"TANGIBLE FIXED ASSETS WITH ECOLOGICAL USE" STATISTICAL SURVEY METHODOLOGY

The statistical survey is conducted annually by the Environmental and Energy Accounts Department, Macroeconomic Statistics Directorate, of the National Statistical Institute, on the basis of mandatory participation, according to the National Statistical Program.

According to Art. 20 of the Statistics Act, respondents are obliged to provide the National Statistical Institute with reliable data on surveys included in the National Statistical Program, which are intended to be conducted on the basis of mandatory participation.

According to Art. 25, para. 1 of the Statistics Act, individual data obtained and collected during statistical surveys are confidential and can only be used for statistical purposes.

GENERAL INFORMATION

OBJECTIVE

The main purpose of the statistical survey is to provide information to all stakeholders and the public about the economic operations related to the acquisition and use of tangible fixed assets with ecological use which are related to the reporting requirements of Regulation (EC) No. 691/2011 on the European Environmental Economic Accounts.

ESSENCE

The object of the statistical survey are the economic operations related with the acquisition and use of tangible fixed assets with ecological use (TFAEU).

TFAEU include:
- Facilities, installations and equipment necessary for environmental protection and recovery in the following environmental activities: wastewater, air, circulating water supply, soil protection, waste disposal, noise protection;
- Monitoring and control equipment.

TFAEU are those assets in which an enterprise has a long-term investment in order to support the activity being carried out. The assets participate in the activities of enterprises for a longer period.

TFAEU are divided into two main groups:

1. End-of-pipe technologies (specialised facilities for the environmental protection), which include only facilities for reduction of environmental pollution and do not participate in the production process;

2. Integrated technologies, which are simultaneously a production factor, i.e. TFA that are directly involved in the production process, and as a result of their use the environment is protected or its pollution is reduced.

An independent group is considered to be the monitoring and control equipment that the enterprise uses in its activities.

The monitored variables include acquired, out of use and available at the end of the year TFA, which are given at accounting value. Acquired (introduced during the year) TFAEU during the reporting period include the value of TFA acquired by the enterprise through construction and purchase.

The classification of TFAEU is tailored with the current European and international requirements of Eurostat and the Organization for Economic Cooperation and Development (OECD) in accordance with the Classification of environmental protection activities (CEPA 2000). The following environmental activities are specified in the classification: wastewater; circulating water supply; air protection; soil and groundwater protection; protection of biodiversity and protected areas; hunting and fishing measures; waste management; noise protection.

PURPOSE
The data for TFAEU obtained as a result of the statistical survey are the main source of statistical information for the available, acquired and out of use TFAEU and are used in relation to the reporting needs under Regulation (EU) No. 691/2011 on the European environmental economic accounts. The data are published annually, according to the Release Calendar, on the NSI website for public information. They are also provided to various institutions or organizations in the country for evaluations and analyses.
Main users of statistical information from the survey are state and municipal administrations, associations, enterprises and citizens.

STATISTICAL SURVEY

SCOPE, STATISTICAL UNIT AND GENERAL POPULATION
The statistical survey covers enterprises from various economic activities.
The statistical unit is an enterprise, a local unit and a kind-of-activity unit.
The general population consists of active enterprises, local units and kind-of-activity units, which have available facilities, installations and equipment, included in the composition of TFAEU or have introduced/acquired TFAEU during the year.
The statistical survey is comprehensive according to certain criteria with the study of the main array of statistical units included in the general population.

DATA SOURCES
-   Statistical survey "Tangible fixed assets with ecological use".
Information from other statistical surveys (business statistics, environmental statistics) is also used to define the general population and verify the data.

FREQUENCY OF DATA COLLECTION AND PUBLICATION
Annually.

STATISTICAL STUDY

DEFINING THE STATISTICAL POPULATION FOR THE STUDY
The statistical population is determined by statistical units (enterprises, local units and units by type of activity, included in the Statistical Business Register (SBR).
The choice of the statistical units from the SBR takes into consideration the survey type, which is comprehensive for the units, for which we have information that they have TFAEU.
The population is updated annually before the start of the Campaign.

DATA COLLECTION
Primary data are collected from respondents for the previous reporting year. The data are collected via Environmental Statistics Information System (ESIS), which includes automatic checks for completeness, valid values, and logical data control, according to the specifics of the survey. The nomenclatures used for its needs and instructions for the respondents are available in the system.

PRIMARY DATA PROCESSING, DATABASE PREPARATION

PRIMARY DATA PROCESSING
After the respondents have reported their data in ESIS, their processing begins. It is carried out in the system according to the survey program schedule and goes through several stages.
Data validation is carried out on the basis of clearly defined criteria regarding their completeness, correct classification, units of measure, comparability with previous years, logical control, etc.
All checks are done at the respondent level.

