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ENERGY EFFICIENCY  
DIRECTIVE

# National Energy Efficiency Action Plans (NEEAPs) – what actions are working and how do you know it?

Executive summary 1.6

NEEAPs and annual reports and measuring progress in energy efficiency

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# 1 Summary

The aim of this work was to find some concrete examples of policies and measures (PaMs) in Member States (MS) for which there is some evidence they are having an impact. Examples of these successful PaMs were sought from any sector, including supply side measures: PaMs can cut across implementation of many EED articles. Successful PaMs can also cover a wide range of measures from technical and behavioural measures to fiscal incentives. The Luxembourg Plenary Meeting heard from successfully implemented PaMs that are seen to be working and contributing to energy savings targets in MS.

Information in this report is based on that provided by MS via a questionnaire (June 2015) and input received during the sessions at the Plenary Meeting in Luxembourg in October 2015.

## All MS reported to have at least one successful PaMs for buildings

All 26 MS respondents reported they have at least one successful PaMs in the buildings sector which are seen to be working and contributing to energy savings targets. Industry and, perhaps surprisingly, transport are the next best sectors covered with over 80% of MS considering they have a successful policy. Fewer MS reported successful policies for energy utilities (65%), residential appliances (65%) and the services sector (54%). For the agriculture sector only 8 of the responding 26 MS have successful measures.

**Figure 1: Proportion of 26 MS reporting they have at least one successful measure in the sector**



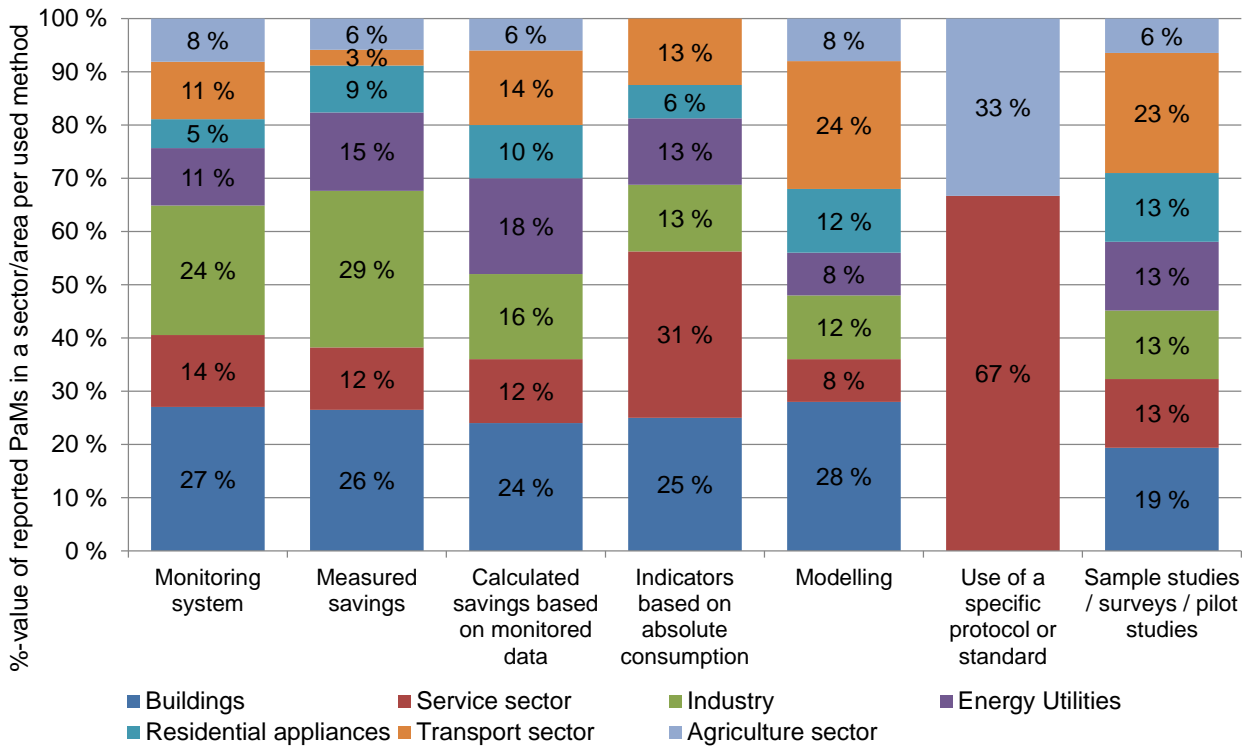
## Wide range of measure types is used in all sectors – differences can be found between sectors

The 26 responses show a wide mix of successful measure types across all sectors – economic, information and education, policy support, regulatory instruments, research, development and deployment (RD&D) and voluntary. The most common successful PaMs type is economic instruments. Information and education as well as regulatory instruments are also popular PaMs types covering a broad range of sectors. However there are some differences in the most popular PaMs types between the sectors.

