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ODYSSEE-MURE
A European best practice in gathering end-use data for energy efficiency monitoring

ADEME
French Environment & Energy Management Agency

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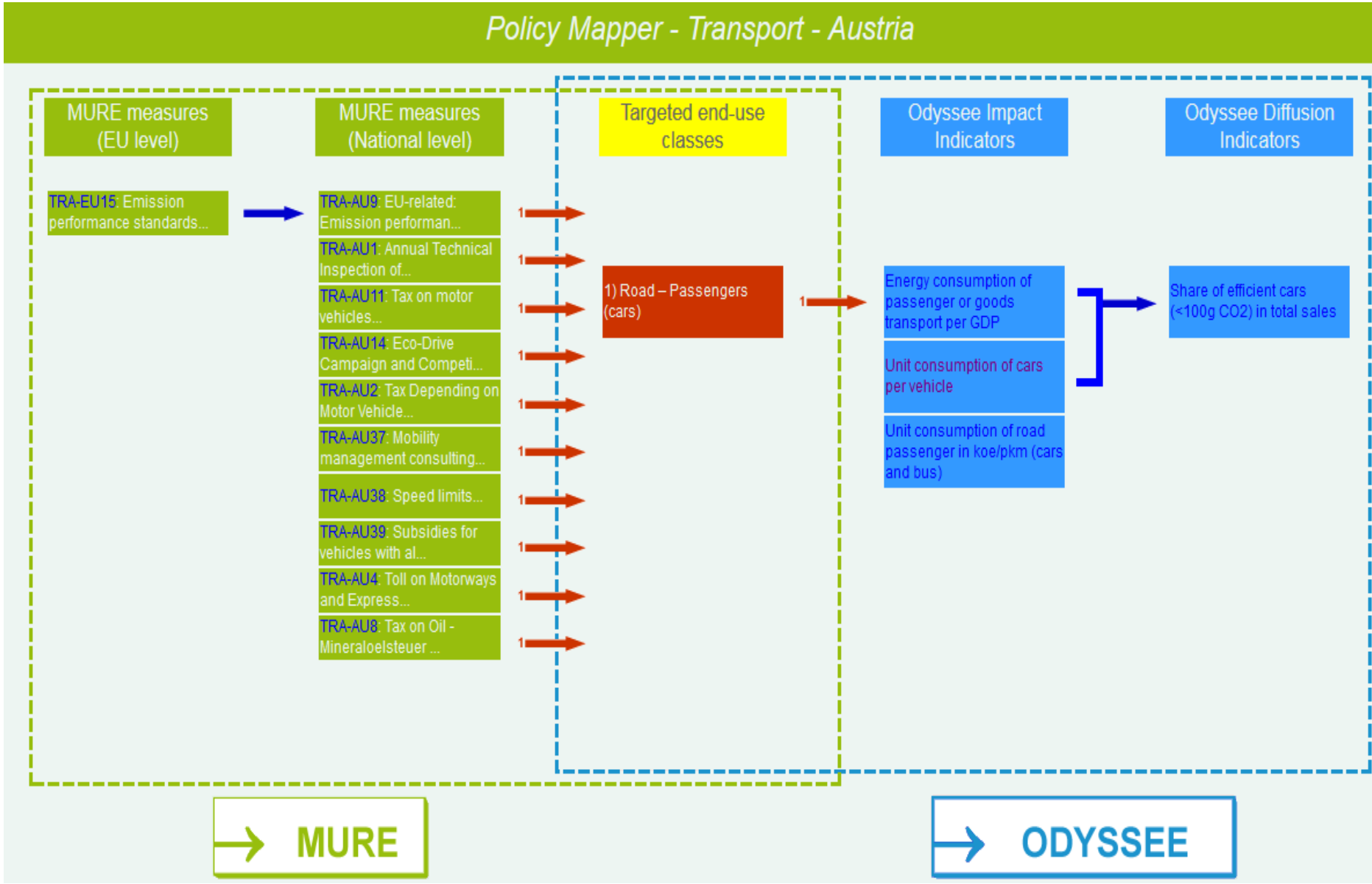
Paris, 13-14th december 2016

The relationship with indicators and policies
Case se of Austria for cars from the ODYSSEE-MURE facilities



