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How are Member States implementing Articles 7 and 8 of the Energy Efficiency Directive?

Anna-Liisa Kaar and Rebecca Turner

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Introduction

- In 2012, Directive 2012/27/EU (Energy Efficiency Directive) was adopted.
- The Directive sets binding measures to help the EU reach its 20% energy efficiency target by 2020.
- Focus on 2 important articles in the Directive:
  - Article 7 – energy efficiency obligation schemes.
  - Article 8 – energy audits and energy management systems.
- In 2016, the European Commission set forth a proposal to increase the EU energy efficiency target to 30% by 2030. For this regard:
  - Article 7 is also amended to extend it beyond 2020 to 2030.
  - Article 8 continues to exist.

What is Article 7?

- Article 7 of the Energy Efficiency Directive requires Member States to achieve **new end-use** energy savings each year from 2014 to 2020, amounting to 1.5% of the baseline energy sales to final customers.

- To meet their energy savings target, Member States need to implement energy efficiency obligation schemes (EEOS), or other policy measures (for example):
  - Energy and CO2 taxes;
  - Financing schemes and fiscal incentives;
  - Regulations or voluntary agreements;
  - Standards or norms;
  - Energy labelling schemes;
  - Training and education;
  - Energy Efficiency National Fund, etc.

Implementation requirements

- Article 7 & associated Annex V define certain implementation requirements for:
  - Calculation of energy savings from policy measures
  - Monitoring and verification of policy measures
- Member States have a liberty in implementation, provided they meet the defined requirements.

National implementation – notification requirement

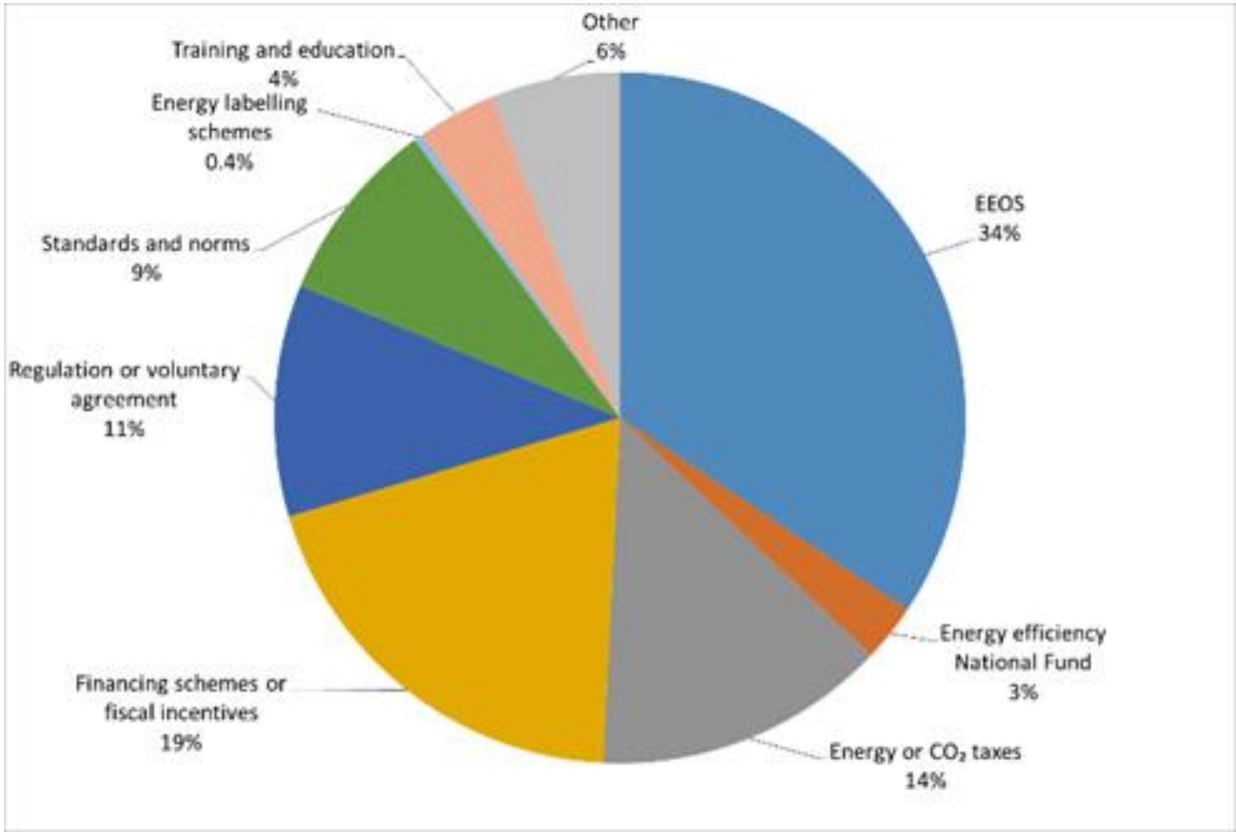
- Member States were required to notify the European Commission of the policy measures they plan to implement and expected savings by 31 December 2013.
- New implementation information however provided on ongoing basis through:
  - National Energy Efficiency Action Plans.
  - Annual progress reports.
  - Targeted dialogue – EU Pilots.
- National implementation plans are changing as Member States progress with implementation.

