“Monitoring of energy efficiency in the EU” ODYSSEE-MURE DEA, 17th June 2015, Copenhagen

ODYSSE-MURE
Main features and implementation status

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Context


2. More EE policies at world level but EE is slowing down (WEC/ADEME study 2013)

3. New climate energy strategy for the EU (2030-2050).

4. Implementation of the EED and the new monitoring system (annual and triannual).

5. Third NEEAPs published and partly analysed.
Energy efficiency policies implementation is increasing overtime including emerging countries. Number of measures is steadily increasing these last years.

**Energy efficiency policies: Frequency of implementation worldwide**

![Bar chart showing energy efficiency policies implementation frequency for different categories between 2009 and 2012.](chart)

Source: WEC survey 2012/13
Energy productivity keeps on progressing

Primary intensity is decreasing in almost all countries: 1.3%/yr at G20 level since 1990. China and UK registered the most rapid reduction.

Since 2000, the lower pace of reduction is mainly explained by a much higher economic growth in countries with a high energy intensity.
Standards for new vehicle are spreading

There is a rapid decrease of the specific consumption of new cars in most countries due to policy measures, mainly efficiency or emission standards for new cars, as well as other tax incentives. And this trend will continue in the next decade given the existing standards.

Specific consumption of new cars

Source: ODYSSEE, EU Commission, IEA; targets from ICCT global vehicle standards 2014
Key features of the 2013-2015 ODYSSEE-MURE project

- EIE project 2012 (support from 75%),
- 32 partners with 2 new countries (Lithuania and Luxembourg)
- 1.9 Meuros
- 30 months duration, starting date 25th April 2013
- Evaluation of the EIE priorities
- 5 technical coordination meetings, 4 general workshops (Sweden-STEM, UK DECC-Ricardo, Croatia (HEIP), Netherlands (NL Agency/ECN), a regional meeting (Brussels 2015)

- New methodological developments
- A single website: http://www.odyssee-mure.eu/
- New communication tools (12 facilities)
- Special effort on communication at national level
- Free access of ODYSSEE data base for non profit organisations
- Free access of MURE data base
The four main objectives of ODYSSEE-MURE

1. Evaluate and compare energy efficiency progress by sector for EU countries and Norway and for the EU as a whole, and relate this progress to the observed trends in consumption.

2. Contribute to the evaluation of national energy efficiency policy measures in the EU countries and analysing the dynamics of implementation over the 3 NEAAPs.

3. Provide a monitoring approach for EU and national targets on energy efficiency that helps to understand developments to complement and support official monitoring systems.

4. Develop support “facilities” to help ODYSSEE MURE users analyse and make the most from the two databases and to improve communication by providing results in an interactive and attractive way.
The ODYSSEE-MURE project

- The project relies on two data bases, covering the EU, the individual 28 Member states and Norway (www.odyssee-mure.eu) and organised by sector (industry, buildings and transport)
  - The ODYSSEE data base on energy efficiency and CO2 indicators (about 180 indicators) with consumption data by sector and end-use and their drivers (about 600 main data series)
  - The MURE database on all policy measures implemented by sector, and their impact evaluation whenever available.

- The data bases are updated by national teams, with a centralised management (Enerdata for ODYSSE and Fraunhofer ISI/ISIS for MURE), that is in charge of the quality control and assistance to the countries.

- Period covered: 1990-2012/2013 for ODYSSEE, 1990-2014 for MURE
The ODYSSEE-MURE network: around 70 experts
Main deliverables of ODYSSEE MURE 2013-15


- A synthesis brochure “Facts and trends on EU energy efficiency” (indicators and policies together)

- 3 brochures describing energy efficiency policies and measures (industry, transport, buildings)

- Sectoral profiles: set of 175 slides presenting energy efficiency trends by sector (20 on macro indicators, 40 on transport, 30 on industry and 85 on buildings and appliances) ➔ updated regularly.

- Country profiles: 2 pages on main energy efficiency trends and policies by country in English and national language ➔ on going updating

- Country reports: detailed national reports on energy efficiency and policies (28 countries) ➔ mid 2015
The users of ODYSSEE data and indicators

**DG-ENER**: explicit reference in the Energy Service Directive to the ODEX indicators; EMOS database (Energy Market Observatory) includes about 20 indicators from ODYSSEE.