Link between EE indicators and EEP&Ms

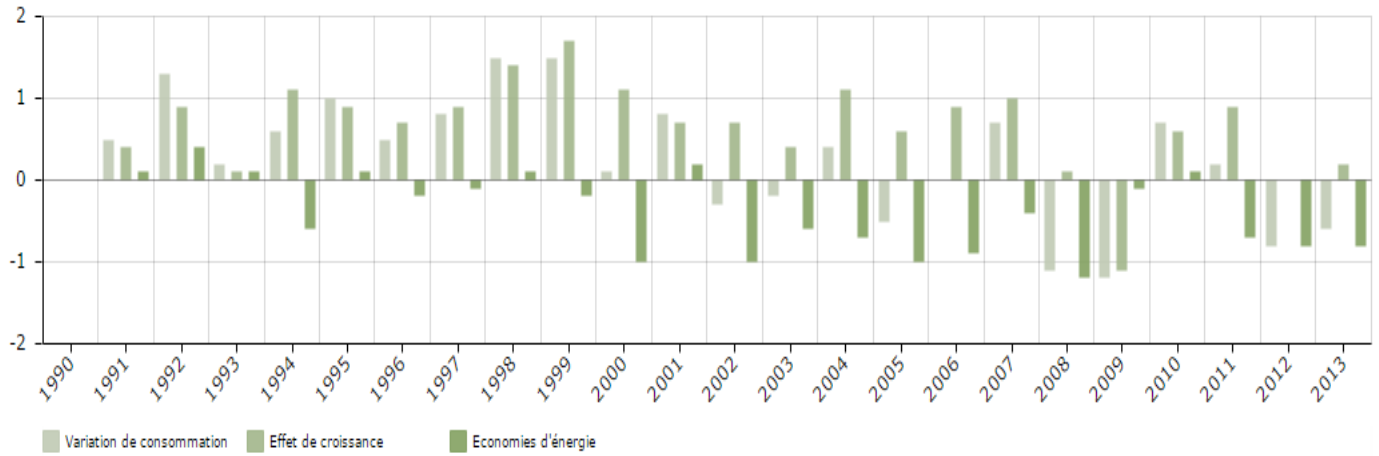
- Transport
- **Résidentiel**
  - Consommation par logement
  - Economies d'énergie
  - Performance énergétique
- Tertiaire
- Industrie

Cliquer sur les info-bulles pour visualiser la description de la mesure.

Methodologie

Evolution annuelle des économies d'énergie des transports (Mtep)

Source : Calcul d'après SOeS



1994: Prime à la casse

1995: Renforcement contrôle technique

1995: Prime à la casse Juppé

2000: Crédit d'impôt

2003: Renforcement des contrôles de vitesse

2006: Label

2008: Superbonus Fillon

2007: Bonus-Malus

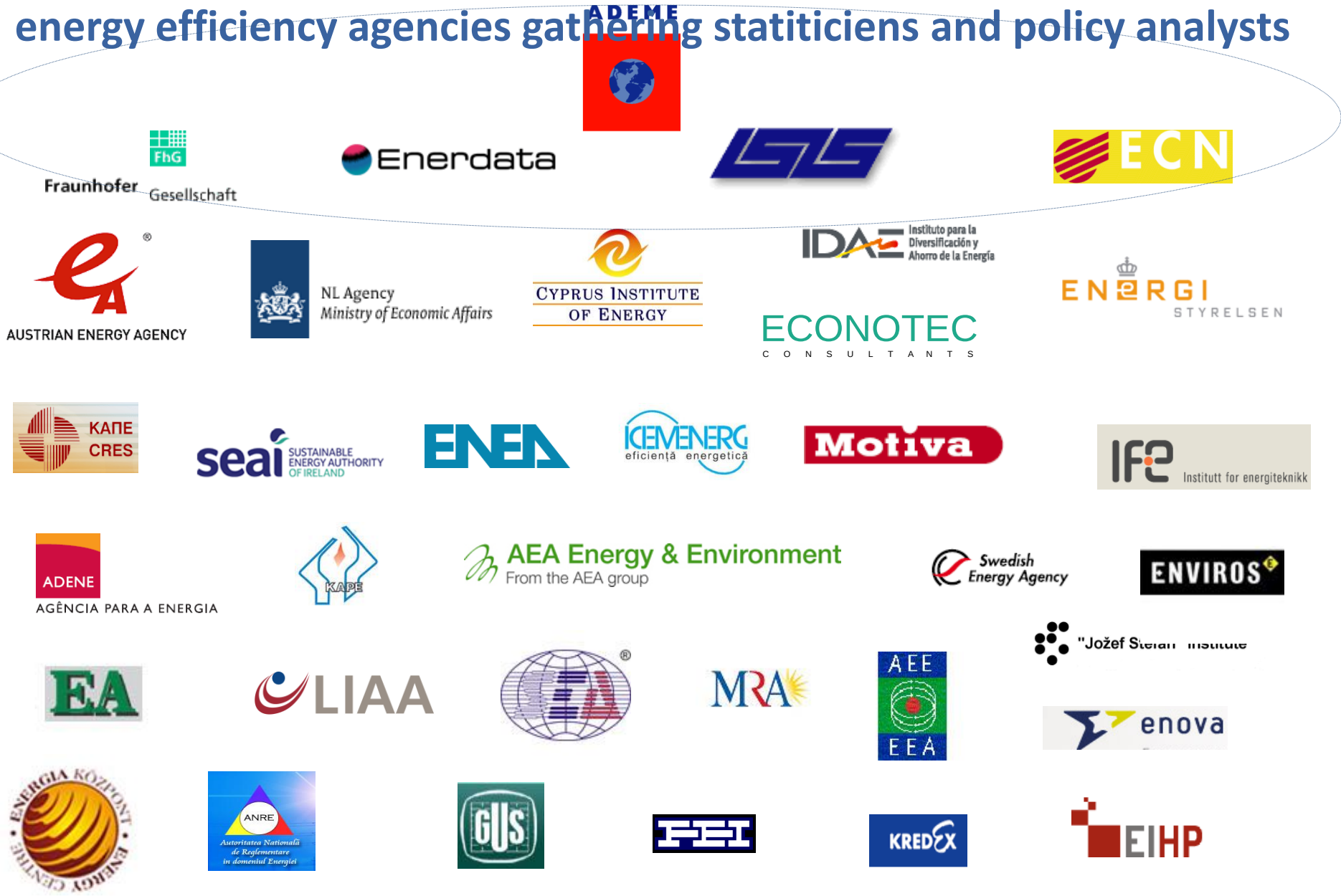
ODYSSEE-MURE in brief

ODYSSEE-MURE, a decision support tool for energy efficiency policy evaluation

Enhancing the capacity of public authorities to plan and implement sustainable energy P&Ms

