states use the two methods the results are not balanced, means that the data used to calculate the member states’ contributions is not fully comparable. Member states reperforming the compilation procedures for estimating data from previous years will not be able to achieve the same level of data quality.

The measurement of the amount recycled is not taken at the point of entry to the recycling operation

67 According to the Packaging and Packaging Waste Directive³⁰, the packaging waste recycled must be calculated as the weight of packaging waste entering the recycling process. However, where reliable data cannot be otherwise obtained, member states may measure the weight at the exit of the sorting operation and apply average loss rates (see paragraph 12 and [Figure 5](#)).

³⁰ Article 6(a) of the Packaging and Packaging Waste Directive, 94/62/EC.

68 Studies to assess the potential losses between the exit of the sorting operation and the entry to the recycling operation indicate that these amounts can be significant and can vary substantially. For example, a study³¹ conducted for the Commission in 2019 analysed 15 recycling plants across nine member states. This was part of work to assess the data reported to Eurostat to fulfil packaging waste recycling targets. The study identified loss rates ranging from 20 % to 45 % of the total process input, due to removal of non-target material or moisture loss.

69 We analysed the quality reports submitted by the member states and checked if the member states were applying the requirement of the Packaging and Packaging Waste Directive. Our analysis shows that only six member states reported recycling data using the measurement point required by the legislation (entry to the recycling operation). The majority (19) of the member states used the derogation set out in the legislation, mainly by measuring the amount of plastic exiting the sorting facility and applying average loss rates ranging from 6 % to 54 %. The remaining two member states did not submit this information.

70 During our on-the-spot visits, we noted that it was not common for recycling facilities to have scales for weighing plastic packaging at the entry to the recycling operation, which the legislation establishes as the calculation point. Without scales at the calculation point, the recycled amount must be measured indirectly using the derogation set out in the legislation.

71 The practice of measuring the amount of waste at the exit of the sorting facility, together with the absence of clear EU rules on average loss rates before the recycling operation (see paragraph 52), makes member state estimates of recycled amounts less comparable and less reliable.

³¹ Study to support the implementation of reporting obligations resulting from the new waste legislation adopted in 2018, final report 2019.

There is a risk that the data on recycled quantities might be unreliable, due to a lack of checks on the processing of waste received by recyclers

72 As described in paragraph **09**, the member states should compile data on the amount of plastic packaging waste generated and the amount recycled. The definition of recycling requires waste to be reprocessed into products, materials or substances in order to be considered recycled³².

No checks are carried out to ensure that waste received by recyclers is actually recycled

73 In the three member states we visited, the main data to be used for own resource purposes (i.e., plastic packaging waste generated and recycled) was supplied to the national authorities by the producer responsibility organisations (PROs). These organisations were created in member states to address the national requirements of extended producer responsibilities (EPR), as defined in the Waste Framework Directive (see **Box 1**).

Box 1

Producer responsibility organisations

The Waste Framework Directive defines the “extended producer responsibility scheme” (EPR scheme) as a set of measures taken by member states to ensure that producers bear responsibility for managing the waste stage of their product’s life cycle.

The application of the EPR concept often involves producer responsibility organisations (PROs), which act on behalf of several packaging producers to establish systems for the collection and recycling of their waste. The PROs are also responsible for meeting recycling targets.

Member states can have one or more PROs dealing with plastic packaging waste and reporting the relevant data to the authorities. For example, the Netherlands has one PRO, Italy has five PROs that report data through a consortium, and Romania has 16, each reporting independently to the national authorities.

³² Article 3(17) of the Waste Framework Directive, 2008/98/EC.

74 During the visits to the three member states, we collected information on the type of checks conducted to ensure that the data used was sufficiently reliable. We found that some of them were carried out on the producers of plastic packaging to verify the reliability of the data provided. These were conducted by the PROs or by member state authorities.

