

Assessing what is currently available. Can it meet the analysis needs?

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Political context In the EU

→ Green papers

- Security of energy supply
- Energy efficiency

→ Directives

- Energy end-use efficiency and energy services
- Combined heat and power plants

→ Commission communications



Why is Eurostat involved with energy efficiency indicators?

- To assess quantitative objectives set by the European Union in the field of energy efficiency
- To extend the data provision of official energy statistics to more detailed end use information (energy consumption by use)
- To assure transparency in data sources and in the methodology used for establishing indicators
- To keep a constant in time high quality statistical system as a concrete basis for future reference
- To collect/centralise on regular basis information from other statistical domains such as transport, housing/building sector, manufacturing industry or national accounts



Project objectives

- Determine the most appropriate indicators relevant to policies
- Provide a shortlist of energy efficiency indicators by sector
- Identify the data requirements and availability for producing these indicators
- Propose alternative indicators that may be readily available from existing statistics
- Define the most appropriate method for collecting the required information



Eurostat actions

Establishment of the 'Priority energy efficiency indicators list'

- Macro indicators
- Indicators for transport
 - Road transport indicators for passenger cars
 - Road transport indicators for goods vehicles (freight)
 - Air - passenger transport
- Indicators for industry
 - Energy intensity
 - Unit consumption
- Indicators for households
- Indicators for services
- Indicators for transformation



Eurostat actions

- Adoption of the list by energy statistics authorities of the MS
- Compilation of the information available:
 - supplied by ODYSSEE and reviewed by the Member States
 - from the Eurostat energy database (joint annual questionnaire and specific data collection projects)
 - from other Eurostat databases (national accounts, transport and social statistics)
- Production of a publication as input to a Eurostat working group, aiming to identify difficulties in data availability (2003)



Summary of problems

→ Methodological

→ Constant structure

→ Temperature correction

→ Data availability

→ The available information was sufficient to produce the majority of the priority-list EU indicators

→ Data availability for macro, transformation and industry indicators was satisfactory for all Member States

→ Data for transport, services and households were adequate for most Member States but not sufficient for producing the required EU indicators

→ Quite a few indicators for EU were not available due to missing data from only a few countries

→ Very few indicators for EU were missing data from a large number of countries



Evaluation of data availability for the selected indicators

→ Missing data for few Member States

→ Transport indicators

→ Test consumption of petrol and diesel passenger cars (before 1995)

→ Average consumption of petrol and diesel passenger cars & trucks

→ Stock of passenger cars

→ Households indicators

→ Electricity consumption for lighting & electrical appliances



Evaluation of data availability for the selected indicators

- Important problems of data availability
 - Transport indicators
 - Average no of km per car
 - Passenger km for air transport
 - Energy consumption for air transport includes passenger & freight
 - Industry indicators
 - Consumption at NACE 3-digit level
 - Households indicators
 - Consumption for space heating
 - Average area of dwellings
 - Services indicator
 - Consumption for space heating
 - Average area of services buildings



Assessment conclusion

- Data for macro energy efficiency indicators are available (energy supply) and of acceptable quality
- Energy efficiency is mainly assessed with end-use data which are very costly to obtain (consumer surveys) and are therefore seldom available
- To produce energy efficiency indicators, energy statistics must be complemented with statistics from other domains (economic, industrial, social, transport, etc.), often not available
- when energy statistics is not the responsibility of a central statistical office, access to non-energy statistics required for the indicators is sometimes difficult
- There is no internationally agreed methodology and guidelines for energy efficiency indicators, as in energy or GHG emission statistics



Current situation in the field of energy efficiency indicators

- Increased political interest; energy efficiency is at the top of the European Commission's political agenda
- There is a legal basis for some energy efficiency indicators in the framework of the climate change Council Decision
- Important support from IEEA financing a number of projects in the field of energy efficiency, however their results are based on small sample surveys
- Energy statistics legal basis under preparation
- A temperature correction method is now available at Eurostat



The way forward to meet EU policy needs

- The proposed energy end-use efficiency and energy services Directive in Article 15.4 states that ' the Commission shall before 30 June 2008 develop a set of harmonised energy efficiency indicators using as a reference guide an indicative list of indicators in annex IVa'
- Eurostat is currently considering re-launching the energy efficiency indicators project, with primary objective of responding to the monitoring requirements of this Directive.
- Support from the Intelligent Energy Programme for carrying out dedicated surveys in the EU will be examined

