



First meeting of the project *“ODYSSEE-MURE,  
Monitoring EU Energy Efficiency First Principle and Policy  
Implementation”*  
16-18 December 2019, Berlin, Germany

## Odyssee-MURE Main features

*Dr Didier Bosseboeuf, ADEME (France)*



Co-funded by the Horizon 2020 programme  
of the European Union







# The new ODYSSEE proposal 2019-2021:

## Main features

New general topic: LC-SC3-EE-16-2018-2019-2020: “Supporting public authorities to implement the Energy Union/ Supporting the delivery of EED”

- **New topical issues : Energy efficiency first fuel, fuel poverty, sufficiency, more updated indicators, continuation of MBs**
- 30 months duration
- Budget (1,7 M€)
- 36 partners (New funded partners : Serbia and Switzerland, ECEEE), **Balkans on board**; Technical coordination : ADEME, FHG-ISI, Enerdata
- Based on the two data bases ODYSSEE-MURE
- **New MURE data base software, new facilities (first fuel, industry)**
- **3** updatings for ODYSSEE → **one additional update to n-1**
- Similar dissemination activities (Policy briefs, country profile)
- Management issues: 6 WPs; 3 regional meetings and 5 technical coordination meetings, 2 training of which one dedicated to balkans

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



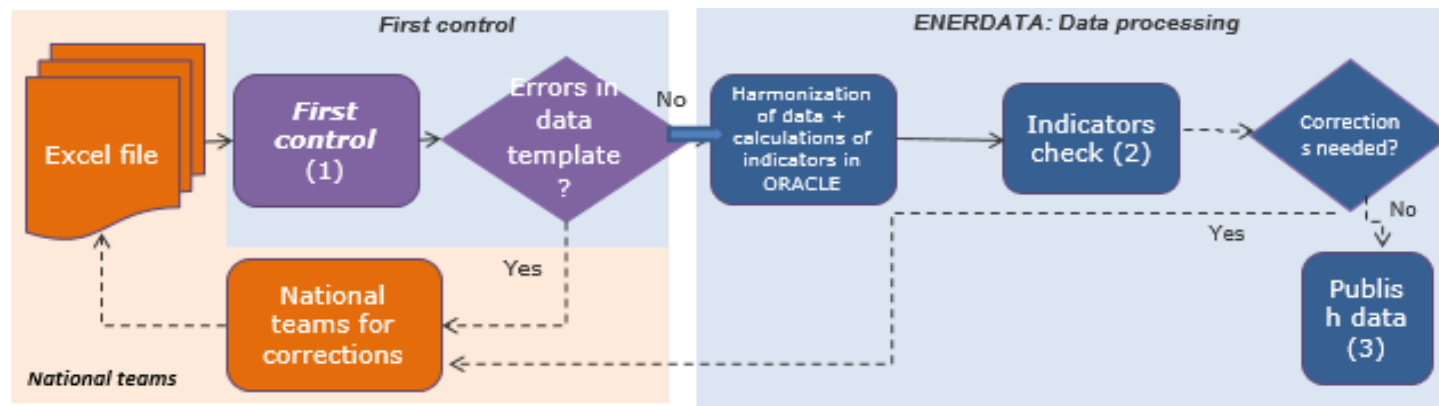
# WP2 : Data collection for EE indicators requires to go beyond the energy balance? But things are improving (Eurostat)

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 specific	steel, cement, paper, heating
5. Energy efficiency indices (ODEX)	final and by sector
6. Energy savings	final, by sector and sub sectors
7. Indicators of diffusion	by sector
8. CO <sub>2</sub> intensities	by sector & sub sector
9. Specific CO <sub>2</sub> emissions	by sub sector & end-use
10. Fuel poverty	Households
11. Sufficiency	by sub sector & end-use
12. Short term indicators	