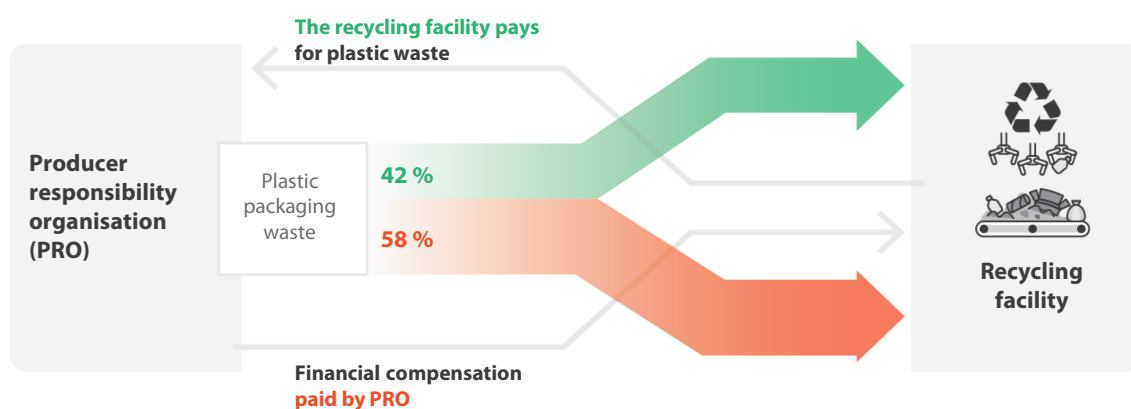
75 However, neither the member state authorities nor the Commission conducted checks or audits to assess if the plastic packaging waste received by the recyclers was effectively processed into other products. Eurostat's verification procedures do not comprise any checks on recyclers. Neither the environmental legislation nor the own resources legislation require such checks to be carried out.

76 We also found a very high risk of recyclers not processing the plastic packaging waste received, due to the reasons explained in the following paragraphs.

77 The authorities and recyclers in all three member states we visited said that, for many types of plastic packaging, recycling was not economically viable as virgin plastic was cheaper than recycled plastic. The PROs therefore had to compensate recyclers for receiving plastic packaging waste at their facilities to achieve the recycling targets set in the legislation. This increases the risk of recyclers having no incentive to invest further resources in processing waste received.

78 The largest PRO for plastic packaging in one of the member states we visited (covering about 84 % of the market) provided us with information on the economic viability of plastic packaging recycling. [Figure 13](#) shows the amount of plastic packaging for which they received payment from recyclers and the amount for which they paid a contribution to recyclers in 2022. For most of the plastic sent to the recyclers, there was no viable market outlet. This means that there was no economic incentive to recycle it.

Figure 13 – Low economic viability of recycling plastic packaging waste (example in one member state)



Source: ECA, based on information collected in one member state.

79 In addition, as the majority of member states use the derogation regarding the calculation point (see paragraph 69), the waste is not measured at the entry to the recycling operation, but only at the exit of the sorting operation. Therefore, there is limited assurance that the waste declared by the recyclers as received is in fact processed.

80 If the plastic waste received by recyclers is not processed as required by the Waste Framework Directive and instead is illegally shipped or disposed of, this constitutes an environmental crime. Europol's Serious and Organised Crime Threat Assessments from recent years³³ show that this type of crime is a significant threat and a key focus of its work.

81 The ECA review on EU action to tackle the issue of plastic waste³⁴ describes in more detail the mechanisms related to plastic packaging waste trafficking. It emphasises that illegal waste disposal is linked to organised crime and money laundering. The review also notes that this is one of the most lucrative illegal activities in the world, due to the low risk of prosecution and low fines.

³³ SOCTA 2013, SOCTA 2017 and SOCTA 2021.

³⁴ Review No 04/2020: EU action to tackle the issue of plastic waste.

82 Member states are responsible for enforcement actions in this area. The EU Environmental Crime Directive of 2008³⁵ stipulates a minimum standard of environmental protection through criminal law to be adopted by member states. However, a Commission evaluation concluded in 2020 that the directive did not have much effect in practice³⁶.

83 **Box 2** gives examples of how illegal activities can affect the reliability of amounts declared as recycled, by presenting two real-life cases recently uncovered by law enforcement authorities in three member states.

Box 2

Examples of illegal activities concerning plastic packaging waste

Waste trafficking between France and Spain

A joint operation between the national authorities of Spain and France in 2022 discovered a network trafficking waste from France and illegally discarding it in a landfill in Spain³⁷.

The mix of plastics, paper and cardboard had been declared as sent for recycling. Since mid-2020, more than 30 000 tonnes of such waste had been trafficked to Spain, earning the network millions in profits.

Criminal group specialised in falsifying recycled amounts in Romania

In 2023, the authorities of Romania identified an organised criminal group that had been operating for the past ten years in waste management³⁸. Its purpose was to obtain undue financial advantage by reporting as recycled the largest possible amount of fictitious waste. The group produced false invoices to show that the waste had been sold or delivered to various recyclers/collectors.

³⁵ Directive 2008/99/EC.

