

Implementation of a new data collection on final energy consumption in households by type of end-use

EUROSTAT – European Commission

Energy End-Use Data and Energy Efficiency Metrics Initiative
Session 2: International assistance on end use data collection
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Overview

➤ Introduction

- ✓ *Framework of assistance on data collection concerning energy efficiency and energy end-use in the European Union*

➤ Recent developments in EUROSTAT

- ✓ *Disaggregation of statistics on final energy consumption*

➤ The MESH project

- ✓ *Example of a non-legally binding tool for helping statisticians to develop and / or implement a new data collection on energy end-use*

➤ Next steps and other related initiatives

Introduction – *framework*

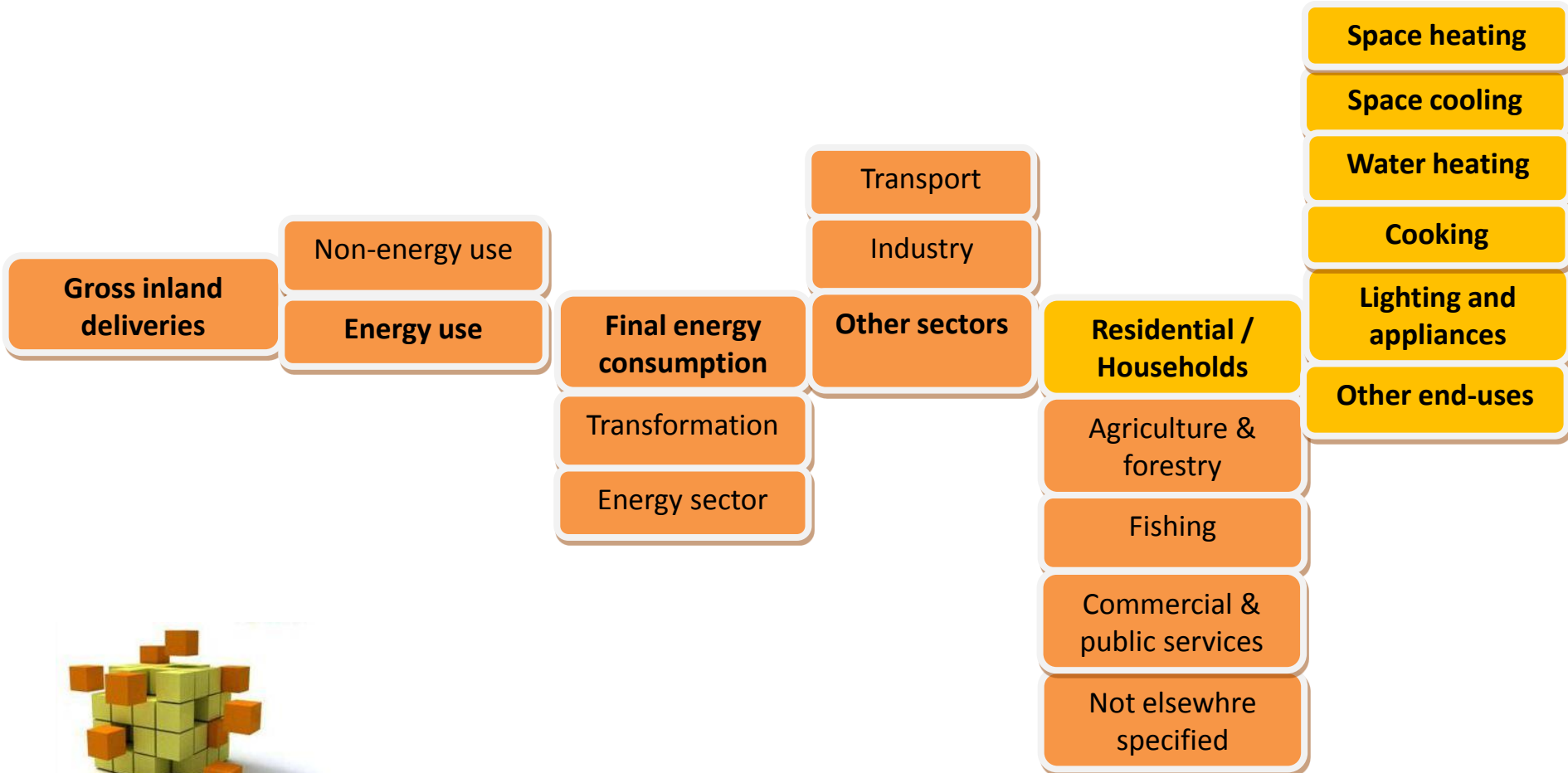
- Various European (EU) 'structures' collecting / compiling data on energy use and energy efficiency
 - ✓ European Commission
 - Policy DG's (*Energy; Climate Action; etc.*)
 - DG JRC (*Joint Research Center*)
 - DG Eurostat (*Statistical Office of the European Union*)
 - ❑ ...of which the *Energy unit*
 - 'Sponsored external partners'
 - ✓ EEA (*European Environment Agency*)
- How is the data collected?
 - ✓ Official statistics
 - ✓ Direct reporting (foreseen in specific binding documents)
 - ✓ Commission (EU) funded projects



Eurostat's work – *new reporting obligations on energy end-use*

- Disaggregation of the statistics on *Final Energy Consumption (FEC)* by **type of end-use**
 - ✓ *Residential / Households* sector [part of *Other sectors*]
 - *Space heating*
 - *Space cooling*
 - *Water heating*
 - *Cooking*
 - *Lighting and electrical appliances (electricity only)*
 - *Other end-uses*
- Based on actual policy needs, in particular in the framework of the energy efficiency related developments





