CONCERTED ACTION
ENERGY SERVICES
DIRECTIVE

Ways to manage data collection

WGR 2.3

Core theme 2
Working Group Report 3

Michael Cemerin, Federal Office of Economics and Export Control, Germany
Madis Laaniste, Ministry of Economic Affairs and Communications, Estonia
Ulla Suomi, Motiva, Finland

Date: 3 December 2012

1.1 Ways to manage data collection

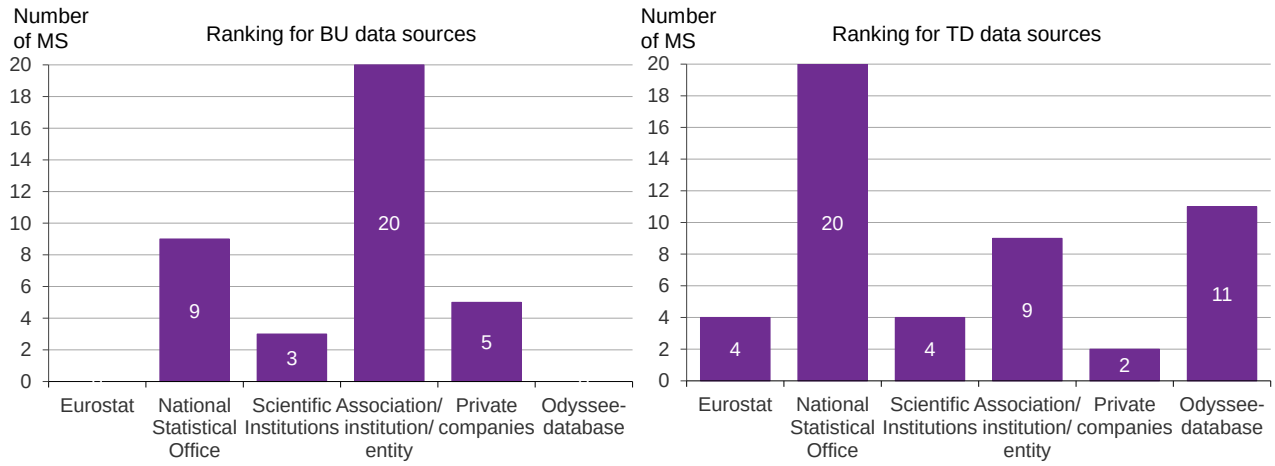
For their 2nd National Energy Efficiency Action Plans (NEEAPs) Member States (MS) were required to calculate energy savings for different energy efficiency (EE) improvement measures/programmes and/or certain sectors. During initial work it became clear that all data related issues, such as data availability, data collection and data sources for energy savings calculations are considered challenging in many MS. This was especially apparent when calculating the energy savings for the 2nd NEEAPs. This research provides insight on the experiences gained in MS related to data collection for the 2nd NEEAP energy savings calculations and MS views linked to data availability, reliability and data gathering costs. All CA ESD participating countries[1] except LU provided input.

Data sources and general organisation of data collection for the 2nd NEEAP

MS often used a mix of data sources. National statistics are very important with 27 out of 28 national CA ESD representatives reporting they used this data[2]. Other frequently used data sources are associations/institutions/entities (19), scientific institutions (16) and the Odyssee-database (15). The majority of CA ESD representatives reported that data is usually collected for other purposes, mostly for national programmes and schemes, and then utilised for savings calculations for the 2nd NEEAP. However, 7 representatives reported they collected some data specifically for 2nd NEEAP savings calculations.

According to the answers for bottom up (BU) methods of data collection, most MS predominantly used institutional data from associations, institutions or entities (including national energy agencies) (20). Other data sources were significantly less important. Top down (TD) data users preferred data from national statistics offices (20), although the Odyssee-database was also often mentioned (11) as well as the most popular data source group for BU calculations, "associations/institutions/entities".

Figure 1: Most important reported data sources for BU and TD calculations for the 2nd NEEAP



Many representatives (20 out of 27) indicated that savings calculation methodologies were usually chosen in their country because of data related issues. Only 6 representatives reported they did not choose their calculation method because of data related issues. In these cases, data gathering and a calculation method was already in place for national purposes, which is then also used for the 2nd NEEAP savings calculations.

Data availability, reliability and gathering costs

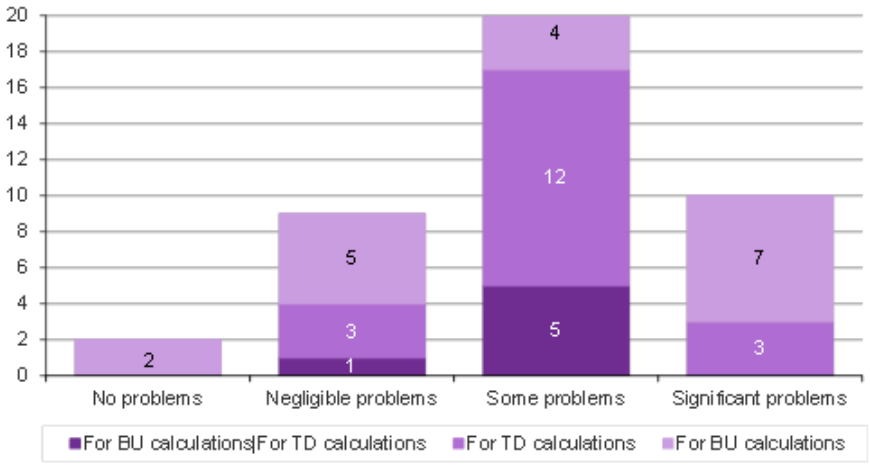
More than two-thirds of the national CA ESD representatives (20 out of 28) indicated that they had some or significant problems with data availability for TD calculations, which is at a similar level for those with BU calculations (16). About a quarter of the respondents reported that they had no or negligible problems with data availability for BU calculations, much more than for those with TD calculations. Many representatives reported they also included in the 2nd NEEAP those measures they were not able to calculate savings for due to data availability

[1] Member State Energy Services Directive implementing bodies as well as Croatia and Norway.