³⁶ Evaluation report of the Environmental Crime Directive.

³⁷ Press release of Spanish Police, 23.07.2022.

³⁸ Press release of the Directorate for the Investigation of Organised Crime and Terrorism of Romania, 21.03.2023.

84 Due to a lack of checks and the factors described in paragraphs [77](#) to [83](#), there is a significant risk that some of the plastic packaging waste received by recyclers may not subsequently be recycled. Illegal waste disposal, where plastic packaging waste declared as recycled is in fact incinerated, discarded in the natural environment or sent to landfill, leads to a reduction in the amounts payable for the own resource. The total amount declared as recycled by the member states was 6.6 billion kilograms (41 % of total waste generated) for 2021, amounting to a €5.3 billion reduction in member state contributions.

Member states cannot ensure that conditions for the recycling of plastic packaging waste exported outside the EU are broadly equivalent to EU recycling processes

85 According to the Packaging and Packaging Waste Directive, when waste is exported outside the EU for recycling, member states must demonstrate that the conditions are broadly equivalent to the requirements of the relevant EU environmental legislation (see paragraph [14](#)).

86 As described in paragraphs [73](#) to [84](#), there is little assurance that the waste received by recyclers in the EU is subsequently recycled. The same applies to plastic waste exported outside the EU for recycling. Even though the Waste Shipment Regulation imposes limitations on the countries that can receive plastic waste from the EU, member states are not currently in a position to verify that waste exported outside the EU is recycled in conditions broadly equivalent to the EU requirements.

87 The member states we visited and those we interviewed remotely following their replies to our survey said that, in the case of exports outside the EU, it is very difficult to obtain information on amounts recycled based on the calculation point. Therefore, there is no assurance that this waste is actually recycled. This poses a risk to the reliability of the data used for own resource purposes.

88 The amount of plastic packaging waste declared as recycled outside the EU in the annual statements submitted by the member states in July 2023 (referring to the year 2021) was 268 million kilograms (4.1 % of the total amount recycled). This represents a reduction of €214 million in member state contributions.

The Commission’s inspections follow well-established processes, but are not sufficient to address the highest risks to data compilation

89 Eurostat’s verification process, involving inspections and desk checks, should adequately cover the risks to the compilation of data on plastic packaging waste and lead to improvements in data comparability, reliability and exhaustiveness³⁹.

90 Eurostat uses a multiannual process to verify the member states’ data. The first verification process started in September 2023 (after member states submitted their data for 2021) and will end in 2026. The verifications are based on the annual statements, quality reports and inventories of sources and methods used to compile the relevant statistical data (see details in [Box 3](#)). They also include inspection visits in the member states. As a result of its inspections, and with the objective of protecting the EU budget, DG BUDG sets reservations on the member states’ compilation procedures where necessary. These can be lifted as soon as the required improvement in compilation procedures is made. However, as in the case of other own resources, the process of lifting the reservations can, in practice, take several years.

Box 3

Key documents produced by member states



Annual statement

Report providing statistical data on the weight of plastic packaging waste generated in the member state and the weight recycled, and including the calculation of the own resource based on non-recycled plastic packaging waste.



Quality report

Document produced as part of the annual data collection under the Packaging and Packaging Waste Directive. It includes a brief description of the compilation processes for the data on packaging waste generation and recycling.



Inventory of sources and methods

Detailed description of the sources, methods and compilation processes used to produce the data for the annual statements.

Source: ECA, based on Commission Implementing Regulation (EU) 2023/595, Commission Decision 2005/270/EC and Commission document SPPW/2021-1/07.

³⁹ Recital 3 of [Implementing Regulation 595/2023](#).

91 We examined Eurostat’s risk analysis model and the way it was applied to prioritise member states for inspection visits. We also analysed Eurostat’s procedures for carrying out its verifications in the member states. In our survey we asked member states whether Eurostat’s verification approach covered the main risks for the own resource. We found that Eurostat’s verification framework followed processes and methodologies similar to the ones the Commission applies to the verification of other own resources, such as GNI- and VAT-based own resources.

92 Eurostat’s inspection visits may include direct verification of data in higher-risk areas in each member state. This involves checking one or more aspects of data compilation, with the aim of establishing a verification trail from selected plastic packaging waste components down to the source data. At the time of our audit, Eurostat had not developed any criteria for assessing the need for direct verifications in the member states. The lack of harmonised criteria poses a risk that desk officers might not apply a consistent approach for direct verifications in different member states. By February 2024, Eurostat had not carried out direct verifications of data compilation procedures in any of the five member states it inspected.

