



EUROPEAN COMMISSION  
EUROSTAT

Directorate E – Sectoral and regional statistics  
E.2 – Environmental statistics and accounts; sustainable development

## **Country-specific notes on Lightweight Plastic Carrier Bags**

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### **General notes**

- (1) This paper provides additional information on specific aspects such as methodologies of data collection and related changes in the methodologies.
- (2) Compliance or non-compliance with targets of the Plastic Bags Directive (Directive 2015/720) is not addressed in this document.
- (3) Failure in submission by a Member State of all or some data (missing obligatory cells or missing voluntary cells) is not addressed in this document.
- (4) While reporting of consumption of lightweight plastic carrier bags (LPCBs – i.e., bags with a wall thickness of  $0 < 50$  microns) is mandatory, reporting of disaggregated data on  $< 15$  micron and  $15 < 50$  micron LPCBs is made on a voluntary basis. Where countries have provided voluntary data, relevant analysis is included in the country specific notes.
- (5) Countries can choose to report LPCB consumption by either number or weight. Where they choose to provide consumption data weight, it is mandatory to provide a weighted average bag weight. These average bag weights have been used to transpose data provided by weight into numbers of bags consumed, thereby allowing per capita consumption rates to be calculated.

Please consider that the countries below are in protocol order, which is not identical to the alphabetical order in English.

## **1. BELGIUM**

Consumption data for Belgium comes from reporting made by producers/importers to producer responsibility organisation Fost Plus, with the data then verified by the Interregional Packaging Commission. Out of a total of 187 Fost Plus members, 147 producers/importers provided consumption data to Fost Plus, a response rate of almost 79%. The resulting data was then extrapolated upwards, based on numbers of members, to give figure for the total market.

Consumption of LPCBs in Belgium for 2021 equates to 5 bags per capita, down from 10 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased from 7 bags per capita in 2020 to 4 bags per capita in 2021, while consumption of <15 micron LPCBs has decreased from 3 bags per capita to 1 bag per capita.

## **2. BULGARIA**

Consumption data for Bulgaria comes from a regular statistical survey of packages placed on the market made by the National Statistics Institute. The population surveyed was made up of retailers with over 10 employees so as not to burden small retailers.

Per capita consumption of LPCBs in Bulgaria for 2021 equates to 104 bags per capita. This is a decrease from 198 bags per capita in 2019 (no data are available for 2020).

## **3. CZECHIA**

Consumption data for Czechia comes from producer/importer reporting to the national packaging EPR system (EKO-KOM). This covers the whole market with the exception of free riders, which are accounted for through extrapolation.

Consumption of LPCBs in Czechia for 2021 equates to 189 bags per capita, 25% down from 252 bags per capita in 2020. Consumption of 15<50 micron LPCBs has fallen from 9 bags per capita in 2020 to 8 bags per capita in 2021, while consumption of <15 micron LPCBs has also decreased from 242 bags per capita to 181 bags per capita.

## **4. DENMARK**

Consumption data for Denmark comes from three different sources. The Danish Environmental Protection Agency conducted a survey of economic actors with regard to L <15 micron, 15<50 micron and ≥50 micron PCBs, as well as the weighted average weight of these bags. The survey responses pertaining to the total consumption of LPCBs and average bag weights were deemed unreliable, so other data sources were used for these. The second data source is producer/importer reporting to the Danish Ministry of Taxation made on PCBs with a volume over five litres placed on the market, as these bags are subject to a producer/importer fee based on the amount of material used. The third data source was a large importer of LPCBs, which provided average bags weights per wall thickness category. The survey data was used to create a distribution key for the different categories of bags, which was then applied to the Ministry of Taxation data to generate LPCB consumption data.

Consumption of LPCBs is not provided here due to the data not being fit for publication.

## **5. GERMANY**

Consumption data for Germany comes from a survey of retailers undertaken by market research company GVM, including both those retailers party to Germany's voluntary retailer agreement and those not party to the agreement. As not all retailers in Germany are surveyed, the results are extrapolated up to the full market using factors such as division of retail sectors, company and sector turnovers, and number of stores. The results are also checked for plausibility using production and foreign trade data.

Per capita consumption of LPCBs in Germany for 2021 equates to 38 bags per capita, down from 45 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased from 8 bags per capita in 2020 to 5 bags per capita in 2021, while consumption of <15 micron LPCBs has decreased from 37 bags per capita to 33 bags per capita.

