# Energy Efficiency Data : implementation and expectation

**François MOISAN**
**Executive Director**
**ADEME, France**

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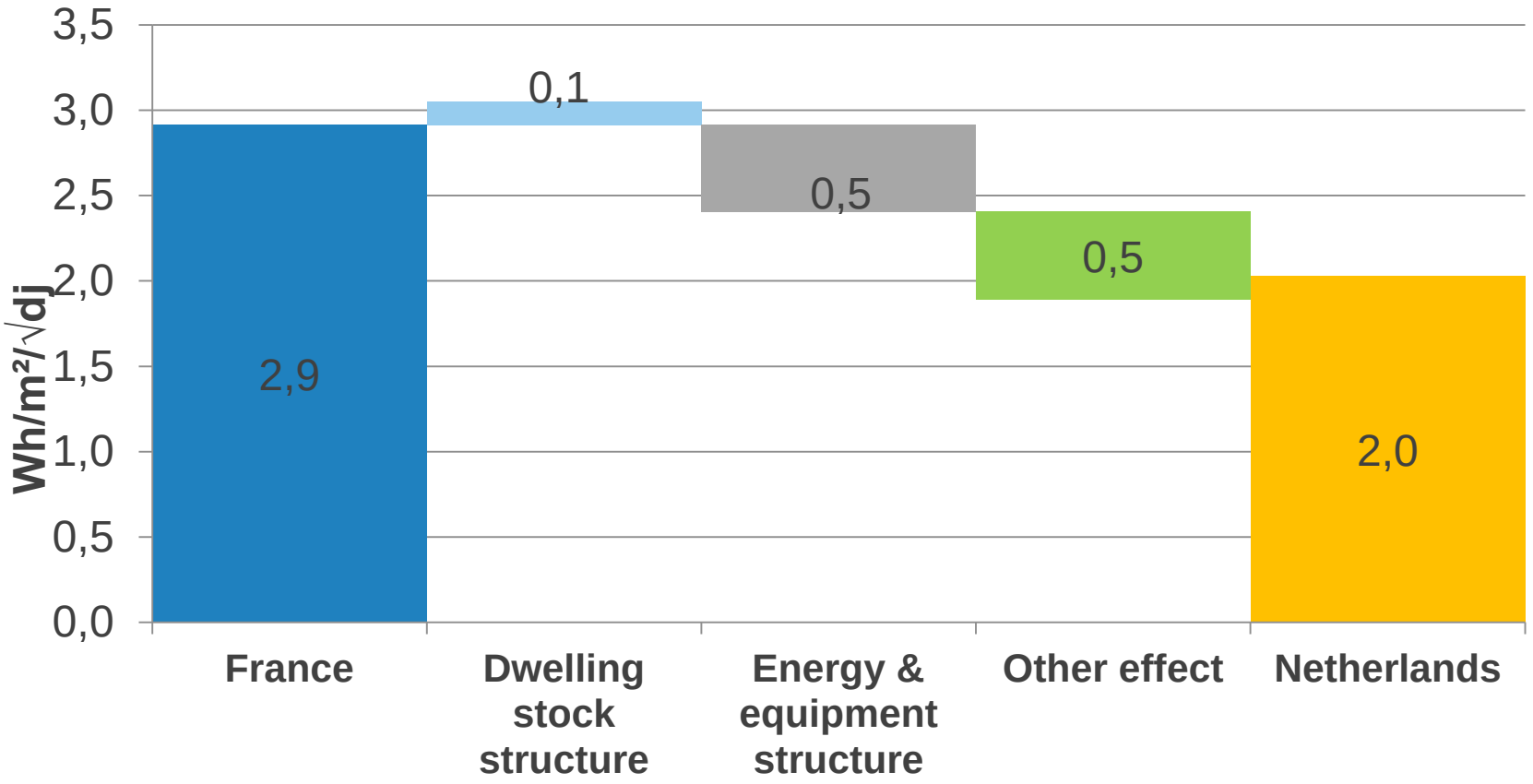
# A growing need for evaluation and monitoring of Energy Efficiency Policies