# WP2 : Odyssee DB update

- Focus on data processing by Enerdata



## (1) First control: **Excel template.**

- Same as done by national teams: internal consistency, consistency with Eurostat/DGMOVE, indicators' graphs;
- Existence of data sources, unit for each datasets
- Checking of annual variation for a selection of data/indicators;

## (2) Second control: **indicator check.**

- Comparison of data and indicators compared to the previous update;
- Calculation of annual growth rate over the 3 last years;
- Visualization of a set of indicators through graphs;

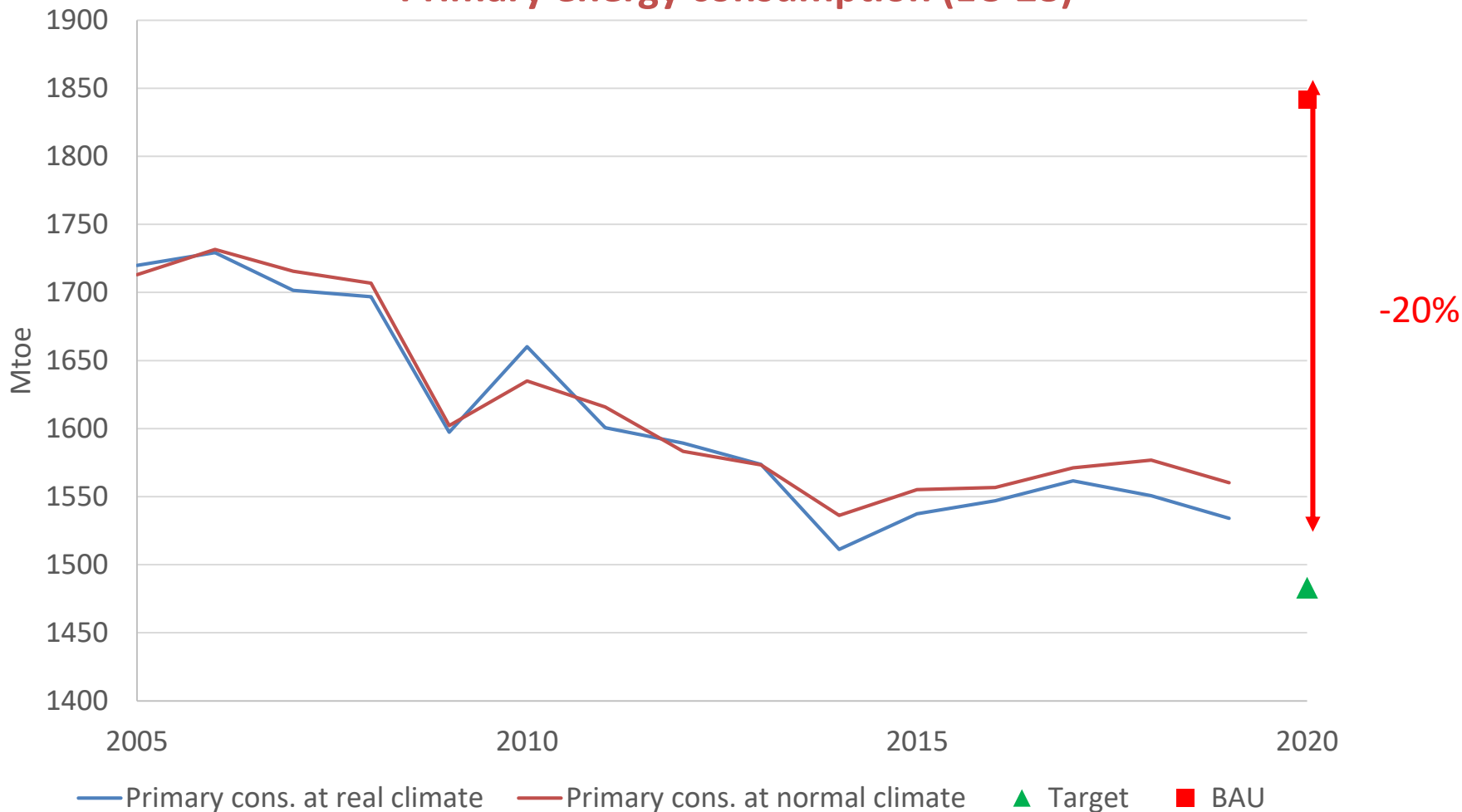
## (3) **Last control before publication.**

- Test on the number of datasets, check of empty datasets

→ if some errors, the file is sent back to national teams for corrections.