- 22 years of project implementation supported by EU and energy efficiency agencies
- 32 partners from EU28, Norway, Serbia and Swizerland mainly policy imlementers
- 1,7 Meuros (1 Meuros for NT), 30 Months starting February 2016
- Link between EE Indicators and EE policies : ODYSSEE 200 comparable EE indicators ; MURE 2500 EE Policies
- 2 updating per year (light and definitive)
- Trainings to 3000 persons
- New indicators, multi benefits and Social impact of P&Ms assessments (incl energy poverty, energy cost vs prices)
- Increase the involvement of national teams (Interactive platform, forum)

The ODYSSEE-MURE network : more than 150 experts mainly from energy efficiency agencies gathering statiticiens and policy analysts



The users of ODYSSEE data and indicators

•**DG-ENEN**: 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

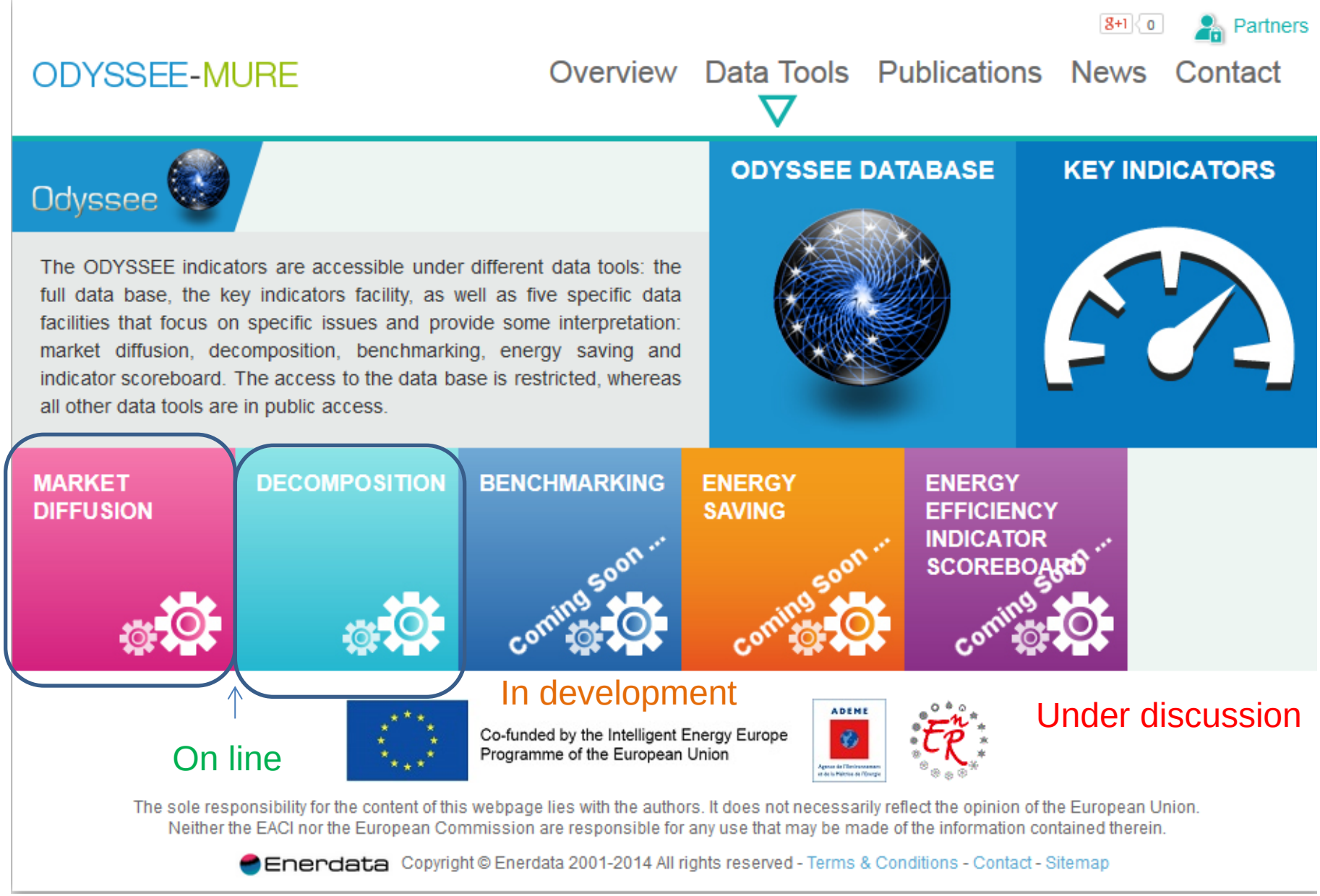
WEC, IPEEC, CENCENELEC, ISO, WB etc.

