MEDSTAT III Energy Sector

ESCWA EGM on Energy Statistics and balance

Energy Efficiency Indicators in MEDSTAT MPCs

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Content

- Methodology of work
- List of Energy Efficiency Indicators
Methodology of work

Before Granada workshop

- General objectives
  - Approach and reflection about the energy efficiency indicators
  - To improve the skills in interpreting, comparing, selecting, calculating and analysing
  - To obtain feedbacks of potential users
- Specific objective
  - Selection 10-20 indicators
    - Reference: European experience
    - Target area: the Mediterranean countries
  - Calculation & analysis

Regional Programme of Statistics in the Mediterranean Region MEDSTAT Phase III
This project is funded by the European Union
Methodology of work
Before Granada workshop

Criteria of selection
- Harmonisation
- Relevance
- Availability of data and information
Methodology of work
Before Granada workshop

- Harmonisation
  - List of indicators
  - Definitions
  - Interpretations
  - Unit of measurement

Analysis usage & definition of indicators (212) through:
- Odyssee project (compare EE progress in Europe)
- National report (SP, FR, IT, GR, NO, GR)
Methodology of work
Before Granada workshop

Relevance

- Application level – vertical scale:
  - Mediterranean, National, Companies
- Thematic dimension
  - Physical, Economic & Environmental
- Type of efficiency
  - Technology, Usage, etc
Methodology of work
Before Granada workshop

Availability

- Data & related information
- Classification according to:
  - Definition,
  - Precision
  - Feasibility to calculate
Submission to MPCs

- Primary list of 37 indicators
- Classification according to:
  - Macro-level,
  - Energy transformation
  - Industry sector
  - Residential sector
  - Tertiary sector
  - Transport sector
- Three thematic working groups for the selection of IEE relevant for the MPCs.
Methodology of work
During Granada workshop

List of agreed IEE

- Macro-Level
  - Ratio of Final Energy Consumption (FEC) to Gross Inland Consumption (CIB)
  - Ratio of Country's energy bill to Gross Domestic Product (GDP)
  - Ratio of Energy sector GHG emissions (eqCO2) to Gross Inland Consumption (CIB)
Methodology of work
During Granada workshop

- List of agreed IEE
  - Energy transformation
    - Ratio of energy production to installed capacity
    - Apparent efficiency of energy transformations sector
    - Power generation efficiency - fossil fuel (specific consumption of the PP)
    - Power generation efficiency - all generation sector
    - Efficiency of electricity transmission & distribution
    - Ratio of Electricity sector GHG emissions (eqCO2) to Electricity production
## Methodology of work

**During Granada workshop**

### List of agreed IEE

- **Industry sector**
  - Specific branch energy consumption/ unit of production (cement, steel, paper, phosphate)
  - Energy expenditure / Value added of the industry sector
  - Energy intensity
  - Industry sector GHG emissions (eqCO2) / (GDP, & Unit of production, Consumed Toe)
Methodology of work
During Granada workshop

- List of agreed IEE
  - Residential sector
    - Unit consumption of energy per dwelling
    - Unit consumption of electricity per dwelling
    - Ratio of residential sector GHG emissions (eqCO2) to the sector consumption
    - Share of energy in household expenditure (excluding transport)
    - Diffusion Indicator (solar water heaters)
Methodology of work
During Granada workshop

List of agreed IEE

- Tertiary sector
  - Final energy intensity of the tertiary sector
  - Unit consumption by night guest for hotels (breakdown by categories)
  - Ratio of residential sector GHG emissions (eqCO2) to tertiary sector consumption
  - Diffusion Indicator (solar water heaters)
Methodology of work
During Granada workshop

- List of agreed IEE
  - Tertiary sector
    - Final energy intensity
    - Share of energy in household expenditure (transport only)
    - Average unit consumption of cars per vehicle / vehicle*km
    - Ratio of residential sector GHG emissions (eqCO2) to transport sector consumption
    - Ratio of total transportation consumption per final energy consumption