[2] While ESD is not yet implemented in EEA, Norway has not submitted the 2nd NEEAP. However, during the period preceding the deadline of the 2nd NEEAP NO evaluated energy efficiency improvement measures using the recommended and national measurement and verification methods. Thus NO provided input which focused on experiences from their evaluation and described what sources they used, and what sources they would have been able to use to calculate energy savings.

and/or lack of methodology in order to give a more comprehensive picture of all measures supporting energy efficiency.

Figure 2: MS opinions on data availability for the savings calculations in general for the 2nd NEEAP



According to CA ESD representatives, those countries using BU data were typically quite satisfied with data availability and data reliability, the biggest concern being the costs of the data collection. According to the reported answers for the TD methods, availability and reliability were very often seen as more problematic. Costs for TD data collection were seen on the moderate to low side, although this varies depending on indicator and sector.

Data gathering methods usually seem to be not easily replicated

The main success factor mentioned in regard to data collection for the 2nd NEEAP[3] was that structures were in place for energy efficiency data collection. This applies to the regulatory framework, institutions and tools (databases) as well as financial resources for surveys and staff. It was also pointed out that data should always be collected from the very beginning of a new measure being adopted and knowledgeable experts should be engaged in the process.

Challenges and barriers reported by the CA ESD representatives often related to the lack of financial and human resources to work with the data. It was also reported that detailed statistics were lacking for one or more sectors and that the data is not always as accurate or reliable as expected. Administrative burden is also an issue for some respondents, as well as the lack of coordination between the parties involved in data collection and handling. The long delay in the availability of the data from the previous year, and data protection and confidentiality issues were also reported.

Suggestions to overcome these barriers were put forward and often included the easiest to say and perhaps one of the most difficult to realise – additional money for data gathering. Other suggestions included the harmonisation of data at an EU level as well as trying to find cost effective ways of developing data collection methods. Some respondents also recommended surveys to improve the data situation. No innovative or easy to implement solutions were put forward. It should also be noted that, based on the answers, there are no clear regional differences at an EU level with regards to data collection (availability, costs, etc.).

Unfortunately, almost all the national CA ESD representatives who responded doubted whether the replication of national data gathering systems from one country to another is possible because systems are very strongly linked with national programmes and circumstances, and so are country-specific. In some cases the principles for BU data gathering could be replicated, but as a general rule data collection and processes need to be carefully tailored to the individual programmes being put in place. Except for Odyssee-indicators, the situation in TD data gathering was even clearer: it was reported that at least some data collection systems could, according to the reported information, be replicated.

[3] The following information is based on comments of the responding MS. It does not give information on the number of MS who share these comments.

National CA ESD representatives were informed about the Odyssee-database as a potential tool for the application of TD methodologies in Member States and in addition data gathering practices, and the assessment of its uncertainty in one country.

Help Desk quite well known but rarely used

In order to support Member States establish their 2nd NEEAP, the Commission established a Help Desk where questions could be asked about data and methodological issues. The Help Desk was known by most but not all national CA ESD representatives. All 9 representatives that reported they had used the Help Desk were generally satisfied with the service. However, the questions asked were mainly related to methodical issues: only one Member State also raised data related issues.

See data gathering positively by utilising it more broadly

The possibilities of reducing data gathering costs or motivating the allocation of resources to data collection is important for Member States. Using existing data as much as possible, integrating energy related questions in existing surveys and EU level obligations were some of the issues that arose in submissions from many CA ESD representatives. It was also stated by more than one participant that there are many other benefits related to good data: data should not be seen only for NEEAP reporting but also, for example, for programme promotion, justification of future programmes, programme refinement, etc.

Should we use minimum (M) or preferred (P) indicators in TD calculations?

There was no clear conclusion on this issue. However, the reason for choosing or not choosing more aggregated M indicators is not just a question of data reliability. M indicators are “bad indicators with good data”, as one CA ESD representative expressed it, so where to use the indicator plays an important role. However, it was also proposed that some EU wide studies/overview of the differences in the results would be useful.

1.2 Added value

Sound data collection is the basis for reliable energy saving calculations. However, data collection under the methodological specifications of the ESD and the proposals of the European Commission (COM) (methodological rules or the harmonised methods) is not always easy to establish. It creates costs, data is sometimes unavailable or difficult to access, and the quality of the data is critical. There was no consolidated picture about the experiences Member States in data collection. CA ESD is addressing this gap by asking about different aspects of data collection activities for the 2nd NEEAP, including challenges and burdens as well as possible solutions. This research provides an overview of data sources Member States have used, their opinions on the issues linked with data collection and how they assess current data collection systems.

For more information please email
[Insert author's email address]

Legal Disclaimer

The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither EACI nor the European Commission are responsible for any use that may be made of the information contained therein.

The Concerted Action for the Energy Services Directive II (CA ESD II) was launched by Intelligent Energy Europe (IEE) in May 2011 to provide a structured framework for the exchange of information between the 29 Member States during their implementation of the Energy Services Directive (ESD).

For further information please visit **www.esd-ca.eu** or contact the CA ESD Coordinator Lucinda Maclagan at **lucinda.maclagan@agentschapnl.nl**

CONCERTED ACTION
ENERGY SERVICES
DIRECTIVE

INTELLIGENT ENERGY
EUROPE