National implementation – expected savings & policy measures

- Notified by 5th October 2015:
  - Total target – 230 million tonnes of oil equivalent.
  - Expected cumulative energy savings - 250 million tonnes of oil equivalent.
  - Over 450 individual policy measures proposed (number ranges from 1 to over 100 per Member State).
    - 4 Member States plan to implement EEOS only (Bulgaria, Denmark, Luxembourg and Poland).
    - 12 Member States plan to implement EEOS in combination with other policy measures (Estonia and Lithuania have however now opted out of EEOS, Greece newly implements).
    - 12 Member States plan to implement other policy measures only (for example, Sweden implements energy and CO_2 taxes only).

National implementation – expected energy savings per policy measure type

- EEOS are expected to deliver the largest share of savings - 34%.
- The share of other policy measures is substantial – 66% of savings.



National implementation – achieved savings (1)

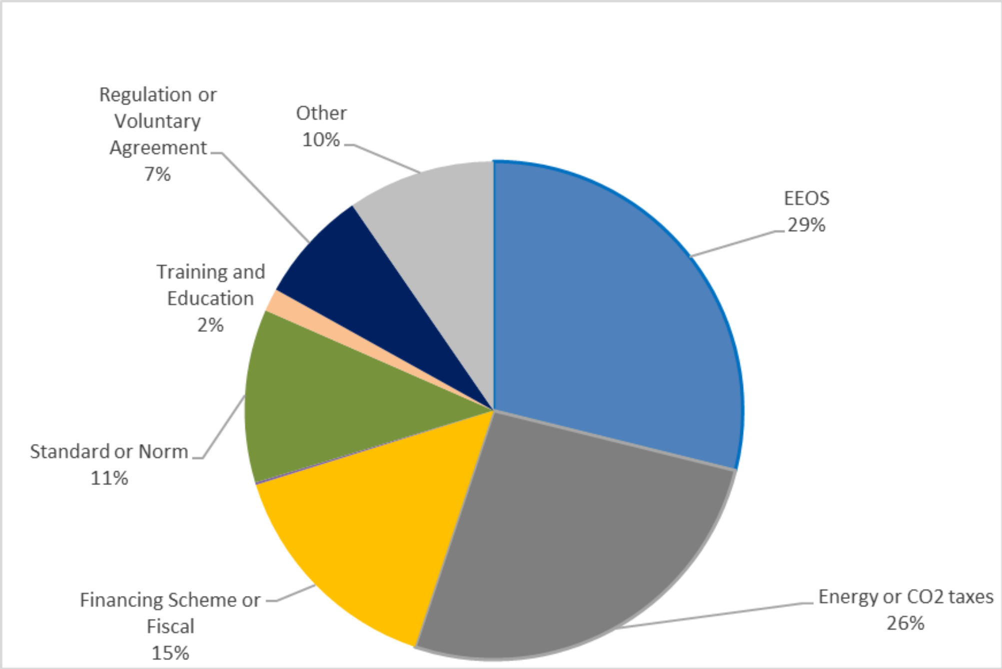
- Member States need to report to the European Commission on an annual basis the energy savings achieved.
- Reporting done for the year before last (x-2).
- So far reports submitted for savings achieved in years 2014 & 2015 (some Member States have also provided savings for 2016).
- Some Member States have updated their achieved savings retrospectively.
- Different reporting formats adopted by Member States.

National implementation – achieved savings (2)

- In 2014 – over 11 Mtoe of achieved savings
- In 2015 – over 17 Mtoe of achieved savings.
- Total over **2014 – 2015** period – over **28 Mtoe** of achieved savings.
- Achieved savings for the 2014-2015 period exceed the average estimated energy savings requirement (i.e. linear delivery of savings) for the period (24 Mtoe).
- However, some Member States over-exceed, while others under-perform.

National implementation – achieved savings in 2014-2015 per policy measure type

- EEOS deliver the largest amount of savings, however:
  - Estonia & Lithuania no longer implement EEOS.
  - Many Member States still at start of implementation (Luxembourg, Croatia, Latvia).
- Energy and CO_2 taxes deliver a large share – large share of savings from taxes in Sweden (100%), Estonia (95%), Lithuania (75%), Germany (60%) and Austria (53%).
- ‘Other’ category is large - some Member States do not report achieved savings per individual policy measure (type).



Conclusions

- Article 7 is an important measure to deliver energy efficiency savings.
- It has resulted in take up of new policy measures in Member States, for example:
  - New EEOS in Latvia, Croatia, Spain, Slovenia, Luxembourg and Greece
- Expected to continue to be a major contributor to EU 2030 energy efficiency target – the Commission has proposed to extend the article beyond 2020.