## **6. ESTONIA**

Consumption data for Estonia comes from two sources. Firstly, producers/importers must report the number of LPCBs they place on the market to the national Packaging Register. Secondly, Estonia contracted research institute Skepast ja Puhkim to undertake a survey of retailers in a study entitled 'Study about the consumption of lightweight carrier bags and analysis about the impact of the reduction of consumption', and the results of this survey have been used to make corrections to the Packaging Registry data. Retailers are required to maintain records on both LPCBs sold to customers and LPCBs supplied free of charge (i.e., under exemption); however, retailers with a point of sale of <100 m<sup>2</sup> are exempt from these reporting requirements.

Consumption of LPCBs in Estonia in 2021 equates to 138 bags per capita, down from 150 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased from 51 bags per capita in 2020 to 48 bags per capita in 2021, while consumption of <15 micron LPCBs has decreased from 100 bags per capita in 2020 to 91 bags per capita in 2021.

## **7. IRELAND**

Consumption data for Ireland comes from two sources, reflecting how <15 micron and 15<50 micron bags are treated differently. LPCBs are subject to a consumer levy, and data on the number of bags sold is reported by retailers to the Revenue Commissioners. As <15 micron LPCBs are exempt from the levy, Ireland reports that at present it has no accurate way of measuring consumption of these bags, but that a rough estimate has been obtained from a packaging study made by the University of Dublin, which requested data on <15 micron bags from distributors and large retailer.

Consumption of LPCBs in Ireland for 2021 equates to 49 bags per capita, down slightly from 50 bags per capita in 2020. Consumption of 15<50 micron LPCBs has remained the same in 2021 as in 2020, accounting for 3 bags per capita, while consumption of <15 micron LPCBs has also remained the same in 2021 as in 2020, accounting for 46 bags per capita.

## **8. GREECE**

Consumption data for Greece comes from two sources. The primary source is mandatory reporting by producers/importers to the National Packaging Registry, made under their EPR obligations. This data is both checked by individual relevant PROs and validated by the Hellenic Recycling Agency (HRA), which manages the registry. The second data source is the Independent Authority for Public Revenue, which reports the revenue collected from a national environmental tax to the HRA.

Greece did not report data for 2021, but did provide previously missing data for 2020. This showed that consumption of LPCBs in Greece for 2020 equated to 81 bags per capita, down from 113 bags per capita in 2019. Consumption of 15<50 micron LPCBs decreased from 45 bags per capita in 2019 to 38 bags per capita, while consumption of <15 micron LPCBs decreased from 68 bags per capita to 44 bags per capita.

## **9. SPAIN**

Consumption data for Spain comes from producer/importer reporting to a public register. Producers/importers are required to report both the number and total weight of PCBs they place on the market. Spain noted that there may be some companies that are required to report but do not. However, it did not provide an estimate of what proportion of the market such obligated but non-reporting companies may account for.

Consumption of LPCBs in Spain for 2021 equates to 131 bags per capita, down from 187 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased dramatically from 57 bags per capita in 2020 to 29 bags per capita, while consumption of <15 micron LPCBs has decreased from 128 bags per capita to 102 bags per capita. Spain explains this decrease in LPCB consumption as the result of its prohibition on the free provision of PCBs (including  $\geq 50$  micron bags) to consumers at points of sale, which has been in place since 1 July 2018.

## **10. FRANCE**

France changed its method of data collection in 2020, and now data is collected via an email questionnaire sent to French manufacturers and importers of plastic bags. Just over 400 companies were initially identified for the survey, but after sorting and verifying of the companies, the survey was sent to 230 companies. These were based on: the Kompass database of companies selling or manufacturing plastic bags and sacks (187 companies); listings of members of the professional organisations of plastic bag manufacturers and mass retailers (23 companies); major retailers who are not members of professional organisations (2 companies); main supplier companies to the catering industry (6 companies); the main 'cash and carry' brands (3 companies); a list of the largest non-food retail chains (nearly 60 chains); a list of marketplaces (10 marketplaces); a list of sellers publishing ads for the sale of LPCBs (90 sellers); and a list of sellers with independent online stores offering the sale of LPCBs (nearly 30 sellers). In addition, these sources were supplemented by an estimate of PCB consumption on all markets and fairs in France provided by the Fédération Nationale des Marchés de France. This additional source was used to guard against double counting. Adjustments to the data were made in order to account for companies that did not report to the survey, as well as to account for bags used in e-commerce purchases.

Consumption of LPCBs is not provided here due to the data not being fit for publication.