Main deliverables of ODYSSEE MURE

All on the website http://www.odyssee-mure.eu

- ODYSSEE and MURE databases and 12 data facilities
- A printed **synthesis brochure** “Facts and trends on EU energy efficiency”
- **3 brochures** describing energy efficiency policies and measures (industry, transport, buildings)
- **Sectoral profiles** : set of 175 slides presenting energy efficiency trends by sector.
- **Country profiles** : 2 pages on main energy efficiency trends and policies by country in English and national language
- **Country reports** : detailed national reports on energy efficiency and policies by country

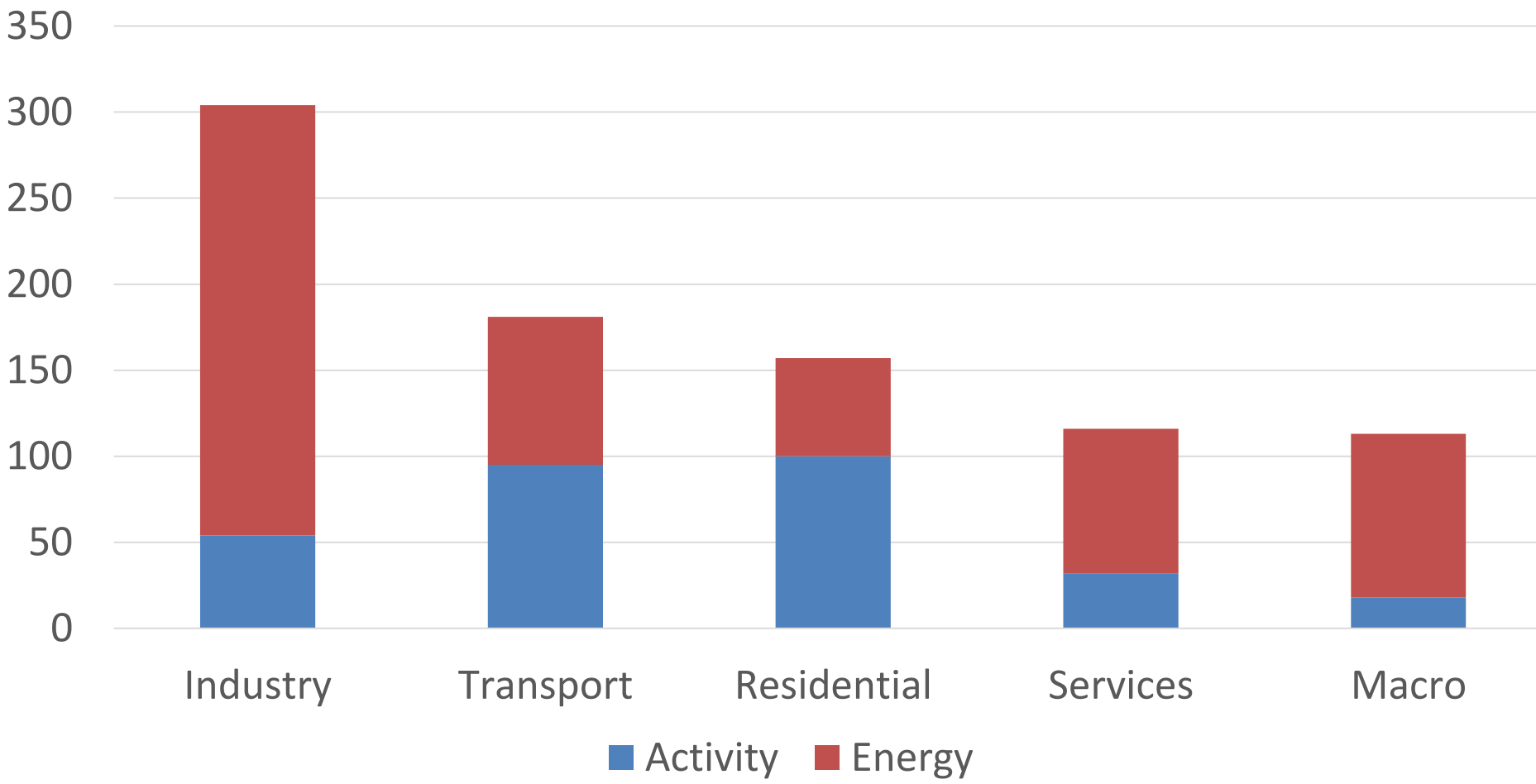
We should ease the users to analyse the end-use data and Metrics The five ODYSSEE facilities on indicators



Energy efficiency and CO2 monitoring require aggregated and detailed EE indicators based on "beyond energy balance end-uses data"