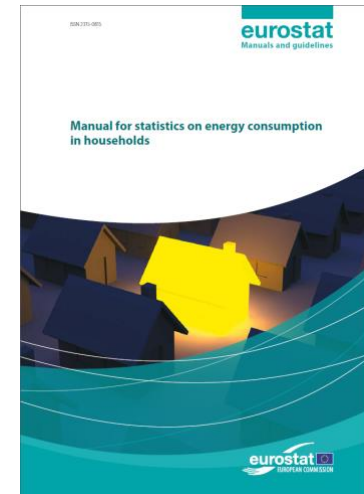
MESH project – *manual for energy statistics in households*

- Different situations across reporting countries
 - ✓ *National authorities* are in charge of collecting and validating the data taking into account their national / local specificities [responsible for the data quality]
- How to help reporting countries implement this new data collection?
 - ✓ No formal harmonized *reporting instructions* ['subsidiarity' principle applies] but consistent and commonly agreed definitions in the *Energy Statistics Regulation* [ESR – Annex A]
 - ✓ Decision to draft a manual as a more flexible and non-binding tool
 - Further details and explains the definitions provided in the ESR
 - Provides useful information / guidelines on how to develop / improve the data collection on final energy consumption in the residential sector according to the legislation



MESH – *content*

- MESH – *Manual for statistics on energy consumption in households*
 - ✓ 2-year project successfully ended with the publication of the manual in November 2013
 - ✓ 7 chapters
 - *Situation*
 - *Definitions*
 - *Methods*
 - *Examples*
 - *Country case studies*
 - *Going beyond the Regulation*
 - *Other issues*
 - ✓ Available on Eurostat's website



http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-GQ-13-003

MESH – *how can the manual help?*



- Describes the situation across the EU
 - ✓ What info is available
 - ✓ How is it collected / compiled in various countries
 - ✓ What are the challenges / obstacles and remaining issues
- Provides more details to précise the definitions and explanations based on practical situations [allowing for a common interpretation of concepts]
- Lists the most commonly used methods for obtaining data across the EU [Business surveys, Household surveys, Administrative data, Modelling, In situ measurements]
 - ✓ Explanations and guidelines for each method [how to use / improve it]
 - ✓ Streangths and weaknesses [What data a method can provide and where is it insufficient]
 - ✓ Specificities [legal aspects, burden, cost,...]



MESH – *how can the manual help?*

- Examples of how the methods are used in specific real situations
 - ✓ In deep analysis of country cases from which are derived some best practices [that can be used as a direct 'source of inspiration']
- Goes beyond the formal requests stepping from the Regulation
 - ✓ Which data is needed to better understand household energy use in each country
 - Demographic and social variables, dwelling variables, more detailed energy end-uses [primary vs. secondary system], energy technologies, penetration of energy efficiency technologies
 - ✓ Data matching
- Gives a view into the future, via several elements that are complementary to the compulsory data collection foreseen by the ESR
 - ✓ Data on use of certain renewable energies, data on fuel poverty
- **Important tool for any statistical authority which has to implement the new data collection process**



MESH – *training session*

- Training session – Madrid (Spain), 2-4 December 2013
 - ✓ Organised by the MESH Team as a way to better and broader disseminate the lessons learnt and the information gathered in the MESH project
 - ✓ Opportunity for around 40 statisticians from 20 Member States and candidate countries to get familiar with the definitions and concepts developed in the manual
 - ✓ Based on practical exercises allowing participants to familiarize themselves with the methods of data collection and modelling, and possibility to share and discuss different approaches
 - ✓ Increased awareness of the challenges and needs for implementing the new data collection and accelerated the preparedness of many reporting countries

MESH project – *some lessons learnt*

- Start from a clear and thorough assessment of the **situation**
 - ✓ Variables vary widely among MS – reflecting priorities
- **Involve** reporting countries / knowledgeable **experts**
 - ✓ ESSnet project – *European Statistical System Network*
 - Great team of experts / NSI's from 7 Member States
- Build on already **existing practices** and frameworks
 - ✓ Examples of 'real life' / actual situations with detailed description of application and challenges to overcome
- Propose options / **solutions** that do not excessively increase burden or cost
 - ✓ Possibility to use existing techniques, experiences, models
- Based on **actual needs**, increase as much as possible the **harmonization** of definitions, methods, methodologies



Next steps and related initiatives



- Work has started on the further disaggregation of FEC in the **Industry sector** [internal proposal on the topic expected by the end of 2017]
 - ✓ Preliminary work on the *Services* and *Transport* sector should start in 2017
- When a new data collection has to be implemented or an older one is significantly modified, Eurostat might provide **grants** to EU Member States [in a different framework, also EEA states and candidate countries can receive it] **to develop or improve their data collection system**
 - ✓ SECH project [prior to the MESH development] allowed 17 MS to finance work on statistics for FEC in households by type of end-use
 - ✓ It is expected that a similar process would be set-up for the disaggregation of FEC in the *Industry* sector over the period 2017-2018
- At international level, Eurostat cooperates with other IO's [in particular the IEA] in order to ensure that the level of **comparability** between existing similar data collections is as high as possible [taking into account the different frameworks]

Thank you for your attention!

Questions?

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