## Calculated savings based on monitored data is most used assessment method

To assess if the PaMs have worked successfully, a broad range of assessment methods were reported to be used in each sector. Only the use of specific protocols or standards seems to be very rare, used only in two sectors and by three countries. There appears to be no correlation between the monitoring method and the sector. Calculated savings based on monitored data is the most common method used. It would be good to understand how much data is monitored in order to make the calculations possible.

**Figure 2: Distribution of assessments methods used for reported successful PaMs**



## Replicability of successful measures have been assessed quite positively

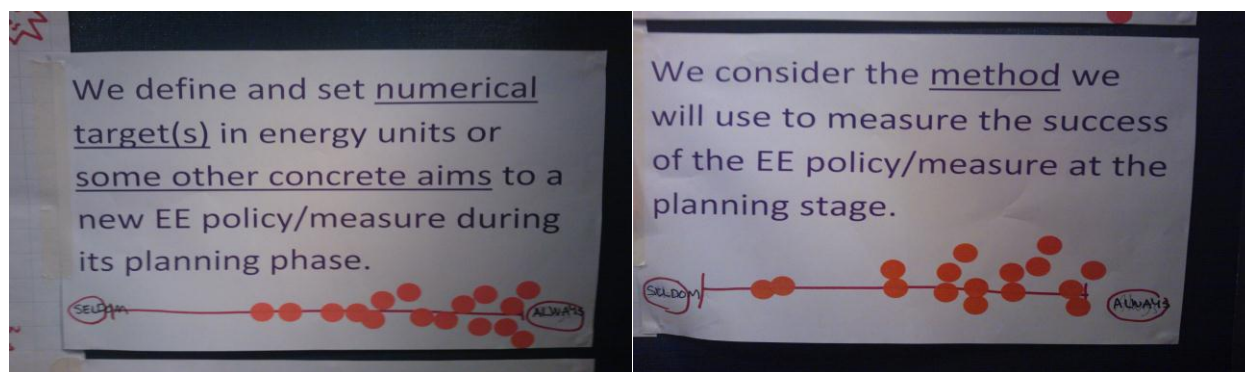
The replicability of successful PaMs was considered quite positively (easily and fairly easily replicable) by the MS representatives responding to the survey, varying between 43% and 65% across the sectors. This leads to a range of questions from other MS that generally relate to their specific circumstance – of which ALL are different. Hence, it is more likely that a MS looking to other MS for policy ideas will need to make their own assessment of how to amend or change an existing measure to work in their own MS. A case could be made to look at how we present policies and measures at Plenary Meetings to ensure consistent information is provided that would enable better comparison between MS.

## 2 Highlights from the sessions

### Target setting and success measurement not universally popular

It was clear from a quick poll of working group participants that defining methods for assessing the success (or otherwise) of a policy was not uniformly done at the policy planning stage. Nor were concrete targets always set at the outset of a policy or measure. This perhaps highlights that other priorities exist when designing and first implementing a policy, and that measurement and verification is often only thought of later.

**Figure 3: Are targets and methods for assessing the policies/measures set at the planning stage?**



### Monitoring from the start can lead to well reported and accepted impacts

From the practical examples given, there seems to be a significant advantage to having good, and preferably measured, data from the beginning of a policy or measure. For at least two of the policies demonstrated, the use of measured data led to increased funding for the measure. This might be down to a greater acceptance of the impact of a policy or measure once it is properly assessed. Such measurement can also lead to greater recognition of the multiple benefits and hence help to further sell the reasons for a policy or measure.

### Measure and verification type can vary widely by policy and measure type

A broad range of policy measures were presented from a range of different sectors – behavioural change campaigns in the public sector, boiler efficiency in greenhouses in the agriculture sector, technology procurement in buildings and industry, and district heating in the residential sector. In each case, the level and depth of monitoring and measuring of the impacts was different. Some examples highlighted that the right data was not collected from the start and that perhaps some thought at the outset as to how a policy would be measured would have made life easier later. Others were fully monitored at reasonable cost, perhaps expelling the myth that building monitoring can be prohibitively expensive.