- In 2018, EU primary energy consumption was close to the 2020 efficiency target (4.5% higher).
- The consumption at real climate decreases faster than the consumption with climate corrections because of the recent warmer winters

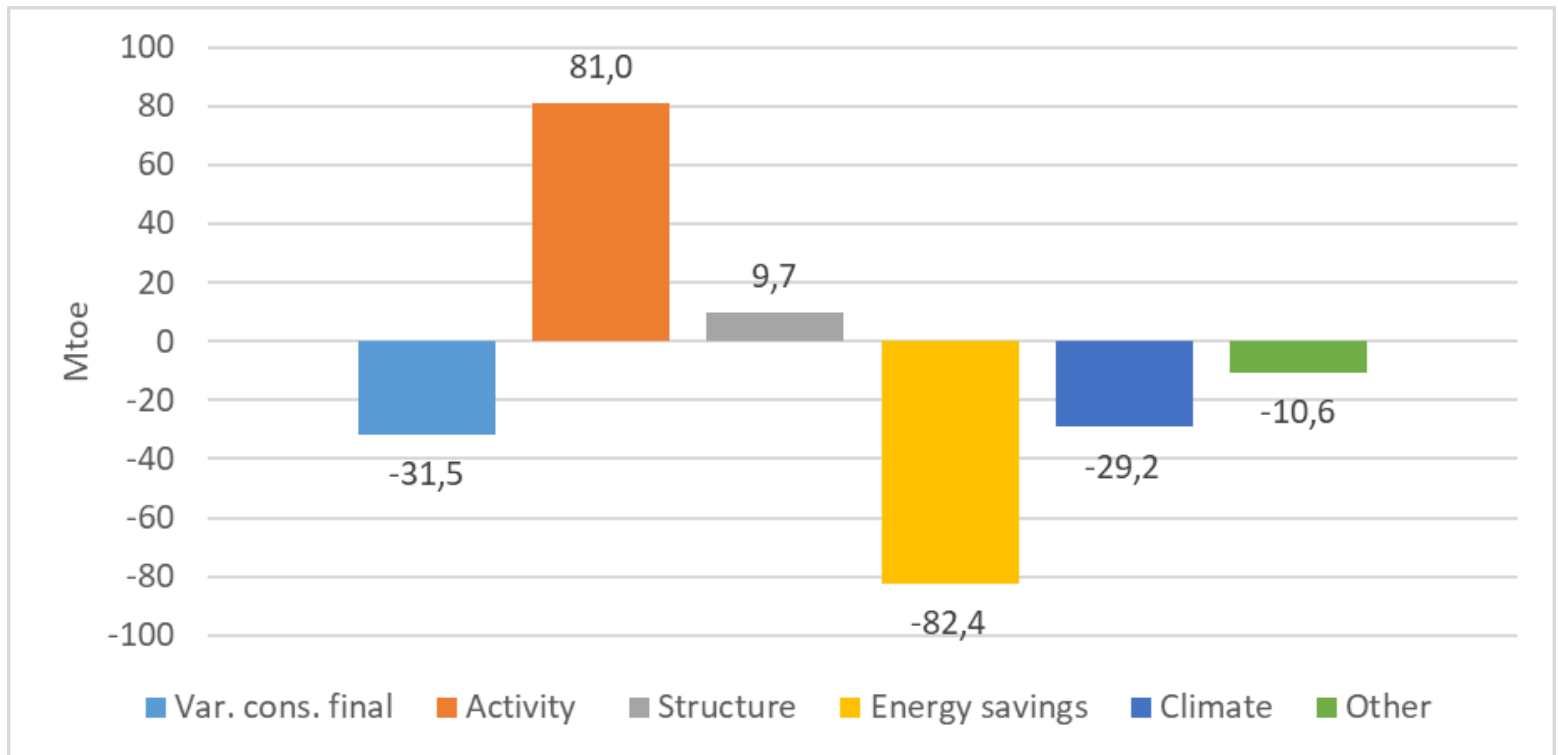
### Primary energy consumption (EU 28)