## **11. CROATIA**

Consumption data for Croatia is reported by producers/importers, as they are obliged to submit data on the quantities of PCBs (<15 microns,  $\geq 15 < 50$  microns and  $\geq 50$  microns) they put on the market to the Environmental Protection and Energy Efficiency Fund, which manages the Croatian EPR system. The Fund then sends this data on to the Ministry of Environment and Energy. In the Quality Report, Croatia notes that there may be data coverage issues concerning free-riders and illegal non-reporting.

Consumption of LPCBs in Croatia for 2021 increased from 90 bags per capita in 2020 to 105 bags per capita in 2021. Meanwhile, 2021 consumption of <15 micron LPCBs was 80 bags per capita, up from 71 bags per capita in 2020, while consumption of 15<50 micron bags was 25 bags per capita, up from 19 bags per capita in 2020.

## **12. ITALY**

Consumption data for Italy comes from two sources. Firstly, producers/importers, who must join the National Packaging Consortium (CONAI), report the weight of LPCBs placed on the market in a statement accompanying their EPR contributions (the CONAI environmental contribution). Secondly, data on reusable bags comes from monitoring sales in large-scale organised distribution.

Consumption of LPCBs in Italy for 2021 equates to 127 bags per capita, up from 112 bags per capita in 2020.

## **13. CYPRUS**

Consumption data for Cyprus comes from reporting made by producers/importers to the Department of Environment on the number of LPCBs placed on the market. Cyprus reports that this data comes from the 10 companies placing LPCBs on the market, and so represents the whole market and that therefore no adjustments to the data have been made. The data is compared against a secondary data source on imports and local sales of plastic packaging gathered by the Statistical Service; however, this dataset does not differentiate between different categories of PCBs.

Consumption of LPCBs in Cyprus for 2021 equates to 167 bags per capita, up slightly from 162 bags in 2020, but still down from 211 bags per capita in 2018. Consumption of 15<50 micron LPCBs has increased slightly from 73 bags per capita in 2020 to 74 bags per capita in 2021, while consumption of <15 micron LPCBs has increased from 89 bags per capita to 91 bags per capita.

## **14. LATVIA**

Consumption data for Latvia comes from producer/importer reporting on the weight of bags having a wall thickness of <15 microns and 15<50 microns placed on the market made under the national EPR scheme. This EPR data covers the whole of the market with

the exception of free riders, and the 2021 data has been adjusted to account for free riders. The weight of  $\geq 50$  micron bags placed on the market is made based on assumptions.

Consumption of LPCBs in Latvia for 2021 equates to 229 bags per capita, down from 283 bags per capita in 2020. Consumption of 15<50 micron LPCBs has fallen from 57 bags per capita in 2020 to 47 bags per capita in 2021, while consumption of <15 micron LPCBs has fallen from 172 bags per capita in 2020 to 155 bags per capita in 2021.

## **15. LITHUANIA**

Consumption data for Lithuania comes from mandatory reporting by producers/importers and retailers made to the national Environmental Protection Agency. Only VAT paying companies are required to report. As this reporting does not differentiate 0<15 micron from 15<50 micron LPCBs placed on the market, the voluntary information on consumption split was calculated based on interviews with the largest economic operators (supermarkets, retail chains and packaging producers).

Consumption of LPCBs in Lithuania for 2021 equates to 271 bags per capita, down from 294 bags per capita in 2020. Consumption of 15<50 micron LPCBs has fallen slightly from 44 bags per capita in 2020 to 43 bags per capita in 2021, while consumption of <15 micron LPCBs has decreased from 250 bags per capita in 2020 to 228 bags per capita in 2021.

## **16. LUXEMBOURG**

Consumption data for Luxembourg comes from producer responsibility organisation Valorlux, which collects data from its members. These members are responsible for 89.8% of the total number of LPCBs placed on the market. The Valorlux data is then scaled-up to represent the full market. All producers/importers are required to report, but Valorlux is the only organisation whose data is reported to Eurostat, and therefore data from producers/importers who are not Valorlux members is not reported to Eurostat besides being estimated via the upscaling calculation.

Consumption of LPCBs in Luxembourg for 2021 equates to 24 bags per capita, down from 26 bags per capita, and continuing the reduction seen since 2018, when consumption was 111 bags per capita. Consumption of 15<50 micron LPCBs remained the same from 2020 to 2021 at 23 bags per capita, while consumption of <15 micron LPCBs has seen a decrease from 5 bags per capita in 2020 to 3 bags per capita in 2021.