### The power of one

It became evident that entrepreneurs and other energised people can get a lot done from simple beginnings. Behavioural change can start small and grow into a full sustainability programme. But the conditions must be right. An enthusiastic and supported person (or group of people), high level management support and government commitment might all be required. High level management support, government commitment, etc. are necessary conditions for the adoption of a given measure, but awareness and proactive behaviour of the end-user might also provide sufficient conditions. There are also significant multiple benefits from behavioural change programmes, extending well beyond energy savings.

### Good progress but always room for improvement on National Energy Efficiency Action Plans (NEEAPs)

The Joint Research Centre (JRC) highlighted some strengths and weaknesses of the NEEAPs. MS were thanked for considering use of the template, as it made some comparisons easier. One of the main conclusions was that more guidance is needed in order to allow establishing a level playing field in regard to how policy measures are reported and how energy savings generated by measures are calculated.

# 3 Practical Examples

Examples of energy efficiency policies and measures that have been successfully implemented were presented by Greece, Ireland, Italy, Latvia and Sweden. These examples covered three measures targeting buildings, one targeting service sector, one agriculture and one district heating. In addition, findings from the European Commission's first EED NEEAP assessment (NEEAP-3) were presented.

## 3.1 Member state examples

### Save Energy at Home – Greece

A presentation was given about the scheme helping Greek householders to save money. This scheme combines grants (of up to 70% depending on the householders' income) with zero interest loans. The loans are funded with money obtained via European Regional Development Fund. Total funding for the programme is €548 million with a target of upgrading 270,000 homes by 2020.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation>Saving Energy at Home – Greece)

### Optimising Power @ Work - A large-scale behavioural change campaign – Ireland

The Optimising Power @ Work programme is a behavioural change campaign being run in 270 buildings in the Irish public sector. The main highlight of the programme is the use of detailed metering from the start of each project, the cost of which is around 5% of the energy spend in a given year. Measured results indicate a 20% saving which needs to be diligently maintained if savings are to persist.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation>Oct15 >Optimising Power @ Work – Ireland)

### The Green Plan – Ireland

The Green Plan is a method developed originally for the Dublin Fire Brigade to make their operations more sustainable. The model has applicability across a broad cross section of buildings and business types. Savings of over 90% on gas and over 80% on electricity have been achieved in one case study by following the plan. Many multiple benefits are also unlocked. The Green Plan is achievable in both the Public and Private Sectors.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation >Oct15 >The Green Plan – Ireland)

### Renewable Technology for improving Energy Efficiency in Greenhouses – Italy

This presentation highlighted the benefits of shifting from oil based to renewable based heating for greenhouses in Italy. The results have good applicability across other MS. Strong criteria are included to ensure the best (top) biomass boilers only are eligible and that a monitoring system is in place to verify savings before grant payments are made.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation >Oct15 >Renewable Technology for improving EE in Greenhouse – Italy)

### Energy Efficiency in District Heating – Latvia

The presentation shows how upgrades to the district heating network in Latvia are achieving efficiency gains.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation >Oct15 >Energy Efficiency in District Heating – Latvia).

## **Technology procurement for the building sector – Sweden**

Support for technology procurement in Sweden by the Swedish Energy Agency has led to over 60 projects being delivered, each with a significant energy saving.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation >Oct15 >Technology procurement for the building sector – Sweden)

### **3.2 Other presentations**

#### **Findings related to the Commission NEEAP-3 (1st EED NEEAP) assessment – JRC/DG ENER**

The JRC presented their assessment of MS 3<sup>rd</sup> NEEAPs commissioned by the Commission. Overall, quality is improving and use of the template facilitated their comparison, even though a few MS did not use it.

The presentation is available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Presentation >Oct15 >Evaluation of the NEEAP – JRC)

### **3.3 Good Practice Factsheets**

In addition to the MS presentations described in the section 3.1, Greece, Italy, Ireland and Sweden also provided Good Practice Factsheets. These are available at the CA EED website <http://www.ca-eed.eu/themes/neeaps-ct1>  
(>Good Practice Factsheet>Nov 15).

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The Concerted Action for the Energy Efficiency Directive (CA EED) was launched by Intelligent Energy Europe (IEE) in spring 2013 to provide a structured framework for the exchange of information between the 29 Member States during their implementation of the Energy Efficiency Directive (EED).

For further information please visit [www.ca-eed.eu](http://www.ca-eed.eu) or contact the CA EED Coordinator Lucinda Maclagan at [lucinda.maclagan@rvo.nl](mailto:lucinda.maclagan@rvo.nl)



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