Source: ODYSSEE  
 2019 estimate based on Enerdata's Monthly data

- Between 2010 and 2017, the **activity** effect contributed to raise the final consumption by 81 Mtoe.
- To a lesser extent, **structural changes** in industry and **modal shift** in transport also contributed to increase the consumption (+10 Mtoe).
- **Energy savings** totally offset the activity effect.
- The **warmer climate** in 2017 had a significant impact (-29 Mtoe) and is equivalent to the consumption reduction.

### Drivers of final energy consumption variation (EU): 2010-2017



*Activity effect : mainly economic growth, plus demography and lifestyle changes (appliance ownership and larger dwellings).*



# WP2 : Other tasks for a better interpretation and data coverage

1. **Additional data**
  - **Market diffusion » :**
  - **Data/indicators on fuel poverty and “sufficiency”**
2. **Decomposition of CO2 emissions**
3. **Transformation of the “energy savings tool” into a “target monitoring tool”**



## WP3 : The new MURE data base

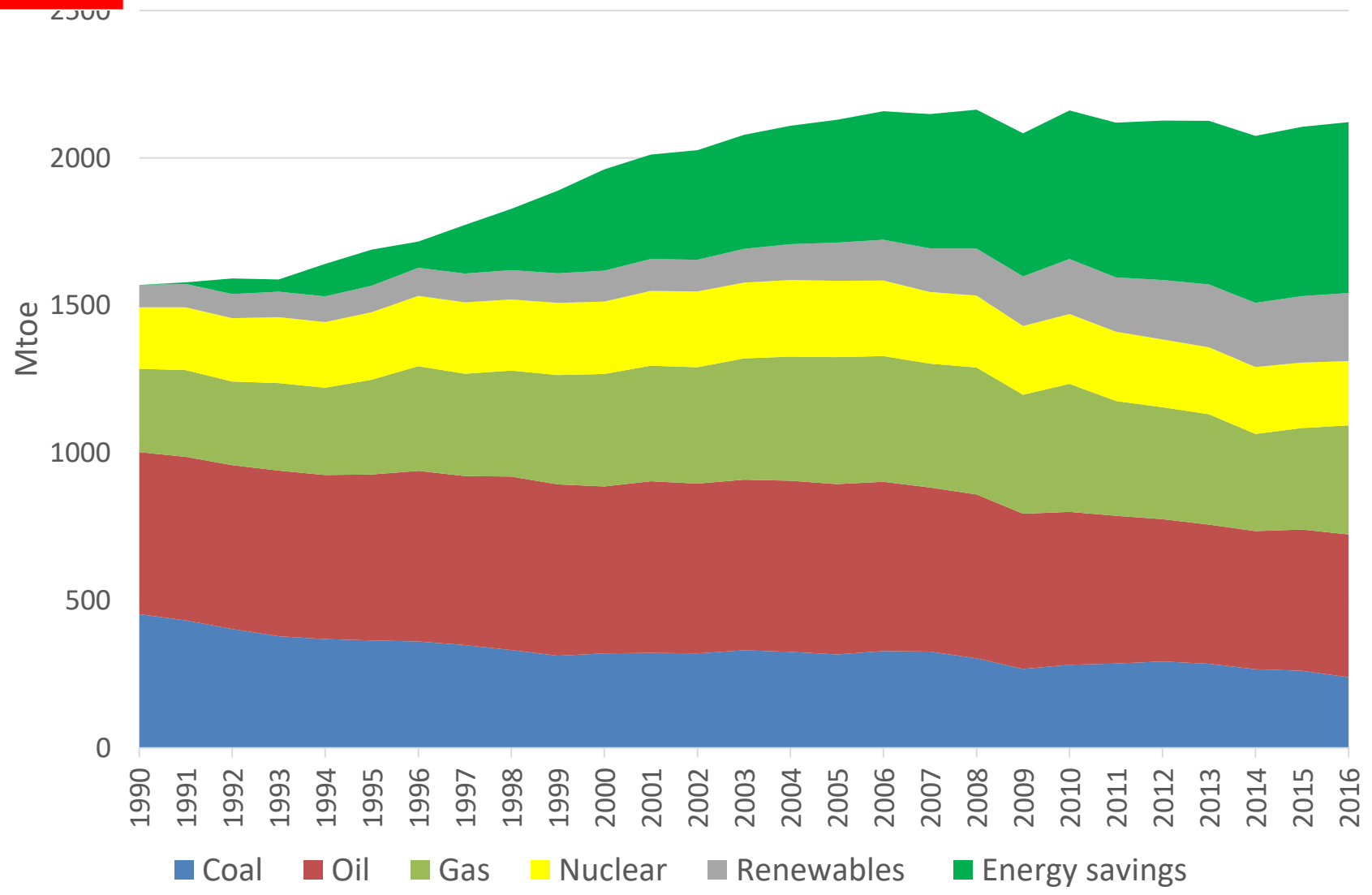
1. New software
2. Slightly renewed nomenclature of the P&Ms's parameters
3. Easier way to introduce new P&Ms in the data base for the National Team
4. Easier retrievals
5. New measures (sufficiency, fuel poverty)
6. New facilities

