Strengthening sectoral indicators: priorities and opportunities

Comisión Nacional para el Uso Eficiente de la Energía

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What implies working with data and indicators of Energy Efficiency

- Detailed consultation about national sources in a timeline.

- Research of different sources of information
  - Socio-Economic
  - Activity
  - Energy

- Analysis of the information for each sector
  - Coherence in time
  - Disruptions in timeline, level of information, boundaries, context…
  - Processes in each sector and branches

Information sources

- Sources of information are increasing but:
  - Level of dissagregation → not harmonized
  - Representativeness → National/Regional/Local
  - Different numbers in oficial statistics → Focus of the Report

- New statistics
  - Inter-institutional coordination is needed
  - Energy information is needed but also activity information
  - Big amount of time to elaborate and implement Surveys
  - Representativeness → National/Regional/Local
  - Time to have the results
  - Frequency

Analysis of information

- In each sector we have to understand and consider:
  - Coherence in time → boundaries, relation between variables
  - Disruptions in timeline → level of information, boundaries…
  - Productive processes and socio-economic context

Energy consumption

- Not the same level of disaggregation as production/VA
- Biomass for residential sector → Different tendency ENIGH-BNE

Better coordination → Harmonized information → Better statistics

Barriers of data collected by sector (1)

1) Services
   - Disaggregation by final use (heating space, cooling and lighting).
     - By fuel type
   - Construction area (m^2)

2) Industry
   - Energy consumption hasn't the same disaggregation as the value added for some industries.
     - Non metallic minerals
     - Sugar
     - Food
     - Chemistry
   - Electricity of others manufacturing industries
     - Separation of services from industry
   - Production differs from the data of EMIM – INEGI.

Barriers of data collected by sector (2)

3) Residencial

- Lack of information for households by final use, activity and appliances.
- Saturation rate:
  - INEGI: in terms of household.
  - Appliances stock.

4) Transport (part 1)

- Disaggregation of vehicles stock
  - INEGI: 4 general categories (overestimated)
  - IEA: 4 categories divided by passengers and freight, and type of fuel.

- Passengers, passengers/km and vehicle/km (domestic)
  - Road: overestimated
  - Buses: overestimated

Barriers of data collected by sector (3)

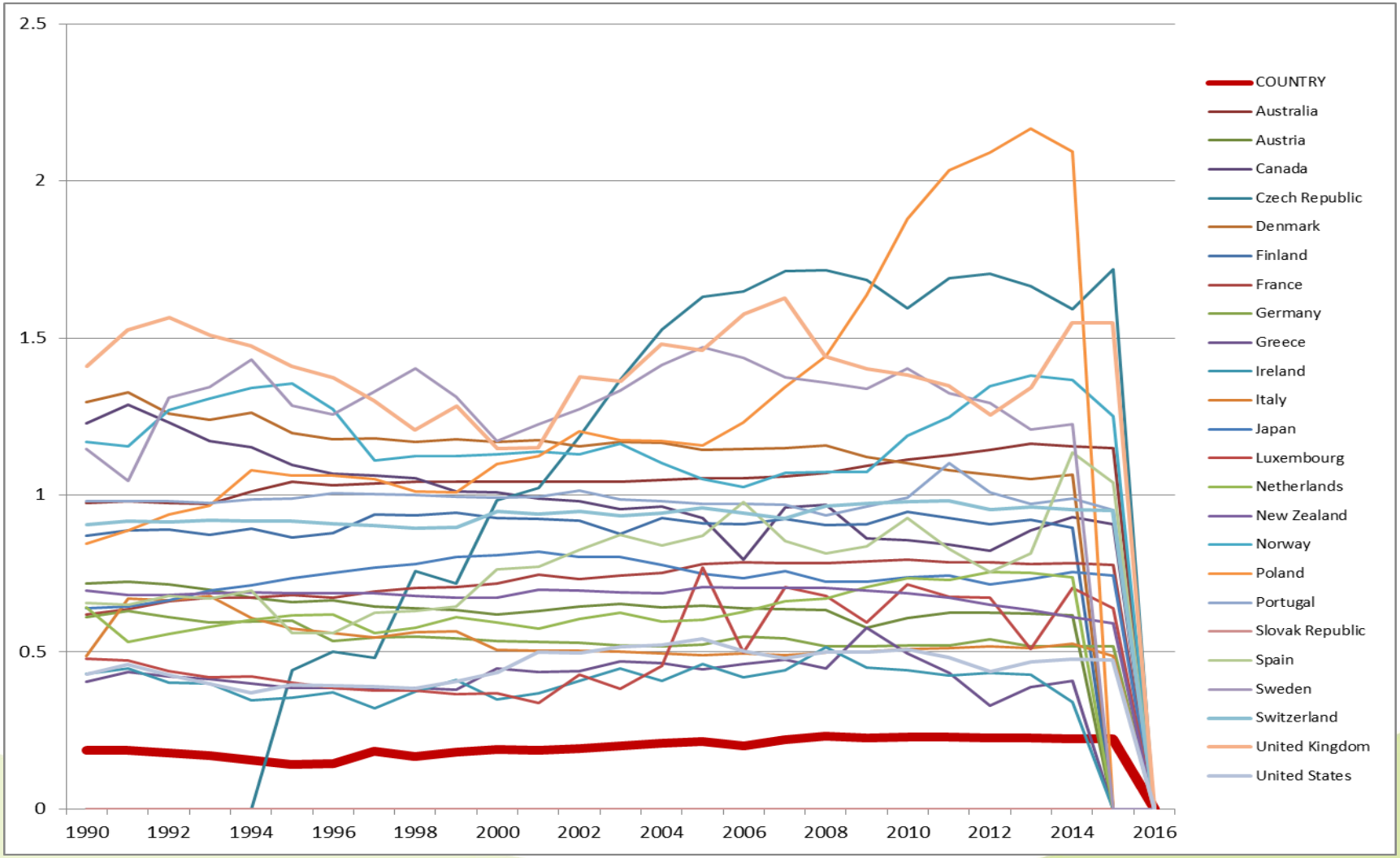
4) Transport (part 2)

- Freight: Tonnes, tonnes/km and vehicle/km (domestic)
  - Road: overestimated (IMT)
  - Aviation: no data available.

- Energy consumption (SIE)
  - Disaggregation by transport mode (freight and passengers)
  - Aviation: Disaggregation by domestic and international consumption
  - Maritime: Disaggregation by offshore and inshore (cabotage).

Improvement opportunities

$$\textbf{Energy int}\textit{ensity buses} = \frac{EC\ (100\%\ buses)}{pkm\ (30\%\ total\ stock)}$$



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Overcoming some obstacles

- Analyze which information is missing
  - Identify possible sources (administratives, surveys)
  - Approaching to them to check or ask for data

- Studies and assumptions
  - Knowledge about individual equipment
  - Assumptions and modelling to get data

Understanding of processes and activities in each sector and collaborative work are key.

Muchas gracias

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