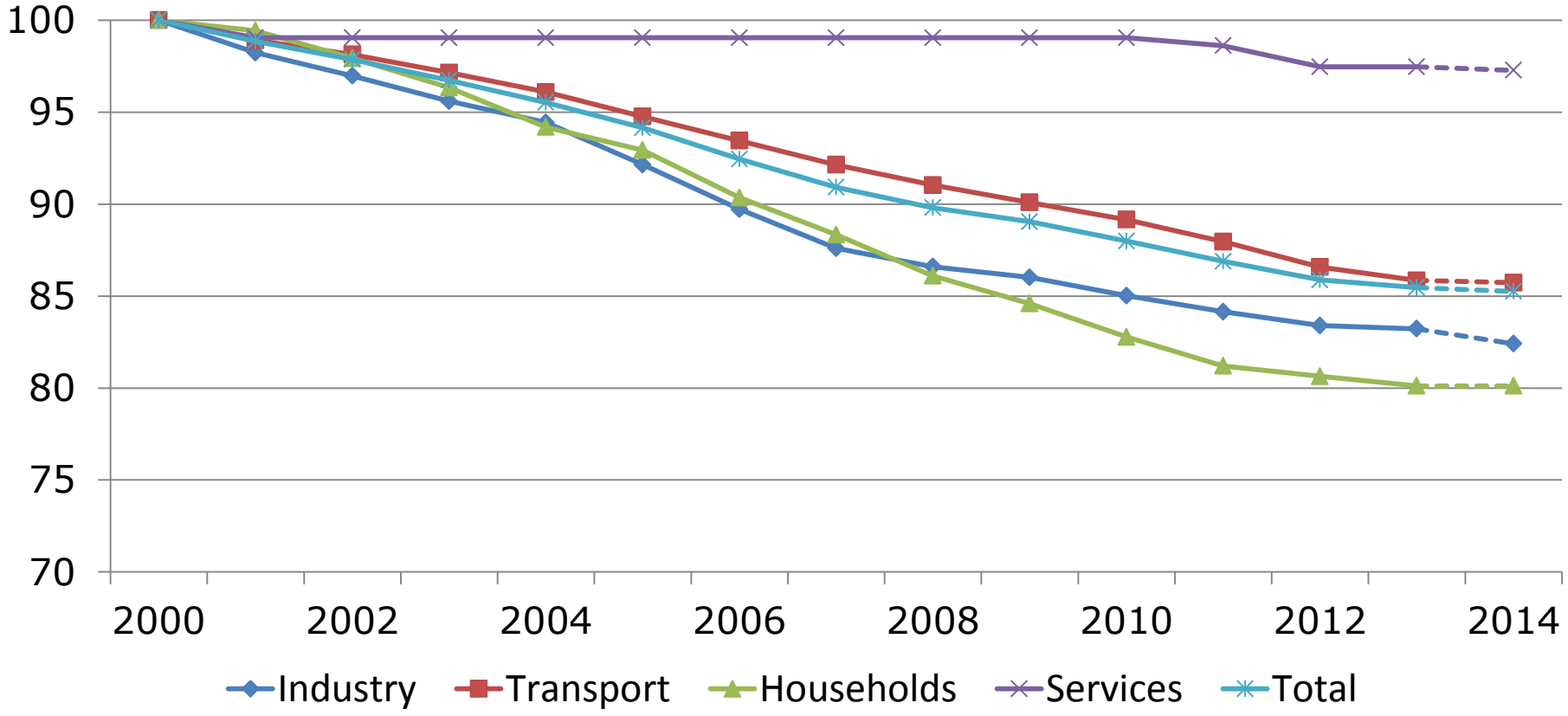
Type	Level
1. Energy intensities	by sector & sub sector
2. Adjusted intensities	final and industry
3. Specific energy consumption	by sub sector & end-use
4. Benchmarked SEConsumption	steel, cement, paper, heating
5. Energy efficiency indices	final and by sector
6. Energy savings	final, by sector and sub sectors
7. Indicators of diffusion	by sector
8. CO_2 intensities and specific emissions	by sector & sub sector
9. Indicators of Multibenefits	By type of multibenefits

ODYSSEE database: Aroud 900 datasets by country, of which 65% energy related, 35% on activity



- 15% energy efficiency improvement between 2000 and 2014 (or 1.1%/year)
- Net slow down, mainly in industry, since the economic crisis: -0.9%/year since 2007, compared to around 2%/year between 2000 and 2007;
- Regular and larger gains for households (1.6%/year), followed by transport (1.1%/year). Few measurable progress in tertiary.