# WP4: Operationalising the "Energy Efficiency First Principle" (EE1-P) for EED policies

- **Task 4.1** - **Assessing** EE P&Ms at national and EU level for the implementation of the EE1-Principle
- **Task 4.2** - **Operationalising** the EE1 Principle through a comparison between the implemented EE measures with economic **EE potentials**.
- **Task 4.3** - Operationalising the EE1 Principle through **benchmarking of country efforts** against each other
- **Task 4.4** - Analysing EE policies **on energy poverty issues** to overcome barriers to the EE1 Principle
- **Task 4.5** - Specific case studies on the EE1 principle
- **Task 4.6** - Development of an EE1 Facility



# WP4 : Energy efficiency first principle (EEI-P) : Energy savings first fuel in EU29



# WP4 : P&Ms towards low incomes households

Database **Radargraph** Summary Table

Search :

Sector :

Countries :

Measure type :

Targeted end-use :

[Search](#)

[Clear All](#)

[More options](#)

By default only ongoing measures are selected. For visualizing completed and

more detail

29 measures found

Country	Title
Lithuania	Agreements with energy suppliers on consumer education and counseling
Hungary	Electricity-Efficient Households Programme: Mitigation of household appliance electricity demand
Germany	Energy Consultancy and Energy Checks of the Federation of German Consumer Organisations (Energiebera
Germany	Energy efficiency checks for low-income households (Caritas)
France	Energy efficiency measures to tackle fuel poverty
Germany	Energy Efficiency Strategy for Buildings
France	Energy Saving Certificates (ESC) "Certificats d'Economies d'Énergie (CEE)"
France	Energy Transition Tax Credit (CITE) (ex- Sustainable Development Tax Credit)
Greece	Energy Upgrading of social housing- The "Green Neighborhoods" Program
