

Environmental Protection Expenditure Accounts Data Sources

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- National Accounts
- Structural Business Statistics
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National Accounts

Supply and use tables

- Supply and use tables (SUT) are one of the most important presentation of national accounts about the supply and use of products linked with data on industries, according to CPA and NACE classifications.
- The supply table shows the supply of goods and services by product and by producing industry, distinguishing domestic supply and imports.
- Those are valued at basic prices.

National Accounts

Supply and use tables

The use table shows the **use of goods and services** categorized by product and by category of use, as follows:

- a) intermediate consumption by industry;
- b) final consumption expenditure: households, general government and NPISH;
- c) gross capital formation;
- d) exports



In the columns under the intermediate consumption by industry, the use table shows the **components of gross value-added**, as follows:

- a) compensation of employees;
- b) other taxes less subsidies on production;
- c) net mixed income, net operating surplus and consumption of fixed capital.

National Accounts

Supply and use tables

Supply and use tables may be used for all market and non-market EP services, once the corresponding CPA products have been identified.

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- Output of CPA 37-39 products by industries;
 - Output of NACE 37-39 by type of output;
 - Final consumption of CPA 37-39 products;
 - Intermediate consumption of CPA 37-39 by industries (including by NACE 37-39);
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National Accounts

Supply and use tables

when data are available at the level of NACE divisions 37, 38 and 39, the supply-use tables would suffer from two limitations:

- It would be necessary to disclose group 38.3 (materials recovery) from groups 38.1 and 38.2, as 38.3 output mainly corresponds to resource management;
- Data by industries should distinguish the institutional sector (general government on the one side and corporations on the other side).



National Accounts

Supply and use tables

Exports and imports: it can be assumed that all exports and imports of goods in the NACE 37-39 grouping correspond to CPA 38.3

Trade and transport margins: as there are no margins on services, the total margin of the NACE 37-39 grouping may be attributed to 38.3 products;

VAT and other taxes less subsidies on products: the allocation of this characteristic may only be done after an examination of the national tax and subsidies system. In justified cases it may be sufficient to allocate them according to the output share of 38.3 in the total NACE 37-39 grouping.

Final consumption: there is no or insignificant final consumption of materials recovery services or secondary raw materials;

Intermediate consumption: all supply of CPA 38.3 products available for national uses is used as intermediate consumption;

National Accounts

Supply and use tables

The EPEA framework distinguishes between

- general government and
- corporations as
 - specialist
 - secondary

producers of EP services.

Although transactions of general government units engaged in CEPA 2 and 3 may be estimated from COFOG and public finance statistics, it is not easy to determine which part of these transactions is included in the data by industries: a producer in the general government institutional sector may be classified in NACE 37-39.

National Accounts

COFOG Data

- Data on general government expenditure by function
 - Classification of the Functions of Government (COFOG)
- COFOG data cover all institutional units of the ESA 2010 general government institutional sector
 - local KAUs of the government sector that are market producers
- One of the functions of the COFOG is environmental protection (division 05). The detailed breakdown of environmental protection is based upon the CEPA.



National Accounts

COFOG 05 (Environmental Protection)	CEPA 2000	NACE*	Mandatory**
05.1 Waste management	3. Waste management	38.1 & 38.2; 39; 81.29	X
05.2 Waste water management	2. Wastewater management	37	X
	1. Protection of ambient air and climate	39	
05.3 Pollution abatement	4. Protection and remediation of soil, groundwater and surface water	39	X
	5. Noise and vibration abatement	43.29; 71.20	
	7. Protection against radiation	38.12; 38.22	
05.4 Protection of biodiversity and landscape	6. Protection of biodiversity and landscapes	91.04	X
05.5 R&D environmental protection	8. Research and development	72	
05.6 Environmental protection n.e.c.	9. Other environmental protection activities	94.12; 94.99	X