**DG-ENV**: defined indicators for GHG monitoring on the basis of ODYSSEE indicators for its own indicators factsheets;

**EEA** (European Environmental Agency): use of ODYSSEE indicators in the annual TERM report; in the fourth pan-European environment assessment report in the 'Environment for Europe' process in the framework of UNECE.

**IEA**: formal exchange of data, inclusion of ODYSSEE data in the IEA questionnaire on energy efficiency

**WEC, IPEEC, ISO, WB** etc.
Evaluation of energy savings (EU)

- About 160 Mtoe cumulated energy savings since 2000 (i.e. 15% of final energy consumption).
- Around 40% of total savings in households, 32% for industry, 28% for transport in 2012
Example of ODYSSEE indicators: decomposition of transport energy consumption variation (2000-2012)

Around 40% of the reduction in transport consumption since 2007 (by more than 30 Mtoe) is due to the economic recession, with a decrease in freight traffic and the stability of passenger traffic, and almost 60% to energy savings, mostly for passenger cars.
NEW measures and NEEAP measures

Total: 2,244 measures, of which 10% very recent (from 2012)

As of 22/9/2014

- household
- transport
- tertiary
- industry
- cross-cutting

Legend:
- All measures since 2007
- NEEAP measures since 2007
- All measures since 2012
The five ODYSSEE facilities on indicators

**ODYSSEE-MURE**

**Overview**  **Data Tools**  **Publications**  **News**  **Contact**

**Odyssee**

The ODYSSEE indicators are accessible under different data tools: the full database, the key indicators facility, as well as five specific data facilities that focus on specific issues and provide some interpretation. Market diffusion, decomposition, benchmarking, energy saving and indicator scoreboard. The access to the database is restricted, whereas all other data tools are in public access.
MURE (Mesures d'Utilisation Rationnelle de l'Energie) provides information on energy efficiency policies and measures that have been carried out in the Member States of the European Union. The information is accessible by query in the database. The distribution of measure by type can be visualized through radar graph. Finally, several facilities enable specific queries.

The "Policies by Topic" facility enables to query all measures in specific topic areas or end-use.
Work programme 2015

End of project
(Sept 30)

Final report preparation
Cost statement: October 15

Newsletter
Sectoral profile
National reports
National seminars, webinars

Country profile (and updates)
Report on transport
Report on industry
Synthesis brochure
ODYSSEE tools completion
ODYSSEE third update

Workshop
MURE third update
TC
Regional Workshop

May
M26

June
M27

July
M28

August
M29

Sept
M30

October
November

17
The TD methods or indicators-based methodology for evaluating energy efficiency: a classification of EEI

<table>
<thead>
<tr>
<th>Type</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Energy intensities</td>
<td>by sector &amp; sub sector</td>
</tr>
<tr>
<td>2. Adjusted intensities</td>
<td>final and industry</td>
</tr>
<tr>
<td>3. Specific energy consumption</td>
<td>by sub sector &amp; end-use</td>
</tr>
<tr>
<td>4. Benchmarked specific energy consumption</td>
<td>steel, cement, paper, heating, cooling</td>
</tr>
<tr>
<td>5. Energy efficiency indices</td>
<td>final and by sector</td>
</tr>
<tr>
<td>6. Energy savings</td>
<td>final, by sector and sub sectors</td>
</tr>
<tr>
<td>7. Indicators of diffusion</td>
<td>by sector</td>
</tr>
<tr>
<td>8. CO₂ intensities and specific emissions</td>
<td>by sector &amp; sub sector</td>
</tr>
<tr>
<td>9. Financial/strategic indicators</td>
<td>Macro level</td>
</tr>
<tr>
<td>10. Indicators for NEEAP</td>
<td>By measure type</td>
</tr>
</tbody>
</table>
Conclusion

- The bulk of NEEAPS 3 Measures has been included in the MURE database with a special access for user;
- ODYSSEE-MURE new facilities have been presented to DG ENEN and CA EED;
- The National Teams will continue disseminate results in their country all along 2015 (already done in some countries);
- Which role ODYSSEE-MURE can play for the new EU energy climate strategy monitoring?
- ODYSSEE-MURE should continue to be the European reference on the harmonised system of energy efficiency monitoring
- The ODYSSEE methodology is spread in Latin America (CEPAL/ECLAC BIEE project with around 25 countries concerned), in North Africa (Medener project), in Thailand and Serbia.
Thank you for your attention

For more information

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