What is Article 8?

- Article 8 of the Energy Efficiency Directive relates to energy audits and energy management systems.
- Under Article 8, Member States must:
  - Promote and ensure the use of high quality, cost effective energy audits and energy management systems to all final customers.
  - Mandate that large enterprises undertake energy audits (or equivalent) at least every four years.
  - Promote energy audits and energy management systems to SMEs.

Who is affected by Article 8?

- Large enterprises are defined as those that are not SMEs.

The definition of an SME is an enterprise with < 250 employees and a turnover of ≤ EUR 50m, or a balance sheet of ≤ EUR 43m.

- Large enterprises had to conduct their first set of audits by 5th December 2015. The next deadline is 5th December 2019.
- SMEs are not mandated to take any action, but Member States are required to ensure that initiatives are in place to promote SME energy efficiency.

Implementation requirements

- Member States have a degree of liberty in how they implement Article 8, provided that their national transposition fulfils the minimum requirements of the Energy Efficiency Directive.
- Companies must calculate their total energy consumption.
- Audits must examine energy use across buildings, transport and industrial activities.

Implementation requirements – audit checklist

Audits must:

- ✓ *Be based on up to date, measured, traceable data on energy consumption.*
- ✓ *Comprise a detailed review of energy consumption profile.*
- ✓ *Build, where possible, on life cycle cost analysis instead of simple payback.*
- ✓ *Be proportionate and sufficiently representative to draw a reliable picture of energy use and identify opportunities for improvement.*

Alternative routes for compliance

- As an alternative route for compliance with Article 8, Member States can allow energy audits to be conducted within the framework of an energy management system.
- The implementation of this aspect varies between Member States, but the most common route is certification to the ISO 50001 energy management system.

Reporting and implementation

- Reporting requirements for large enterprises vary between Member States, and range from a simple notification of compliance to a requirement to report on progress against audit actions.
- The majority of Member States require companies to proactively submit information on their energy audits to a regulating body. In few (Germany, Greece and the Netherlands) companies need only submit this information upon request.
- Article 8 does not obligate Member States to require companies to implement the measures identified through the audits.

National implementation for large enterprises – qualification

- Most Member States have used the EU's definition of a non-SME to define the qualifying group of companies.

A few have broadened their target group beyond the minimum requirements

Bulgaria, Ireland, Romania and Italy have set thresholds for energy consumption, above which companies are required to comply with auditing legislation.

Some have chosen to exempt certain companies

Denmark, Malta and Romania exclude companies with annual energy consumption below a minimum threshold.

In Portugal, audits are only undertaken where they can be shown to be financially viable.

Denmark exempts companies participating in voluntary energy efficiency programmes.

The UK and Germany exempt public bodies.

National implementation for large enterprises – audit coverage

- There are differences in the way that boundaries are defined for multi-national companies.
  - In some Member States, companies must include all international operations (UK, Finland, Denmark and Germany). Others such as Greece and Italy, specify that only energy consumed within national borders should be considered.
  - Many Member States have set minimum thresholds for the proportion of total energy use that must be covered. In the UK and Germany this is 90%. Finland requires that 95% of total energy use is covered.
  - Many Member States have allowed a sampling approach to audits. Companies with a large number of similar sites can audit a representative sample.
- In all cases audits must be representative of overall energy performance.

National implementation for large enterprises

Auditors

- The majority of Member States allow the use of in-house auditors.
- In-house auditors must be independent of the process or activity that they are assessing.

Penalties

- The Energy Efficiency Directive requires that Member States set out penalties for non-compliance with Article 8.
- The penalties that have been introduced are largely financial and range in scale from EUR 10,000 to EUR 200,000.
- Most Member States intend to carry out spot checks of company audits, to enforce compliance.

Promotion of energy audits and management in SMEs

- Member States are required to encourage SMEs to undertake energy audits and to implement the associated recommendations.
  - This involves addressing issues such as limited staffing and financial resources.
- There are currently around 50 policy instruments in place across Europe, which address energy efficiency in SMEs.
  - The number and type of measures implemented varies widely across the MS.
- Just under a third of Member States have voluntary energy efficiency programmes in place, that include SMEs.
  - Companies signing up to these are incentivised to conduct energy audits.

Promotion of energy audits and management in SMEs

- Over half of Member States have put in place financial measures which promote energy efficiency in SMEs.
  - An example of this is the German SME Energy Consulting Programme.
  - This provides funding support for energy audits and implementation of efficiency measures.

- The provision of information based support to SMEs is common.
  - This includes measures such as training, websites, helplines and knowledge sharing platforms.
  - These are often linked to funding support schemes.

Anna-Liisa Kaar & Rebecca Turner

anna-liisa.kaar@ricardo.com & rebecca.turner@ricardo.com