## **17. HUNGARY**

Consumption data for Hungary comes from mandatory producer/importer declarations made to the National Tax and Customs Administration under the administrative framework of the national environmental product fee (tax) on plastic bags. These economic operators are required to declare both units and weight of material placed on the market.

Consumption of LPCBs in Hungary for 2021 equates to 140 bags per capita, up from 91 bags per capita in 2020. Consumption of 15<50 micron LPCBs has increased from 56 bags per capita in 2020 to 74 bags per capita in 2021, while consumption of <15 micron LPCBs increased from 34 bags per capita to 66 bags per capita. Hungary notes that 90% of the LPCBs placed on the market in 2021 were done so in the first half of the year, as from July

2021 there entered into force a ban on the provision of LPCBs, with exemptions for VLPCBs and biodegradable bags. It attributes the high consumption for the months prior to July 2021 to the ongoing effects of the COVID-19 pandemic, and to commerce having built up high stocks of bags.

## **18. MALTA**

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## **19. NETHERLANDS**

Consumption data for the Netherlands is based on a voluntary survey of retailers and takeaway caterers (picked as a representative, stratified sample by type and volume of store) who were asked to provide information on the number and type of bags provided to consumers. A total figure for the Netherlands was then calculated by combining this data with data on annual revenues per sector. There are data accuracy concerns with this method, as collected data is based on estimations by store owners, and only a sample of stores provided these estimations (only 7% of all stores). The Netherlands reports that the organisation carrying out the survey gave a possible data error of 17%. Furthermore, no new survey was conducted for 2021, and the 2018 results were applied to 2021 sector revenue data. The Netherlands also cross references its figures to data on the prevalence of PCBs in litter waste.

Consumption of LPCBs in the Netherlands was 45 bags per capita in 2021, down from 48 bags per capita in 2020. <15 micron LPCB consumption was 34 bags per capita in 2021, while 15<50 micron LPCBs was 10 bags per capita.

## **20. AUSTRIA**

Consumption data for Austria comes from five collection and recovery systems for household packaging, which hold EPR license agreements with Austrian producers/importers of LPCBs. Austria reports that this data covers the whole market and that no data corrections have been made.

Consumption of LPCBs in Austria for 2021 equates to 25 bags per capita, the same as in 2020.

## **21. POLAND**

Consumption data for Poland comes from retailers and wholesalers, who are obliged to record the numbers of plastic carrier bags provided, including both those subject to and exempt from a charge. Retailers and wholesalers are required to report consumption data via an electronic registry (BDO) each year, after which the data is verified by the marshals of the voivodeships. The Ministry of Climate and Environment then reports the data.

Consumption of LPCBs in Poland for 2021 equates to 19 bags per capita, remaining the same as in 2020. Consumption of  $\geq 50$  micron PCBs decreased slightly by 1.5% from 2020 to 2021.

## **22. PORTUGAL**

Consumption data for Portugal comes from producers/importers, who are required to report the number of bags they are placing on the national market to the Tax and Customs Authority (including quantities of bags exempt from the national charge), which then reports to the Portuguese Environment Agency.

Consumption of LPCBs in Portugal for 2021 equates to 9 bags per capita, down from 17 bags per capita in 2020. Portugal attributes this decrease to the impacts of the COVID-19 pandemic, but notes differences in the data between the continental territory and the autonomous regions.

## **23. ROMANIA**

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## **24. SLOVENIA**

Consumption data for Slovenia is collected as part of the administration of a mandatory tax on producers/importers, who are obliged to report numbers of PCBs placed on the market to the Ministry of Finance, Financial Administration of the Republic of Slovenia (FURS). Producers/importers are required to provide data by wall thickness category (<15 microns, 15<50 micron and  $\geq 50$  microns), as well as by type of plastic polymer. Slovenia reports that the data represents complete capture of the market, but it also reports that there is no estimate for the market share of producers/importers who have not met the mandatory requirement to report. No adjustments or extrapolations from the data have been made.

Consumption of LPCBs in Slovenia for 2021 equates to 81 bags per capita, up slightly from 74 bags per capita in 2020. Consumption of 15<50 micron LPCBs has increased slightly from 11 bags per capita in 2020 to 13 bags per capita in 2021, while consumption of <15 micron LPCBs has increased slightly from 63 bags per capita to 68 bags per capita.

