



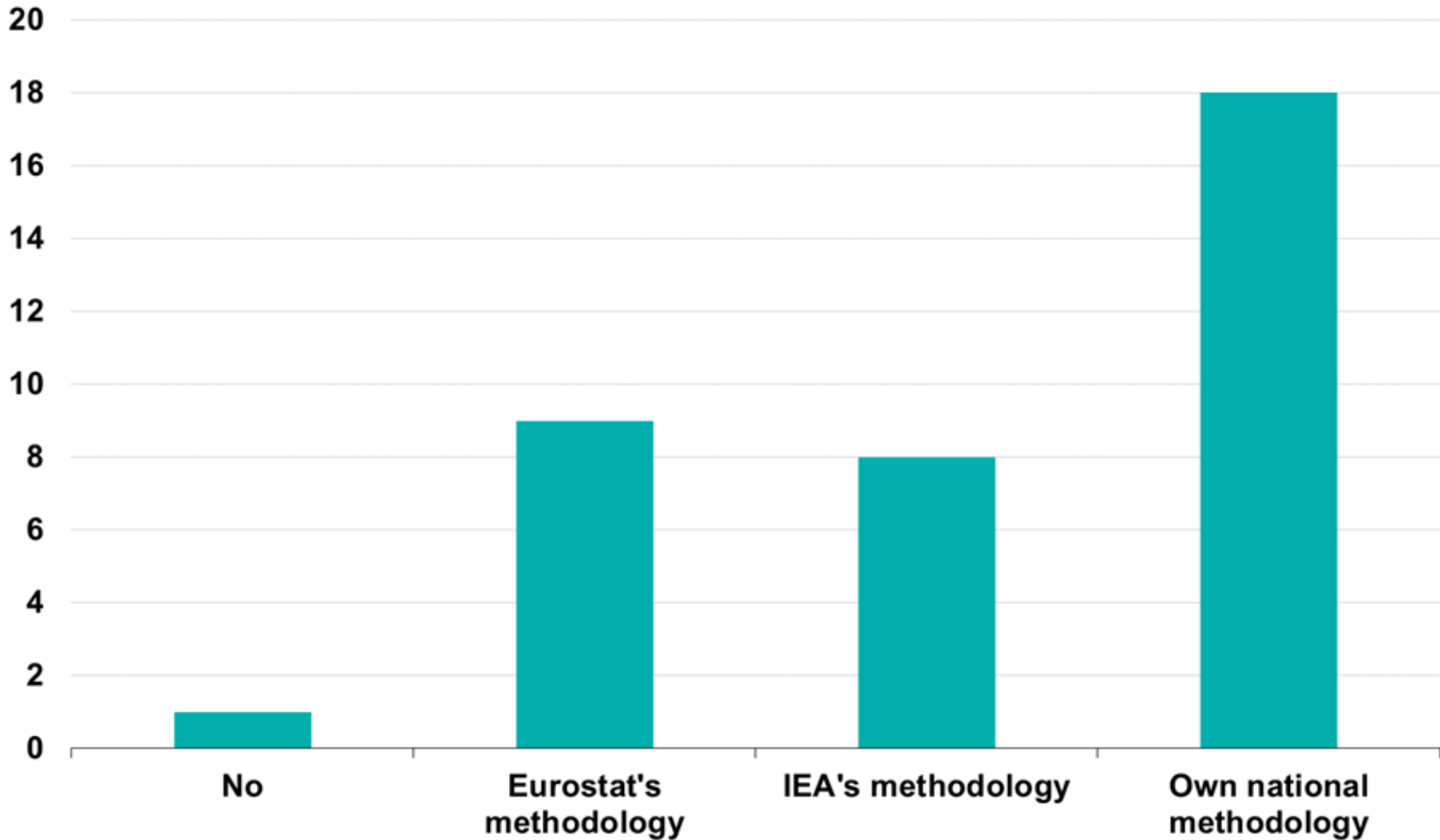
# Energy balances – understanding differences

Marek Šturc

European Commission - Eurostat

# Current practice in Europe

Do you create your national energy balance?



# Eurostat's energy balance / 1

- **International aviation is considered within final energy consumption of the transport sector**
- **Eurostat produce 2 balances: simplified and complete**
- **Simplified energy balance format is designed as A4 format for 1 country and 1 year: 9 columns (key product aggregates) & 71 rows (energy balance flows)**
- **Complete energy balance fits on 4 pages A3 format for 1 country and 1 year: 65 columns (products and their aggregates) + 173 rows (energy balance flows)**
- **There are also complementing data to energy balance, especially more detailed electricity and heat production by plant type and fuel, blended and non-blended biofuels, detailed consumption in households ... it is possible to further extend the existing energy balance with more rows and columns**

# Eurostat's energy balance /2

- **Contrary to SIEC, Eurostat consider hydro, tide, wave, ocean, wind, solar, geothermal, and nuclear as primary fuels**
- **Consequently, transformation processes exists from geothermal, solar thermal and nuclear to electricity and heat**
- **Also product transfers from hydro, tide, wave, ocean, solar photovoltaic and wind to electricity exists in the energy balance**
- **Transformation is split between transformation input and transformation output – no negative numbers in transformation sector in Eurostat's energy balance**
- **Eurostat is now analysing if it is feasible to include "ambient heat captured by heat pumps" as a new renewable fuel in its energy balance structure**

# Key aspects to consider in the future design of Eurostat's energy balance

- Several elements reported are no longer regularly surveyed/measured but are now modelled
- Reported calorific values are often not updated
- Confidentiality aspects and protection of information in liberalised European market is starting to cause more and more problems in some European countries
- All fuel sources and technologies contributing to the renewable target might be also considered for energy efficiency target and thus included in the future energy balance
- Energy security, import dependency, energy poverty, energy efficiency, energy savings, ... might need different assessment tools – energy balance approach might not be fit for all

# Requests for harmonisation of energy balances

- **Eurostat received several requests for harmonisation of energy balances with the energy balance of the IEA**
- **There are few conceptual and presentational differences between Eurostat and the IEA**
- **Eurostat will engage in further discussions with IEA on steps towards closer harmonisation between IEA and Eurostat**

# Moving towards a single worldwide energy balance format

- **Several aggregates of the current Eurostat's energy balance are referenced in the legal acts of European Union**
- **Many elements are used in the calculation of the high level targets**
- **All major adaptations of Eurostat's energy balances requires also legal assessment and agreement of Member States, possibly also formally involving the European Council and the European Parliament**
- **Even if a new energy balance format is agreed on the worldwide level, Eurostat might be forced to continue production of the current (or different) style of energy balance**
- **Small adaptations are feasible and expected**



**Thank you for your attention!**

Marek.Sturc@ec.europa.eu

<http://ec.europa.eu/eurostat>