DATABASE PREPARATION
After finalising the process of removing all identified errors and discrepancies in the data, actions on classifying and coding the data related to the statistical units or collected variables are also taken. The purpose of these encoding procedures is to obtain derived variables, numerical values, or aggregate values during the next processing stages. The coding process is carried out using code tables. When new versions of the used classifications and nomenclatures appear, recoding and reclassification of statistical units and variables is carried out.
After completing these actions, the methodologists prepare the primary database for further processing and calculation the statistical data.

CALCULATION AND ANALYSIS OF STATISTICAL INDICATORS

DATA PREPARATION
Data preparation is a set of processes through which the primary data are brought into a form suitable for the statistical data calculation, analysis and assessment of their quality and the subsequent presentation to users, incl. fulfilment of reporting obligations to Eurostat, according to the specified table formats.

ASSESSMENT OF PRIMARY DATA RESPONSE RATE
Within the framework of the Campaign, reports should be collected from all survey respondents. In the event that 100% collection of primary data from respondents is not achieved, the need to assessment the missing data is assessment and, if necessary, carried out.

STATISTICAL DATA CALCULATION
The following indicators are calculated from the database:
Acquired TFAEU is obtained as a sum of the acquired TFAEU in the reporting year "Buildings, construction facilities and structures, land and others" plus the acquired TFAEU in the reporting year "Machines, production equipment, apparatuses, means of transport".
Available at the end of the year TFAEU are "Available at the beginning of the year TFAEU" plus "Acquired TFAEU" in the reporting year minus "Out of use TFAEU" in the reporting year plus "Increase from TFAEU restoration" minus "Decrease from TFAEU restoration".

Data are aggregated at different levels: by environmental domains from each section in the corresponding columns in the report, by statistical zones, regions, districts, economic activities and environmental domains.

The data are aggregated by:
- By environmental domains - specialised facilities and integrated technologies;
- By environmental domains (CEPA 2000), the value of TFAEU for each of which is equal to the sum of the values of specialised facilities and integrated technologies;
- By divisions and sections and sectors of NACE rev.2, by aggregated nomenclature A10;
- By regional principle for the territory of the country - by statistical zones, regions and districts.

Specialised software – Excel, SPSS and/or R – is used to calculate the data.

CONFIDENTIALITY

According to Regulation (EC) No. 223/2009 on European statistics and Statistics Act, the individual (primary) data of enterprises are confidential. In order to ensure their protection and the impossibility of being identified, the aggregated indicators are defined as confidential also when:
- Criterion A - the indicator is formed by one or two enterprises;
- Criterion B - one enterprise dominates the value of the indicator with a share equal to or greater than 85%.

QUALITY ASSURANCE

The statistical survey follows the General model of the statistical production process in NSI. The quality assurance is carried out in order to guarantee compliance with the requirements of the Statistics Act. Data quality is ensured by the application of the European Statistics Code of Practice principles and NSS Common Framework for Quality Management.

To provide the high quality of the data, their consistency with the data from the reference on non-current tangible fixed assets for the enterprises, which is part of the annual reporting on the activities of the enterprises (in BSIS), is checked.

Efforts are being made to continuously improve the quality of the data, by improving the primary data collection system through the online-based ESIS, ensuring strict arithmetic and logical control of the input data, and by performing additional analyses and verifications.

Quality report and metadata are also published on the NSI website together with the statistical data. They are updated annually and contain additional information related to the survey.

STATISTICAL PRESENTATION

The data on acquired, out of use and available at the end of the year TFAEU are presented by:
- Environmental domains in total for the country (wastewater, circulating water supply, air, soil and groundwater protection, biodiversity, hunting and fishing activities, waste, noise and equipment for monitoring and control) and by type (specialised facilities and integrated technologies);
- Statistical zones (2 zones), regions (6 regions) and districts (28 districts);
- Environmental domains and economic activities, according to aggregations by economic activity (NACE rev.2): total for the country, Agriculture, forestry and fishing (A01-03), Industry - Total (B, C, D, E and F 05 -43), Mining and quarrying (B05-09), Manufacturing (C10-33), Production and distribution of electricity and heat, gaseous

fuels, water supply (D and E 35-36), Specialised producers of environmental goods and services (E 37-39), Construction (F41-43), Services (G - U 45-99), Public administration (O 84).

The data are published on the NSI website in the "Statistics – Environment" section, as well as in the Infostat system. The data are used for the preparation of NSI publications - Statistical Yearbook, Statistical Reference book, brochure 'Bulgaria', specialised electronic publication 'Environment', as well as for providing information upon users' request.