Belgium	EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Brussels - Act structurally on the der
Malta	EU-related: Energy Performance of Buildings (Directive 2002/91/EC) - Energy Efficiency in Low Income Hou
Belgium	Federal government - Reduced VAT for renovation of old buildings
Belgium	Federal government - Tax deduction for energy saving measures in residential buildings
United Kingdom	Home Energy Efficient Programmes (Scotland)
France	Mandatory Energy Performance Diagnosis and audits in co-ownership properties
United Kingdom	Northern Ireland Sustainable Energy Programme (NISEP)
Hungary	Our Home Renovation Sub-Programme: Mitigation of heat demand of residential buildings (family homes
United Kingdom	Reduction in VAT rate for energy saving materials
Portugal	Remodelling Measures - This measure consists of three sub measures: efficient window, efficient insulation
Greece	Replacement of oil heating systems with natural gas ones in residential sector
Greece	Saving at home program
Greece	Saving at home II program
Slovenia	Scheme of energy efficiency for low-income households

# WP4 : The 4 EPOV's Fuel poverty indicators



- High share of energy expenditure in income (2M): part of population with share of energy expenditure in income more than twice the national median
- Hidden energy poverty (HEP): part of population whose absolute energy expenditure is below half the national median
- Inability to keep home adequately warm: based on self-reported thermal discomfort
- Arrears on utility bills: based on households' self-reported inability to pay utility bills on time in the last 12 months

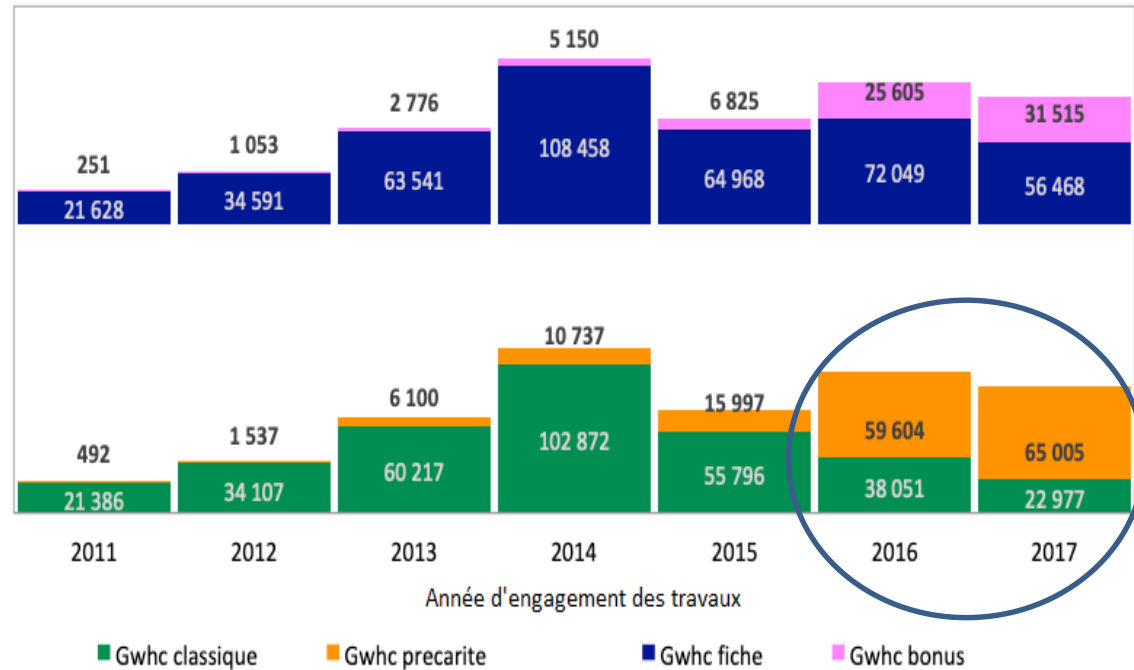
# WP4 : 60% of obligations in households are dedicated to fuel poverty in France

Since 2016 a share of obligations should be realised towards fuel poverty households.