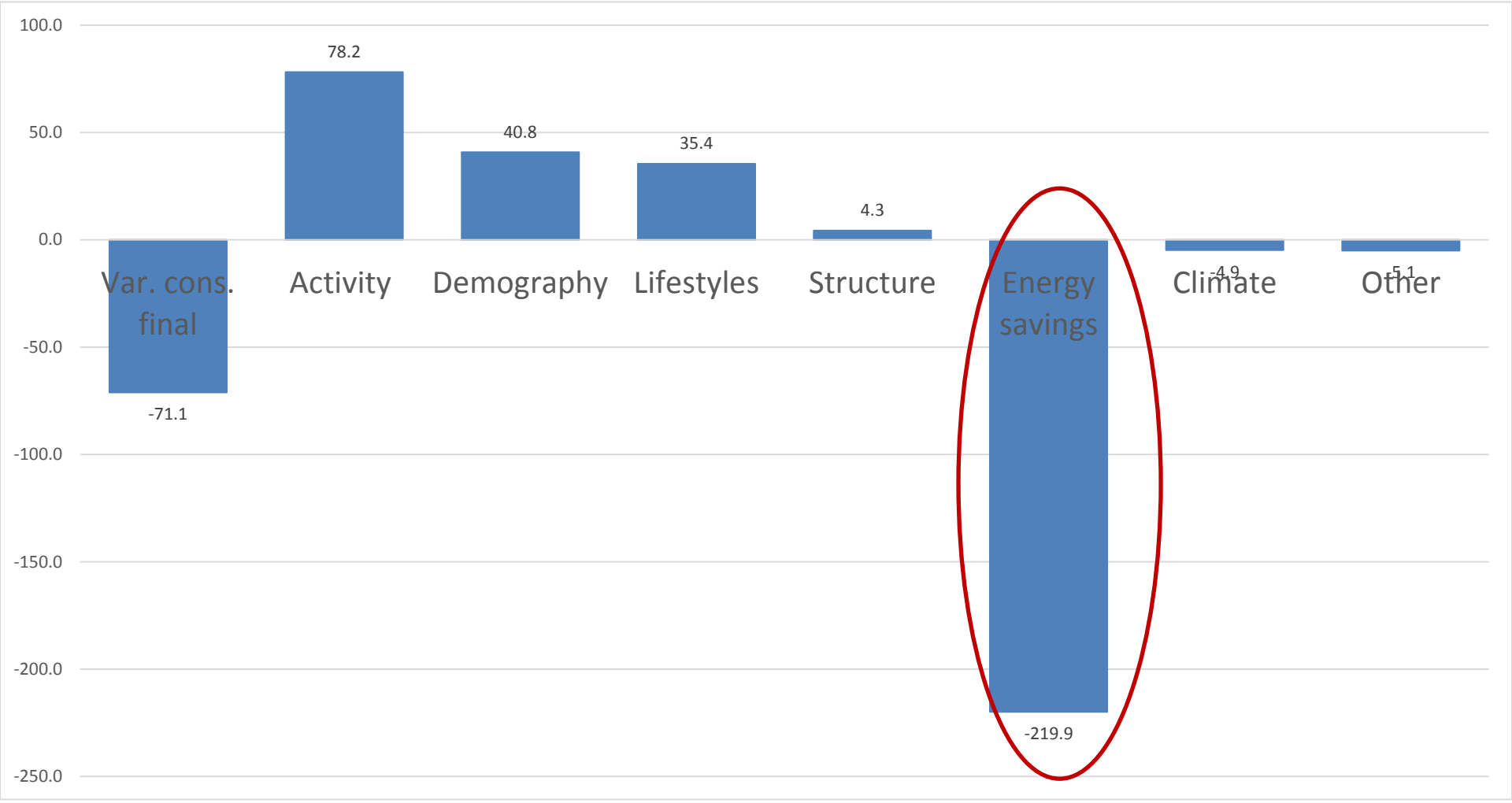
Energy efficiency index (ODEX) for final consumers (EU)



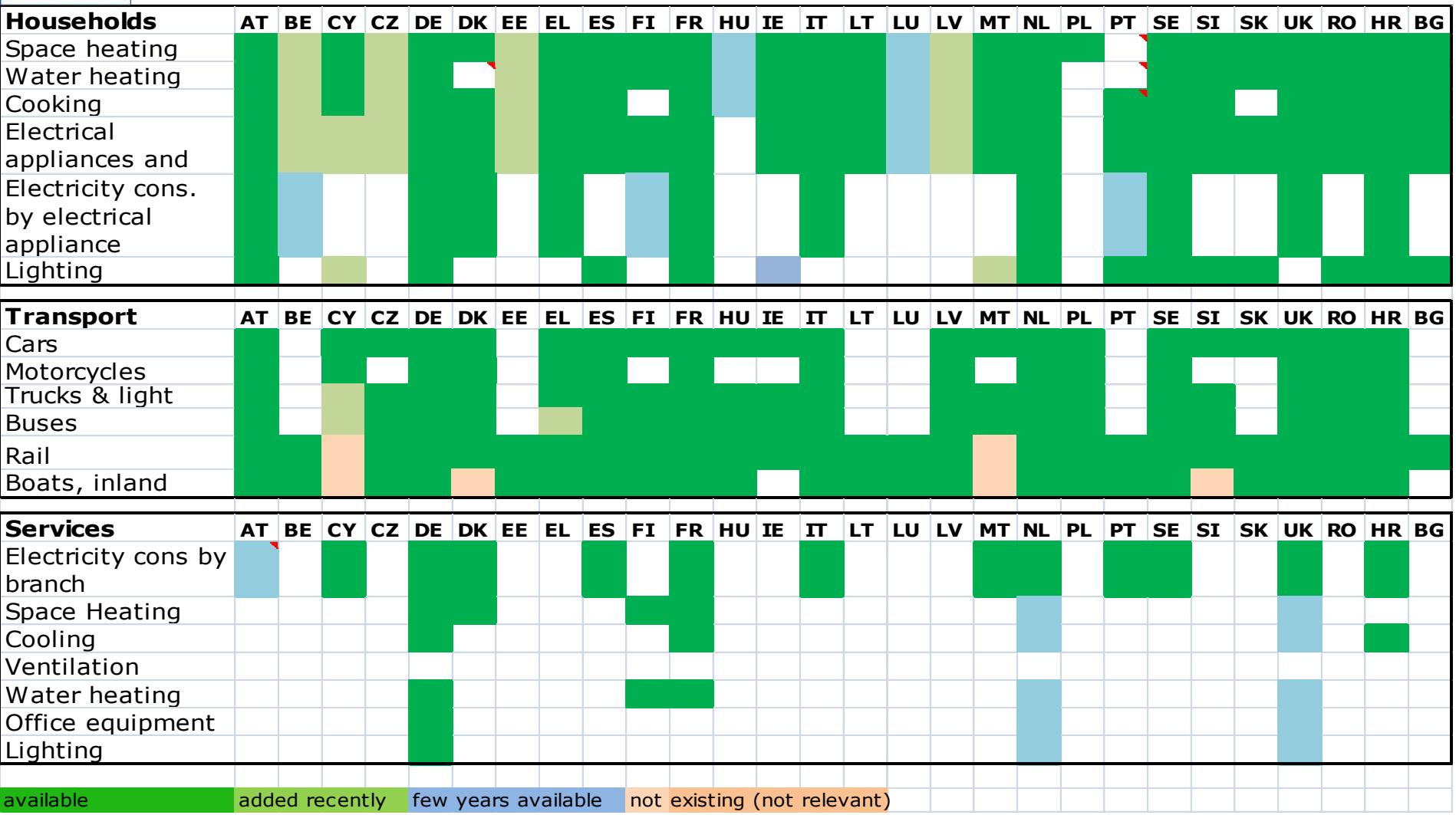
Technical ODEX; calculated as a 3 years moving average to avoid short term fluctuations.
2014 based on estimates from short term indicators.