- Target setting and tracking at national and EU level require data
- Energy Efficiency Policy is a priority in all Members States and at EU level but quantitative delivering and attribution remain a questionable issue
- Paris Agreement at COP 21 is calling for more exchange of experience on policy implementation and impact at international level through INDCs
- KPIs are necessary to monitor the progress of the SET PLAN activities
- Data are more and more produced by private actors but quality check, and access is an issue
- All actors are looking for detailed (and free) data on energy end use (Governments, Local Authorities, implementation agencies, companies, utilities, NGOs, consultancies…)
- Data collection and management is costly (enquiries) and we should avoid redundancies

**E3P : a platform for smarter and available data on energy efficiency**

# Specific consumption difference between France and Netherlands for space heating




Attali, Bosseboeuf, Lapillonne and Sebi, EEDAL 2013

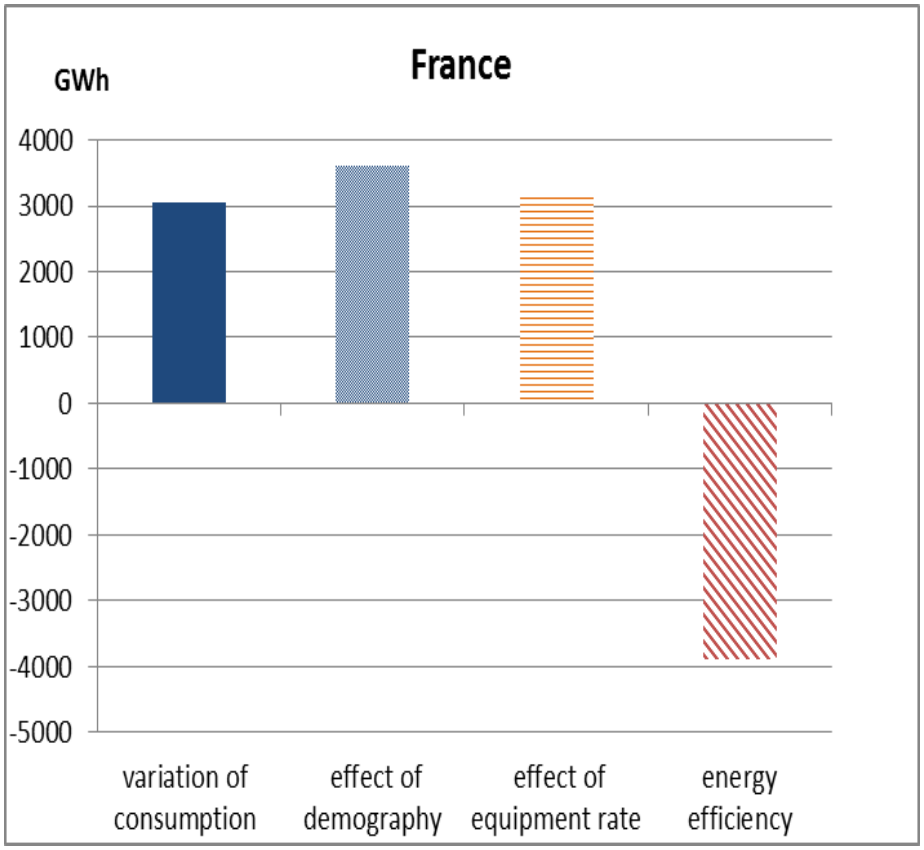
# Discrepancies in specific use of electricity : Selected list of 30 potential explanatory factors