As the results **60% of the volumes of obligations** have dedicated to Fuel poverty).

This is due to a better valorisation of this type of obligations compared to the classic ones

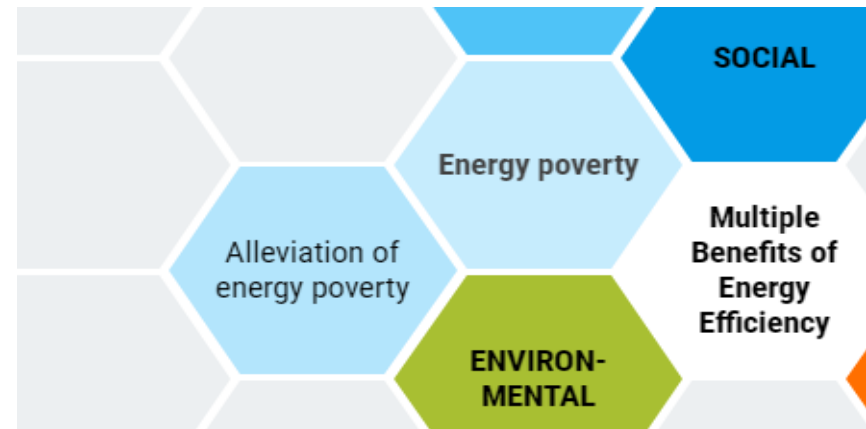
Bâtiment résidentiel (en GWhc) : Précarité. Bonus.



# WP4 : Energy poverty in ODYSSEE-MURE

## Existing data in MB:EE facility

- Indicator on impact on Low income households
- Based on
  - energy savings (ODYSSEE, MURE)
  - energy prices (Eurostat)
  - Income deciles (Eurostat)



## Energy poverty observatory

**Primary** indicators ([Arrears on utility bills](#), [Low absolute energy expenditure \(M/2\)](#), [High share of energy expenditure in income \(2M\)](#), [Inability to keep home adequately warm](#))

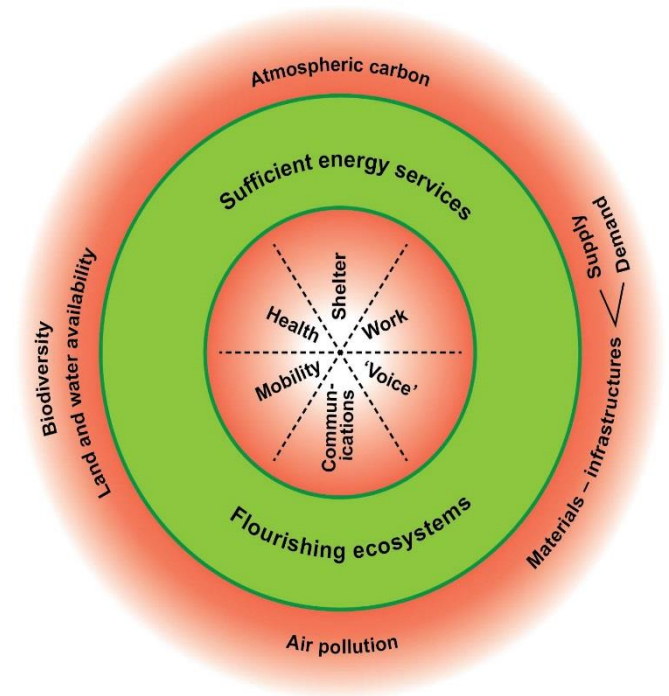
**Secondary** indicators (Energy prices, Number of rooms per person, Comfort, Energy expenses (for different income quintiles), Equipment rates (heating, cooling))

→ Suitable indicators to be added to ODYSSEE database? (income deciles, energy prices?)