ODYSSEE in the on-going DG-ENER Impact Assessement Report

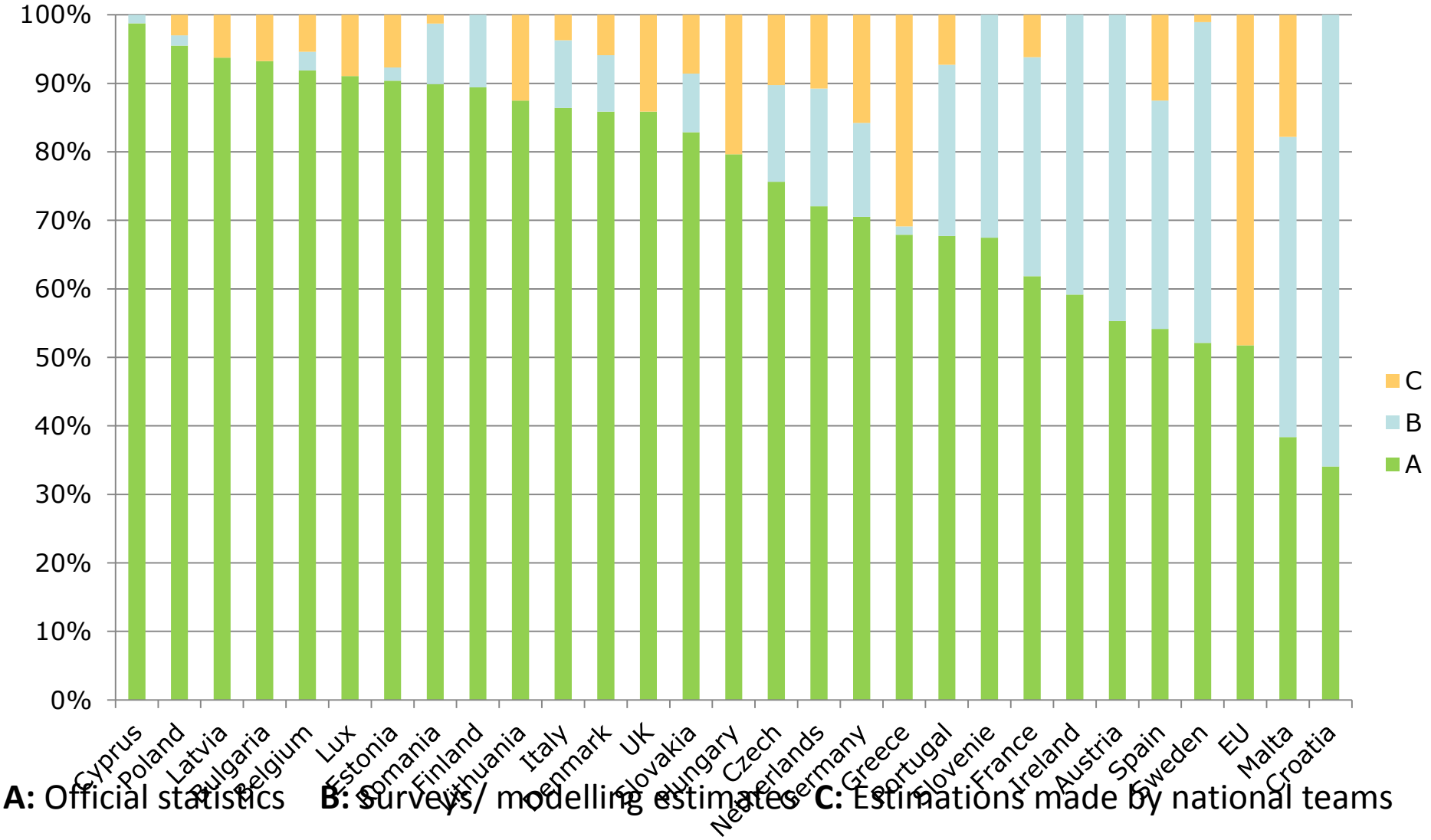
Decomposition of the Final energy consumption variation (EU29 2000-2014, Mtoe) Source ODYSSEE



European countries have end-use data but still with important data gap



Distribution of end-uses data in Europe by origin of sources
Half of countries with over 80% official statistics



A: Official statistics **B:** Surveys/ modelling estimates **C:** Estimations made by national teams

*Results based on a selection of 100 datasets (December 2015)