National Accounts

COFOG Data

COFOG data directly provide four of the characteristics asked in the EPEA

- P51G_NP.1, P3_EPS.1, D1.1, P2.1

COFOG (variables relevant for EPEA)	code	EPEA	COFOG: list of variables relevant for EPEA (transfers)	Code	EPEA Q
Gross capital formation + Acquisitions less disposals of non-produced non-financial assets	OP5ANP		Subsidies	D.3	
Gross capital formation	P.5		Other current transfers	D.7	D3_D7_D9
Gross fixed capital formation	P.51g	P51G_NP.1	Capital transfers	D.9	2_D99_PA
Acquisitions less disposals of non-produced non-financial assets	NP		of which investment grants	D.92	Y_GG.6
Intermediate consumption	P.2	P2.1	Social transfers in kind – purchased market production	D.632	
Other taxes on production payable + Current taxes on income, wealth, etc. + Adjustment for the change in pension entitlements	D.29 + D.5+ D.8	(D29)			
Compensation of employees	D.1	D1.1			
Transfers (see below)	various				
Final consumption expenditure	P.3	P3_EPS.1			

National Accounts

COFOG Data

- 01.2.1 Economic aid
- 01.3.2 Overall planning and statistical services
- 04.2.1 Agriculture
- 04.5 Transport
- 04.7.4 Multi-purpose development projects;
- 06.1.0 Housing development
- 08.2.0 Cultural services



Structural Business Statistics

Structural business statistics (SBS) describe the structure, conduct and performance of economic activities, down to the most detailed activity level.

They cover all activities of the business economy with the exception of agricultural activities and personal services.

SBS data are available at class level (four digits), which is more detailed than standard national accounts data.

- sewerage (37)
- waste management activities between waste collection (38.1)
- waste treatment and disposal (38.2)
- materials recovery (38.3)
- remediation activities (39)

Structural Business Statistics

The most important features of SBS are better NACE breakdowns than national accounts and the collection of environmental variables for EPEA.

If national accounts data are not available at a more detailed NACE level than published, EPEA compilers can use additional detail from SBS to split up the national accounts data.

SBS data are collected at the level of enterprises, which may be a limitation in particular when comparing with national accounts data which are generally compiled on the basis of local KAUs for presenting data by industry.



Structural Business Statistics

The main SBS characteristic of interest for the determination of output of corporations is production value.

*“**Production value** measures the amount actually produced by the unit, based on sales, including changes in stocks and the resale of goods and services.”.*

The production value is close to the output as defined in national accounts and therefore a **proxy** of the EPEA characteristic **P11**.

Structural Business Statistics

SBS also collects data on:

- **Personnel costs (13 31 0):** personnel costs are defined as the total remuneration, in cash or in kind, payable by an employer to an employee. This characteristic is a proxy for the EPEA characteristic D1.
- **Gross investment in tangible goods (15 11 0) less Sales of tangible investments goods (15 21 0)** is a proxy of the EPEA characteristic P51G_NP (gross fixed capital formation plus net acquisition of non-produced non-financial assets).
- **Number of employees in full time equivalent units (16 14 0):** it is the total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory. This characteristic corresponds to the EPEA characteristic EMP.

Other sources

Specific surveys;

- Ancillary output of corporations
- Intermediate consumption of EP services by the various industries
- Identify producers of EP services
- Disaggregation of COFOG group 05.03 data according to CEPA 1, CEPA 4, CEPA 5 and CEPA 7.
- Obtain data on the value of related non-EP outputs and employment



Other sources

Household expenditure surveys;

- When the national accounts use table is not sufficiently detailed, e.g. when it does not distinguish products of the CPA 37 and 38.1+38.2, household surveys may provide data on the final consumption of households on waste water and waste collection and treatment services, corresponding to CEPA 2 and CEPA 3.
- General household consumption surveys rarely provide data sufficiently detailed to allow identifying household expenditure on specific goods and cleaner goods.

COICOP
04.4

Other sources

Sources for NPISH;

- The EPEA reporting framework groups NPISH together with general government. However in COFOG or national accounts data NPISH are not included in the general government institutional sector, except for these NPISH which are under the control of the general government. Therefore data on NPISH must be estimated
- Similarly to the general government, there is a classification of the purposes of non-profit institutions serving households (COPNI).

COPNI
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Təşəkkür edirəm