## WP4 : Sufficiency : The donuts?

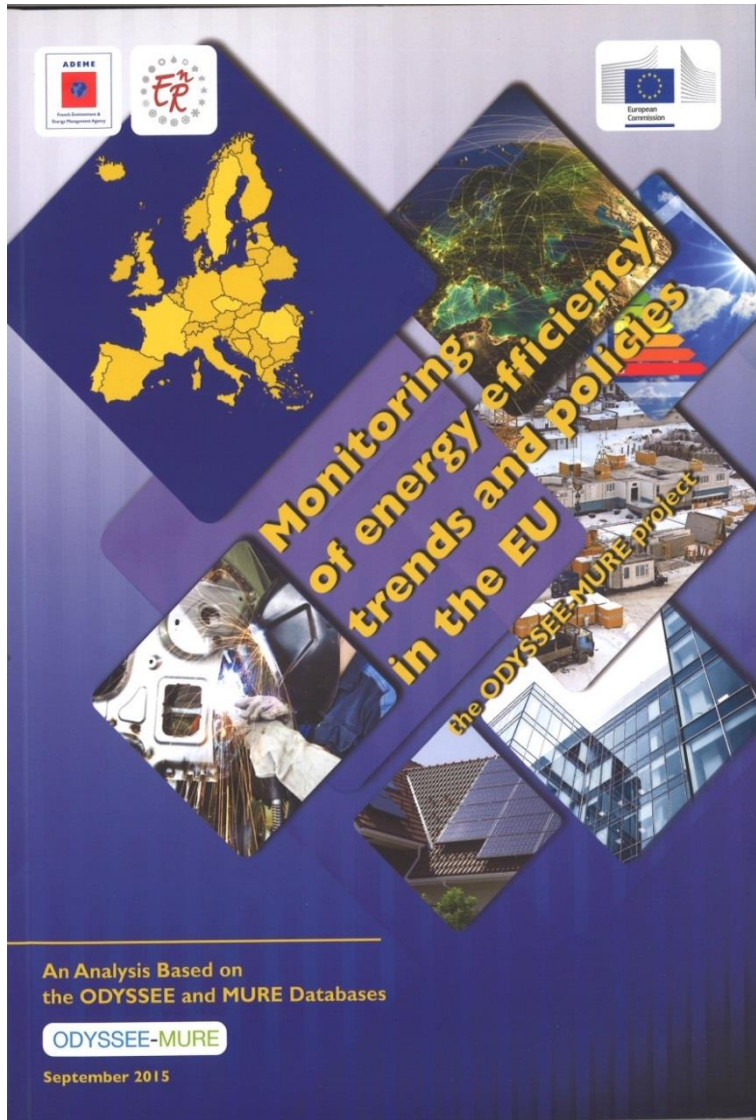
- **Non shared definition.** Debate among academics and ONG's. Few institutionals : **This is the right moment for implementers.**
- **A tentative definition** : Energy sufficiency is a state in which all the personal basics needs on energy services are satisfied with equity and respective to the environmental limits.
- Some issues : Suffered or chosen ; Soft or Hard; Rupture or just a continuum with Energy efficiency



## W5 : Selected Dissemination Activities

Beyond the two databases updated to 2020 (ODYSSEE) and 2020 (MURE)

- 30 Country energy efficiency profiles
- 6 Sectoral profiles
- 5 Newsletters
- 5 National reports
- 15 printed policy briefs (edited and printed)
- 6 Webinars
- The combined scoreboard through the ECEEE's web site
- 1 article in a scientific journal (e.g. Energy Efficiency, Energy Policy, Energy & Environment etc.)
- International Activities : DGEN, JRC, ECEEE, EEA, IEA , Enr Club etc.



**Thank you for your attention**

**For more information**

***Didier.bosseboeuf@ademe.fr***

***Tel : 00 33 1 47652355***

***www.odyssee-mure.eu***