

# **EUROSTAT Energy Indicators Program**

## ***Data Collection and Production***

Roeland Mertens

*Energy Statistics*

*Eurostat*

***Commission of the European Communities***

Indicators for Sustainable Energy Development  
Third Research Coordination Meeting/Workshop

*New York – 15/9/2004*

# Data Collection and Production

- Eurostat energy statistics: activities in general
- Frequency, timeliness and scope of energy statistics
- Data collection, processing and evaluation
- New policy of data dissemination
- Indicators

# **Eurostat energy statistics activities**

- ❑ Provide the Commission with statistics needed for an effective energy policy
- ❑ Provide high quality statistical services and products to other users
- ❑ Implement actions improving national statistical systems (EU Member States and Accession Countries)
- ❑ Assist Candidate Countries in adapting their national systems to EU standards

# Eurostat energy statistics activities

- Processes
  - main/routine activities of the unit
  - in response to the first and second Ambitions
- Projects - Member States and Accession Countries
  - demand driven (Commission)
  - in response to the last three Ambitions

# Frequency, timeliness and scope of energy statistics

- A balance to strike between timeliness and accuracy
- Data collection with a set of questionnaires:
  - different frequencies
  - different timing
- Frequencies:
  - Annual
  - half-yearly
  - Monthly
- Timing:
  - 8 months
  - 3 months
  - 1 month

# Frequency, timeliness and scope of energy statistics

## Frequency

- Annual:
  - Coal
  - Oil
  - Natural Gas
  - Electricity & Heat
  - Renewables & Wastes
- Half-yearly: prices

## Delay

- Annual: 8 months
- Half-yearly: 3 months

# Frequency, timeliness and scope of energy statistics

## Frequency

- Monthly (M-3):
  - MOS (Oil and Gas)
  - Monthly Coal
  - Monthly Electricity
- Monthly (M-1):
  - JODI (Joint Oil Data Initiative)
  - SEGgas (Short Gas)
  - SEGelectricity (Short Electricity)

## Delay

- Monthly: 3 months
- Monthly: 1 month (!)

# Frequency, timeliness and scope of energy statistics

## Scope:

- Energy commodity balances
- External trade (Imports/Exports by country of origin/destination)
- Structure of the Energy Industry
- Price Statistics



# **Data collection, processing and evaluation**

- Data providers
- Data collection
- Evaluation and output
- Users

# Data collection, processing and evaluation

## Data providers

- National Statistical Institutes
- Ministries (Energy, Industry, Economy)
- Energy Agencies designated by the MS
- Professional Associations
- Energy Industries

# Data collection, processing and evaluation

## Data collection

### Standardised questionnaires:

- Five joint Eurostat/IEA/UNECE **annual** questionnaires  
Coal, Oil, Natural Gas, Electricity & Heat, Renewables & Wastes
- M-3 **monthly** questionnaires:
  - The MOS (Monthly Oil and Natural Gas Statistics): IEA questionnaire, also in use by Eurostat
  - Monthly Coal and Monthly Electricity: purely Eurostat
- M-1 **monthly** questionnaires:
  - JODI (Joint Oil Data Initiative): joint questionnaire of APERC, Eurostat, IEA, OLADE, OPEC, UNESD
  - SEGgas (Short Gas) and SEGelectricity (Short Electricity): purely Eurostat questionnaires

# Data collection, processing and evaluation

## *Data collection*

Others:

- **Half-annual** energy prices (based on a EC Directive):
  - Households and industry prices for gas and electricity
  - purely Eurostat

# Data collection, processing and evaluation

## Evaluation and output

- Data entry into central database
  - Reception mostly per email
  - Loading and checking of data highly optimised
- Evaluation
  - Inconsistencies or omissions, questions to data providers, ...
  - Overlapping/interacting data of the various questionnaires
  - Highly interactive team

# Processing and evaluation

## Evaluation and output

- Databases (SIRENE, NEW CRONOS)
  - 2850 series per Member State
  - starting from 1960
- Publications (electronic or on hardcopy):
  - Energy Balance Sheets (annual)
  - Energy Yearly Statistics (annual)
  - Monthly Bulletin (monthly)
  - Energy Prices (half-yearly)
  - Statistics in Focus (20 per year): small topical editions
  - Annual Energy Statistics Manual: with the IEA

# Processing and evaluation

## Users

- The Commission
- Other Institutions, EIB, EEA
- National Administrations
- Energy Industry, Plant Operators, Professional Associations
- Consultants, Universities, Citizens

# New policy of data dissemination

Last year's crisis in Eurostat

- Problems originated from excessive externalisation, particularly for data dissemination
- *The quality of the data was never questioned*

## Completely new dissemination policy:

- New policy of free dissemination (*New Cronos access to public*)
- Dissemination primarily in electronic format (Internet)
- Free internet dissemination planned to be operational in October 2004



# Available Energy Indicators

- Coverage : NewCronos/Sirene
  - 25 member states, Rumania, Bulgaria
- Structural indicators: annual data of strategic importance
  - Market share of the largest generator in the electricity market
  - Energy intensity of the economy
  - Share of renewable energy
- Euro-indicators: monthly key economic indicators
  - Supplies/imports, key energy prices, electricity consumption

# ISED

- Agreement to be reached for the ISED list
- Analysis on availability of data in Eurostat system:
  - Economic indicators (ECO $x$ ):
    - » In general: very well covered
    - » Good: quality, timeliness, completeness
  - Environmental indicators (ENV $x$ ):
    - » GHG and acidifying emissions: covered
    - » Some of the proposed indicators are hard-to-get values
    - » Further evaluation to be planned
  - Social indicators (SOC $x$ ):
    - » Energy data do not (yet) consider social issues
    - » Household surveys, health statistics: many data available, further evaluation to be planned