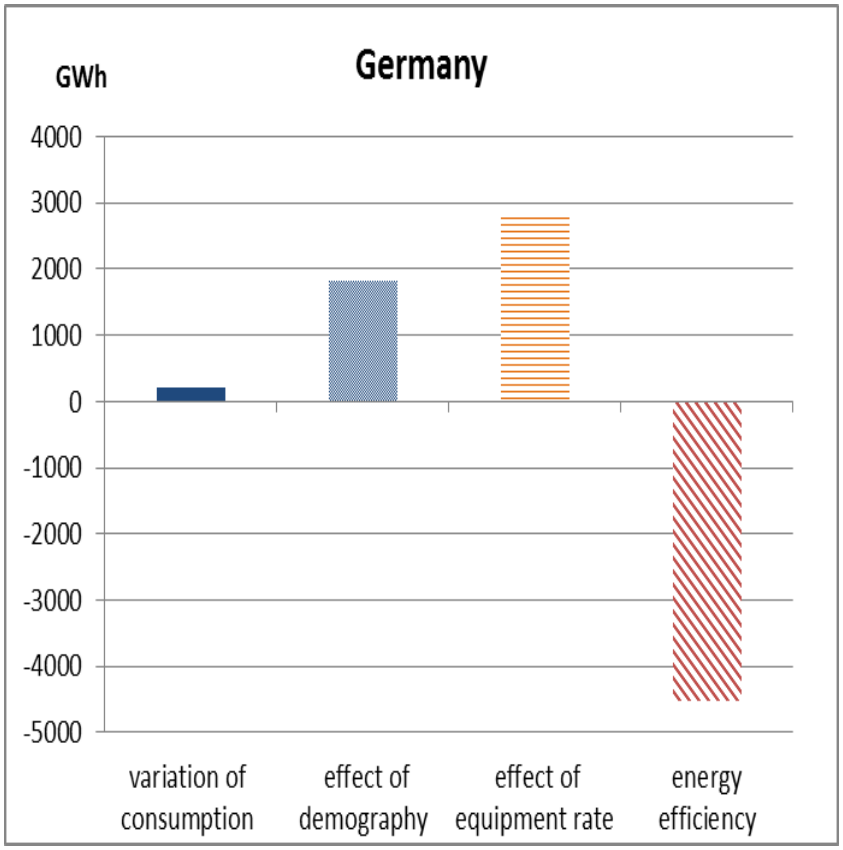
| Quantitative | Qualitative |
|---|---|
| **Equipment rate in appliances** | Countries' structure |
| Appliances' size (cold appliance & TV) | Appliance market structure |
| **Efficiency level: energy label and standards** | Consumer's purchasing behavior |
| Equipment features & functionality | Energy labelling comprehension |
| Equipment price for energy efficient class | Value and volume market |
| Electricity price | Relation between retailer and manufacturers |
| Consumer usage behavior | Information on energy efficiency available in the shop |



# The rise of specific electricity consumption in Germany between 200 and 2009 is considerably smaller compared to France (0.2 TWh)

## Factors responsible for the total variation in the consumption of all electrical appliances in France and Germany between 2000 and 2009




**The effect of demography is almost half as significant compared to France, whereas the increase of equipment rate is analogous to the French one. The impact of energy efficiency measures is stronger than in France, resulting in energy savings of 4,5 TWh**

# ODYSSEE MURE : a continuous effort in energy efficiency data collection at EU level and adaptation

- Deployment of EE indicators database at EU level for more than 2 decades (6 countries in 1993, 30 in 2016)
- Data collection is done at national level involving national experts team (most from EE agencies)
- Detailed data : 200 indicators and 1000 data /year/country, 2500 data on national EE policies and measures.
- Importance of quality check : automatic + expertise
- ODYSSEE MURE is essential for EE Directive monitoring and reporting. >10 000 connections/year on www.odysseemure.com
- Same methodology is now used in more than 60 countries (IEA, MEDENER, UN CEPAL).

# New questions regarding the digital transition

- **Digital transition will increase dramatically the amount of data (e. g. Big Data through smart meters and smartphones networks)**
- **Issues regarding privacy and open access need to be addressed by Governments**
- **The need for public interest data will have to be defined and Public authority should become a trusted third party**

# Expectations of Energy Efficiency Policy implementers on E3P

- Energy efficiency performances (benchmark) and trends (EE indicators and analysis)(EEA Index, ODYSSEE…)
- Energy efficiency policies implementation and impact evaluation (data base and report of analysis) (i.e. NEAAP, MURE)
- Detailed EE Technologies and policies Roadmaps
- Energy saving potential assessment and energy efficiency scenarii (PRISMES, POLES etc.)
- Cost of EE technologies and works, EE Cost abatement curve

# Thank you for your attention

ADEME

Agence de l'Environnement et de la Maîtrise de l'Energie