93 The results of the survey show that most member states (81 % of those which replied to our survey) considered that the verification process proposed by Eurostat fully or partially covered the main risks. However, around half the member states did not expect the verification process to sufficiently address the risks related to the “placed-on-the-market” and waste analysis methods, balancing, lack of independent verification of data on recycled amounts and lack of reliable estimates for loss rates.

94 As several methodological issues have not yet been addressed, it will be difficult to ensure that the main risks concerning member states’ data quality are adequately covered during the current verification cycle. Some issues require the adoption of EU-level guidance or legislation, for example on average loss rates (see paragraphs [51](#) and [52](#)), and therefore cannot be addressed solely by Eurostat’s verifications and subsequent reservation-setting. Other issues, such as the lack of checks on the processing of waste received by recyclers, are not covered by the scope of Eurostat’s verifications (see paragraph [75](#)).

Conclusions and recommendations

95 We conclude that the member states were not sufficiently prepared for the implementation of the own resource based on non-recycled plastic packaging waste and that, even though the Commission's actions to monitor and support the implementation were useful for improving data quality, they were not timely. We also conclude that the data used for own resources purposes was not sufficiently comparable and reliable. This also affects the data that is used for reporting on the achievement of the recycling targets set out by the Packaging and Packaging Waste Directive.

96 We found that the introduction of the new own resource did not go smoothly. The member states were late in transposing key legal aspects and the Commission did not follow up the transposition-related issues affecting the calculation of the own resource in a timely manner (see paragraphs [27-33](#)). While this was partly affected by the constraints imposed by the COVID-19 pandemic, we found that the Commission's support to the member states in the early stages of implementation was useful but not timely (see paragraphs [34-41](#)). Late adoption of key legal requirements prevented a harmonised introduction of the own resource (see paragraphs [44-53](#)). These issues impacted the first year of implementation of the plastic-based own resource, with the amount collected based on member states' forecasts amounting to €1.1 billion less than the amount based on the estimates reported in the annual statements, a difference that had to be compensated for by the GNI-based own resource and therefore not impacting the EU budget (see paragraphs [54-60](#)). More own resources are expected to be introduced in the coming years (see paragraph [02](#)).

Recommendation 1 – Apply the lessons learnt from the introduction of the plastic-based own resource

When preparing future own resources, the Commission should:

- (a) identify the legislative changes needed with an estimated timetable for proposal;
- (b) where new own resources are based on data reported by member states, identify the key risks affecting the quality of data and share the information with the member states before the introduction of the new own resources;
- (c) establish an efficient procedure for following-up any significant non-compliance detected in transposition into national legislation or issues affecting data quality.

Target implementation date: for new own resources proposed after 2024

97 The member states had not applied key data compilation procedures, such as using the two compilation methods for waste generated and balancing the results (see paragraphs [61-66](#)); using the measurement point specified by the legislation to calculate the amounts recycled, or making use of average loss rates based on harmonised rules (see paragraphs [67-71](#)). We also noted that the definition of *plastic* varied in EU legal documents (see paragraphs [43-45](#)), and that not all member states had transposed the compilation rules required by the Packaging and Packaging Waste Directive (see paragraphs [30](#) and [31](#)).

Recommendation 2 – Improve data comparability and reliability

The Commission should:

- (a) establish a timetable, together with the member states, to address the difficulties preventing each country from estimating waste generated using the two methods and balancing the results;
- (b) identify, together with the member states, the difficulties preventing them from using the calculation point on entry to the recycling process to establish the amounts declared as recycled, and take action to address those difficulties;
- (c) present a revised proposal of a delegated act to establish average loss rates;
- (d) propose the alignment of the definition of plastics in all texts used for the plastic-based own resource.

Target implementation date: 2026

98 The legal framework does not provide for checks on recycling processes. Therefore there is a risk that plastic packaging waste declared as recycled might not in fact be recycled in all cases (see paragraphs [72-84](#)). We also found that member states were not in a position to ensure that conditions for the recycling of plastic packaging waste exported outside the EU were broadly equivalent to EU recycling processes (see paragraphs [85-88](#)). The Commission's inspections followed well-established processes, but did not sufficiently address the highest risks to data compilation (see paragraphs [89-94](#)).

Recommendation 3 – Mitigate the risk of waste sent to recyclers not subsequently being recycled

The Commission should assess the risk of plastic packaging waste sent to recyclers within and outside the EU not subsequently being recycled, identify appropriate actions to mitigate this risk, and discuss them with the member states with a view to their implementation.