Next steps for ODYSSEE

1. First series of the 10 webinars with Leonardo University based on 20 policy briefs : Autumn 2016
2. First serie of ODYSSEE results for 2015: winter 2016
3. Second training for European public authorities : Malta June 2017
4. Second regional meeting : Malta June 2017 under the hosting of SEWCU
5. Second serie of ODYSSEE results for 2016: winter 2017
6. Third training for European public authorities Portugal Autumn 2017 under the hosting of ADENE
7. Final regional meeting : Vienna April 2018 under the hosting of the AEA
8. Third serie of ODYSSEE results for 2017: october 2018

Qualitative Criteria to increase the end-use data avaibility for EE monitoring

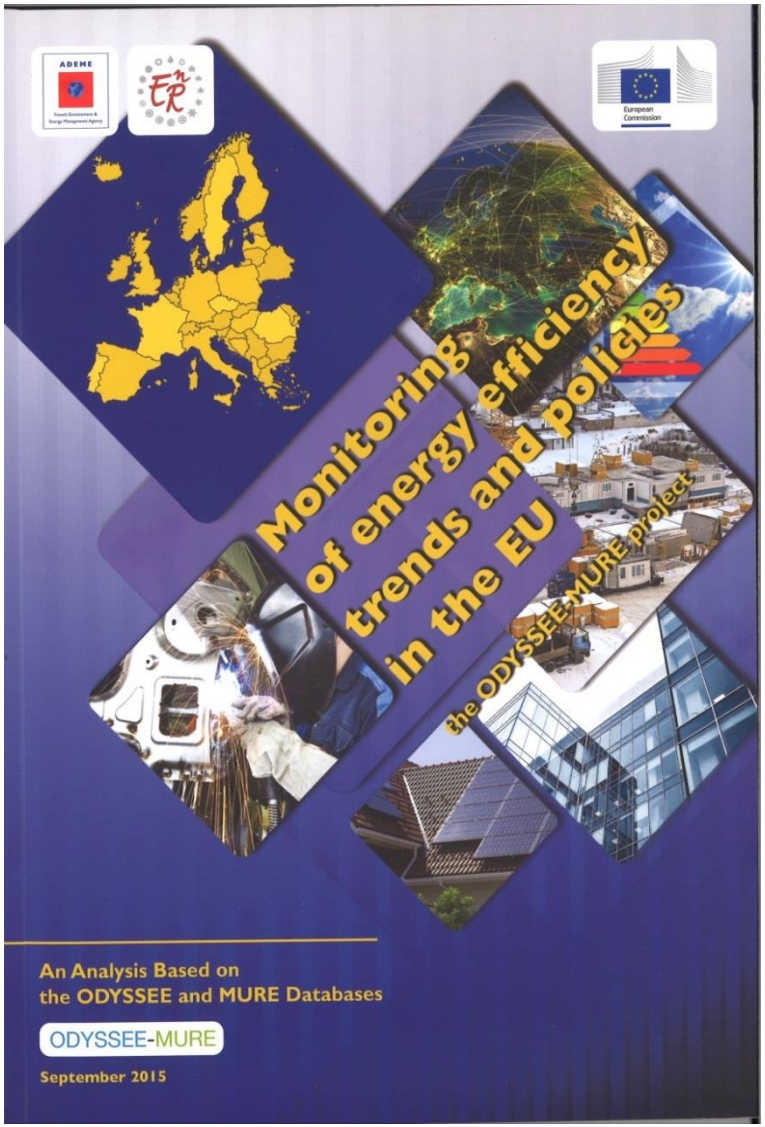
1. The level of commitment and political voluntarism (ex: EEDirective in the EU, Mexico, Brazil, Algeria, etc.)
2. The institutional framework
3. The importance to associate stakeholders to the monitoring (Government, agencies, statisticians, analysts)
4. The importance of methodology sharing
5. The acceptance of non official data
6. Cost effectiveness of the data collection
7. The need to maintain an EE data in a data base
8. The willingness to disseminate the results

Technical Conclusions: Yes we have but should be improved

1. European countries have **20 years of experience in gathering comparable end-use data** and providing EE indicators.
2. However, many countries face the **same data collection issues** (breakdown by vehicle type, building by end uses and electricity by appliances etc;)
3. Currently, energy efficiency monitoring cannot be properly done only through official data. We have to **go beyond the national balance** with end-use surveys
4. Good practices in end-use data collection **exists everywhere**
5. All countries practices can meet the average standard of end-use data availability through new surveys
6. End-use data collection is dynamic (not always in a positive way), and improve step by step. New issues could lead to new surveys.
7. End-use data gathers many stakeholders which can be potential sponsors.

Strategic conclusions : Political commitment should increase

1. The increasing level of energy efficiency P&M implementation will need more end-uses data for design and evaluation;
2. More transparency and reporting at national level (EE and climate Action plan) and international levels (COP 21 and INDC's, G20?) will be required;
3. The willingness of governments are needed to overcome the reluctance to provide data and to participate to benchmark;
4. Energy market liberalisation may limit the data collection flux from utilities. This gives an opportunity and an institutional and social obligation to governments to fulfill the data gap.
5. The cost of data collection is absolutely negligible compared to the energy supply and energy efficiency markets.
6. Countries may prefer to develop national data collection system. However joint efforts on end-use data collection have a clearly an important value as it is demonstrated in Europe (Eurostat directive).



Thank you for your attention

For more information

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www.odyssee-mure.eu

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