## **25. SLOVAKIA**

Consumption data for Slovakia comes from producers/importers, who are required to report annually to the Ministry of Environment on quantities of LPCBs they have placed on the market. Reporting is either made individually or through producer responsibility organisations. Producers/importers are also required to report quantities of  $\geq 50$  micron bags placed on the market.

Consumption of LPCBs in Slovakia for 2021 equates to 80 bags per capita, down from 93 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased from 16 bags per capita in 2020 to 10 bags per capita in 2021, while consumption of <15 micron LPCBs has fallen from 77 bags per capita in 2020 to 70 bags per capita in 2021.

## **26. FINLAND**

Consumption data for Finland comes from producers and is collected through the national packaging registry (Finnish Packaging Recycling RINKI Ltd). The public institution with



responsibility for the data is the Centre for Economic Development, Transport and the Environment for Pirkanmaa. The consumption data represents the amount of material placed on the market by producers with a turnover greater than one million Euros. Finland did not report any additional work being done to scale the consumption data up to account for bags placed on the market by producers with under one million Euros turnover. However, Finland has indicated that the methodology will be changing to remove the turnover de minimis in future years. Information on average bag weights comes from the largest producers, which together account for upwards of 95% of bags placed on the market.

Consumption of LPCBs in Finland for 2021 equates to 128 bags per capita, a slight increase on 126 bags per capita in 2020. Consumption of 15<50 micron LPCBs has increased slightly, from 53 bags per capita in 2020 to 55 bags per capita in 2021, while consumption of <15 micron LPCBs has remained the same at 73 bags per capita in both years.

## **27. SWEDEN**

Consumption data for Sweden comes from producers/importers, who are required to complete an online survey from the Swedish Environmental Protection Agency (SEPA). Companies were asked to report the number of LPCBs (0<50 microns) <15 micron LPCBs, and ≥50 micron PCBs placed on the market. SEPA contacted the largest companies, which together yearly account for about 95% of the PCBs placed on the market in Sweden, to check that the data provided was accurate.

Consumption of LPCBs in Sweden for 2021 equates to 16 bags per capita, drastically down from 103 bags per capita in 2020. Consumption of 15<50 micron LPCBs has decreased from 55 bags per capita in 2020 to 14 bags per capita in 2021, while consumption of <15 micron LPCBs has decreased from 48 bags per capita to 2 bags per capita. Sweden attributes the decrease in consumption to the ongoing effect of its PCB tax, introduced in May 2020.

## **28. ICELAND**

Iceland reported data for the first time in 2021 (no data for 2020 is available). Consumption data for Iceland comes from customs tariffs to estimate the number of LPCBs imported into Iceland (there is no LPCB production in the country). The Icelandic Revenue and Customs (Skatturinn) reports the imported amounts of LPCBs in kilograms to Statistics Iceland (Hagstofa Íslands). The LPCBs are reported under two custom tariff categories: <15 microns and >15 microns. There is no separate category for ≥50 micron PCBs, so data reported under the >15 micron category may be inflated by inclusion of some of these thicker bags; however, Iceland states that any such inflation will be by a minor amount.

Consumption of 15<50 micron LPCBs in Iceland for 2021 equates to 45 bags per capita.

## **29. LIECHTENSTEIN**

Consumption data for Liechtenstein comes from the Office of Environment, which collects data from surveying retailers on the number of 15<50 micron LPCBs sold, and the number of <15 micron LPCBs, given away free of charge. However, the survey only covered 50%

of retailers, with no estimation of what proportion of the market these retailers cover, and no extrapolation being made to account for the whole market.

Consumption of LPCBs is not provided here due to the data not being fit for publication.

### **30. NORWAY**

Consumption data for Norway comes from two national EPR organisations, Green Dot Norway and another unnamed organisation, which collected data directly from producers/importers. The data does not include free-riders to the EPR scheme.

Consumption of LPCBs in Norway for 2021 equates to 239 bags per capita, up from 202 bags per capita in 2020. The increase is attributed to a change in data collection methodology, as a new EPR reporting obligation for <15 micron bags came into effect.

### **31. NORTHERN IRELAND**

Consumption data for Northern Ireland comes from retailers, who are required to report information on the number of single-use carrier bags for which they have charged the 5 pence levy via the NI Direct website, managed by the Carrier Bag levy Team (CBLT) within the Department of Agriculture, Environment and Rural Affairs (DAERA) Statistics and Analytical Services Branch (SASB). Retailers use a range of methods to collect consumption data, including spreadsheets, written records, barcodes and till reporting systems.

Consumption of LPCBs is not provided here due to the data not being fit for publication.