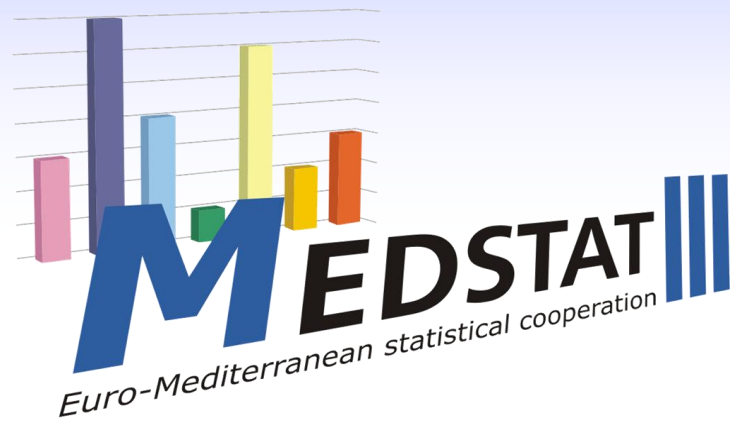


ENERGY EFFICIENCY INDICATORS WORKSHOP



**The many challenges
associated with
collecting the right
information for
progress tracking**

Regional perspective

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This project is funded by the European Union and implemented by MEDSTAT III Consortium

6 and 7 June, 2012
IEA Headquarters, Paris

Content



- Ensuring to choose the right indicators to monitor progress
- The challenges with tracking change over time
- What indicators for the MEDSTAT region ?
 - Methodology of work
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Ensuring to choose the right indicators to monitor progress

■ Purpose of Energy Efficiency Indicators

- To minimize the quantity of used energy products
- To maximize the income
- To minimize the air pollution

The challenges with tracking change over time

some principals according to UN rules for indicators

- Indicators are most revealing and useful when the same measure is tracked over time
- Successive data collection periods allow you to identify those aspects of “energy efficiency” that are improving or deteriorating
- Each indicator must be tracked in this way, providing a dynamic measure of change between data collection periods
- Aggregated indicators and dimension levels, providing a description of wider trends for the regional comparison

What indicators for the MEDSTAT region? Methodology of work



■ General objectives

- To share the 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 which could benefit future studies

■ Specific objective

- Selection 10-20 indicators
- Reference: European experience
- Target area: the Mediterranean countries
- Calculation & analysis

General aspects for the compilation of energy efficiency indicators

■ Criteria of selection

- Harmonisation
- Relevance
- Availability of data and information

General aspects for the compilation of energy efficiency indicators

■ 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, DE,NO,GR)

General aspects for the compilation of energy efficiency indicators

■ Relevance

- Observation level:
 - Global or regional level: Mediterranean,
 - National or sub-national (climatic zone, administrative boundaries, etc)
 - Local level : Companies
- Thematic dimension
 - Physical
 - Economic
 - Environmental
- Type of efficiency
 - Technology,
 - Usage, etc

General aspects for the compilation of energy efficiency indicators

- **Availability of data & metadata**
 - Data & related information: Energy balances, Energy account, Final Energy Consumption surveys, Green House Gas Emissions inventory for energy sector
 - Classification according to: Definition, Precision Feasibility to calculate

General aspects for the compilation of energy efficiency indicators

■ 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.

Selected indicators

■ 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)

Selected indicators

- **Energy transformation level**
 - 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

Selected indicators

■ Industry sector level

- 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)

Selected indicators

- **Residential sector level**
 - 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)

Selected indicators

■ Tertiary level

- 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)

Selected indicators

- **Transport sector level**
 - 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

Conclusion

■ Next steps

- Results of the study performed by Plan Bleu – RCREEE & EU-MED-ENEC II
- Present the results of the Transport survey for MA
- Pursue the data collection & calculation of energy statistics & indicators and related metadata
 - Within MEDSTAT III programme
 - then EMESWG – Euro-Mediterranean Energy Statistics Working Group