



## “Improving data for circular economy - packaging waste and construction waste” project

In August 2022 The National Statistical Institute completed successfully the work on the “Improving data for circular economy - packaging waste and construction waste” project in accordance with Grant Agreement with the European Commission № 101023440 — 2020-BG-CEPCW. The duration of the project was 18 months – from March 2021 to August 2022

As a result of the implementation of the project’s activities, the main goals set in it were achieved:

- improvement of the quality of the indicators of the circular economy;
- improvement of the statistics on packaging (including lightweight plastic carrier bags) and construction waste;
- development of experimental accounts for construction waste.

The project allowed more detailed analyses of available data for packaging and construction waste in the country. This avoided to improving of the methodology for collecting of data related with circular economy model and continuously increases demand of data for the application of the model.

### Project activities

The work of the project was distributed in two work packages – WP1 “Packaging waste” and WP2 “Construction waste”, for each of them the planned goals were achieved.

#### *WP1 “Packaging waste”*

1. New methodologies materials– solutions, classification, etc. were investigated, in order to compare and take a conclusion about the best approach for the preparation of statistical about packaging and lightweight plastic carrier bags placed on the market. As a result, a statistical survey based on a combination of exhaustive and sample survey using assessment was shown to be the appropriate approach.
2. Identification of possible new sources of information at national level in order to reduce the burden on the respondents and to achieve cost efficiency was carried out. As a result, some opportunities have been noted that can serve as a basis for future development.
3. It was conducting a separate sampling survey (in additional to regular annual survey) for calculation of annual consumption of lightweight plastic carrier bags in number and kg. It’s purpose was to serve to analyze of quality of the final statistical data in comparison with the current approach (the survey list included business units that were selected exhaustively and was supplemented with a sample that was assessment).
4. Based on the comparative analysis, it was concluded that the current approach provides high data quality, therefore its application should continue.
5. In order to reduce the burden on the respondents, the results of the comparative analysis with the sample observation will serve as a basis for updating the methodology (in the future, upon confirmation by the time series).

WP2 “Construction waste”, for each of them the planned goals were achieved.

1. Sources of administrative data were researched - a significant number of potential sources of information on construction waste have been identified to reduce respondent burden and achieve cost efficiency. In a result it's found that the most of them do not collect and aggregate such information. Steps for future development were marked.
2. The coverage of regular annual statistical survey "Waste from economic activities" was expand with improvement of the construction waste section.
3. It was exhaustive survey of construction waste (as part of "Waste from economic activities" survey), coverage the statistical units with over 10 employee. In result the data quality was improved – much more comprehensive and quality information for construction waste on national level. The sample and in the services sector has been increased as a source of construction waste from different repair activities.
4. The better quality data thus provided will be criteria to future development for determination of the opportunities for use of administrative data source, that may lead to reduce of the burden on respondents.
5. The main challenge for NSI remains to continue to work, together with other institutions, in the direction of optimizing information flows in the country so to avoid parallel data collection.
6. In addition, the work on the project allowed to increase the knowledge of the experts to collect data on construction and demolition waste, according to the requirements of Regulation No. 2150/2002 on waste statistics.

### **Results of the project**

In the result of the implementation of the aforementioned activities, the specific purposes of the project are achieved:

1. Improvement of the quality of the sub-indicators of the circular economy:
  - a) Recycle rate of plastic waste by type
  - b) Recovery rate of construction waste
2. Development of methodology for calculation of placed on the market packaging (including lightweight plastic carrier bags).
3. Development of experimental accounts for construction and demolition waste according Regulation (EU) No. 691/2011. They give quite detailed information about construction waste and a good future prospect for development.
4. As a result of intensive communication with more respondents, there is:
  - a better understanding on their side of the reports, which also leads to better quality primary data;
  - a better understanding of the utility of the aggregated data from the by respondents (increasing the efficiency of the planning activity in the companies);
  - a better understanding by the experts in NSI structures for difficulties that respondents have when filling out the reports and the possibilities for their optimization.

### **Conclusion**

As the result of the efforts made within the project, more detailed and better quality statistical information is available for packaging waste and construction waste. Based on this, the collection of data



on these wastes will continue through a statistical survey with an extended scope. At the same time, the active search for opportunities to reduce the burden on respondents through the use of administrative data will continue. A main focus in the future work will be the training of the respondents and the administrations related to the data, as well as the provision of their methodological support.

The activities of the project provided an opportunity for a more complete analysis and the finding of some imperfections in the approach applied so far in relation to both types of waste. This in turn provides a good basis for future development and further improvement of the quality of data reported in accordance with the requirements of European legislation - Directive 94/62/EC according to Commission Decision 2018/896 on the calculation of annual consumption of lightweight plastic carrier bags; Directive 94/62/EC according to Commission Decision 2019/665 amending Decision 2005/270/EC establishing the formats relating to the database system pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste; Regulation (EC) № 2150/2002 on waste statistics.