Target implementation date: 2027

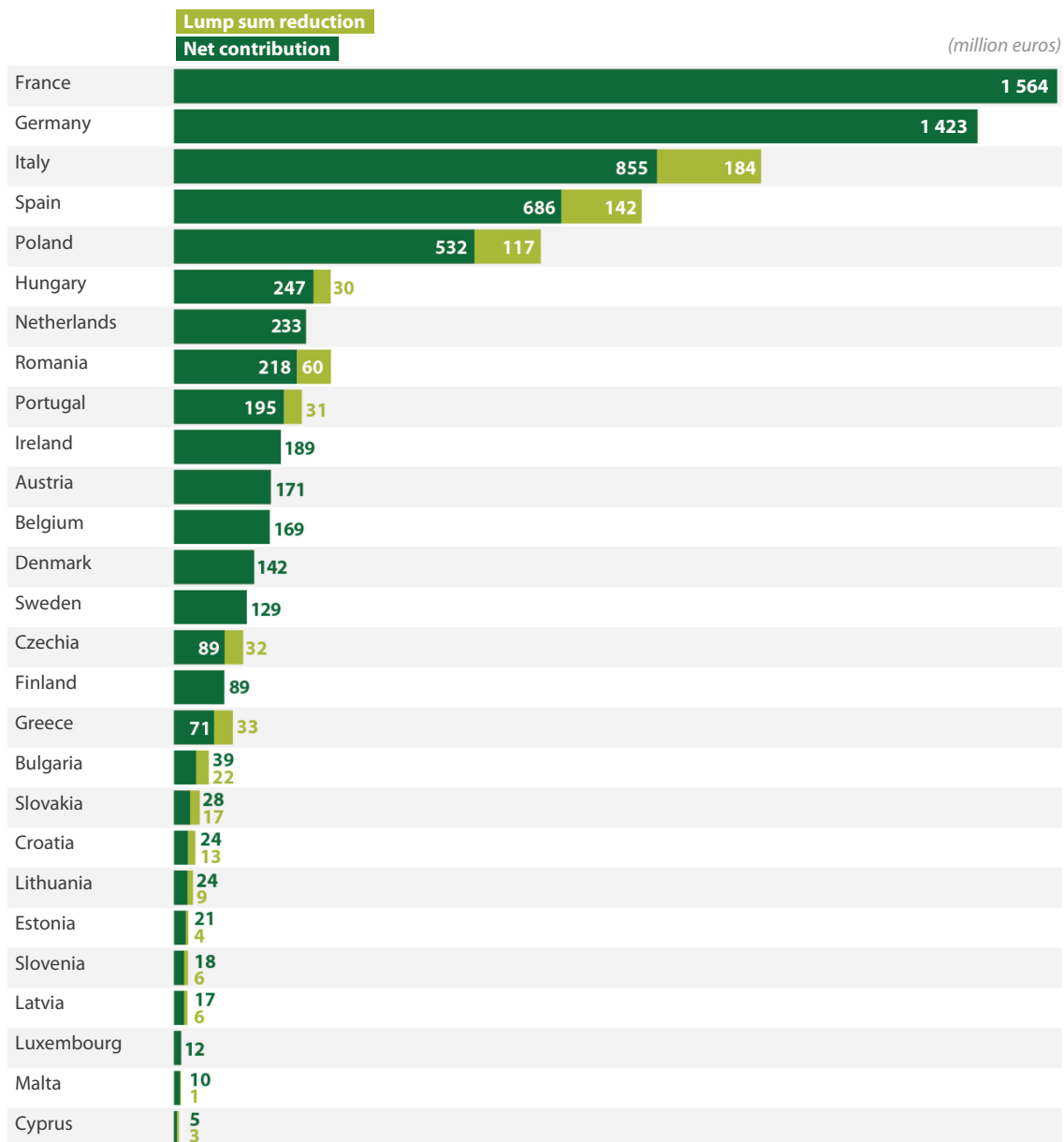
This report was adopted by Chamber V, headed by Mr Jan Gregor, Member of the Court of Auditors, in Luxembourg at its meeting of 9 July 2024.

For the Court of Auditors

Tony Murphy
President

Annexes

Annex I – Member states' net contributions to the plastic-based own resource in 2023 and corresponding reductions



Source: ECA, based on Table 3 of the EU amending budget No 4 for the financial year 2023.

Abbreviations

EPR: Extended producer responsibility

Eurostat: Statistical office of the EU

DG BUDG: Directorate-General for Budget

DG ENV: Directorate-General for environment

GNI: Gross national income

GNP: Gross national product

PRO: Producer responsibility organization

SPPW: Statistics on plastic packaging waste

VAT: Value added tax

Glossary

Extended producer responsibility: Approach which adds the post-consumer stage of a product's life cycle, including recycling and disposal, to the producer's environmental responsibilities.

Placed-on-the-market approach: Method of estimating plastic packaging waste at the moment in which the product is supplied for distribution, consumption, or use, based mostly on data from the plastic packaging producers.

Producer responsibility organisation: Body set up by manufacturers to meet their obligations in respect of the environmental impact of their products.

Replies of the Commission

<https://www.eca.europa.eu/en/publications/sr-2024-16>

Timeline

<https://www.eca.europa.eu/en/publications/sr-2024-16>

Audit team

The ECA's special reports set out the results of its audits of EU policies and programmes, or of management-related topics from specific budgetary areas. The ECA selects and designs these audit tasks to be of maximum impact by considering the risks to performance or compliance, the level of income or spending involved, forthcoming developments and political and public interest.

This performance audit was carried out by Audit Chamber V – Financing and administering the Union, headed by ECA Member Jan Gregor. The audit was led by ECA Member Lefteris Christoforou, supported by Theodosia Tsiolas, Head of Private Office and Panagiota Liapi, Private Office Attaché; Alberto Gasperoni, Principal Manager; José Parente, Head of Task; Diana Voinea, Deputy Head of Task; Tadhg Ó Caoimh, Eda Caliskan and Marco Fians, Auditors. Giuliana Lucchese provided graphical support.



From left to right: Panagiota Liapi, Alberto Gasperoni, José Parente, Diana Voinea, Lefteris Christoforou, Tadhg Ó Caoimh, Eda Caliskan, Marco Fians and Theodosia Tsiolas.

COPYRIGHT

© European Union, 2024

The reuse policy of the European Court of Auditors (ECA) is set out in [ECA Decision No 6-2019](#) on the open data policy and the reuse of documents.

Unless otherwise indicated (e.g. in individual copyright notices), ECA content owned by the EU is licensed under the [Creative Commons Attribution 4.0 International \(CC BY 4.0\) licence](#). As a general rule, therefore, reuse is authorised provided appropriate credit is given and any changes are indicated. Those reusing ECA content must not distort the original meaning or message. The ECA shall not be liable for any consequences of reuse.

Additional permission must be obtained if specific content depicts identifiable private individuals, e.g. in pictures of ECA staff, or includes third-party works.

Where such permission is obtained, it shall cancel and replace the above-mentioned general permission and shall clearly state any restrictions on use.

To use or reproduce content that is not owned by the EU, it may be necessary to seek permission directly from the copyright holders.

Software or documents covered by industrial property rights, such as patents, trademarks, registered designs, logos and names, are excluded from the ECA's reuse policy.

The European Union's family of institutional websites, within the europa.eu domain, provides links to third-party sites. Since the ECA has no control over these, you are encouraged to review their privacy and copyright policies.

Use of the ECA logo

The ECA logo must not be used without the ECA's prior consent.

HTML	ISBN 978-92-849-2876-7	ISSN 1977-5679	doi:10.2865/210697	QJ-AB-24-018-EN-Q
PDF	ISBN 978-92-849-2864-4	ISSN 1977-5679	doi:10.2865/871406	QJ-AB-24-018-EN-N

In January 2021, the EU introduced a new own resource based on non-recycled plastic packaging waste generated by member states. In 2023, it amounted to €7.2 billion, 4.0 % of the EU's total revenue. We assessed the introduction of this new own resource. We conclude that the member states were not sufficiently prepared, and data used was not sufficiently comparable and reliable. Even though the Commission's actions improved data quality, they were not timely. We recommend that the Commission apply the lessons learnt from the introduction of this new own resource, improve data comparability and reliability, and mitigate the risk that waste sent to recyclers is not actually recycled.

ECA special report pursuant to Article 287(4), second subparagraph, TFEU.



EUROPEAN
COURT
OF AUDITORS



Publications Office
of the European Union

EUROPEAN COURT OF AUDITORS
12, rue Alcide De Gasperi
1615 Luxembourg
LUXEMBOURG

Tel. +352 4398-1

Enquiries: eca.europa.eu/en/contact

Website: eca.europa.eu

Twitter: @EUAuditors