

ENERGY AUDITS

(AND ENERGY

MANAGEMENT

SYSTEMS) UNDER

THE EED

Energy Efficiency Coordination Group Energy Community Vienna, 28 June 2017

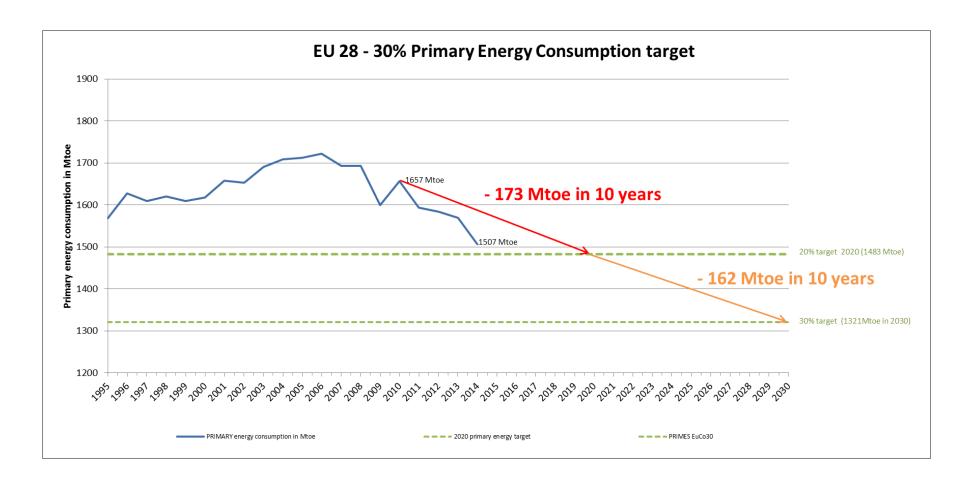




THE CONTEXT

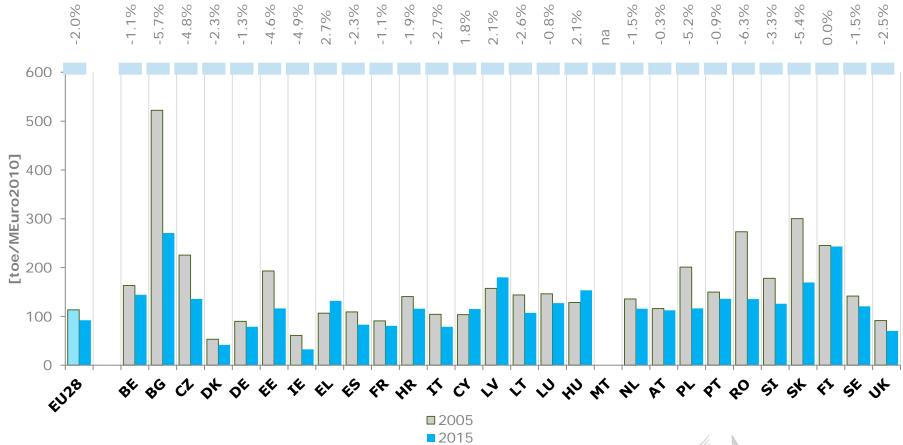


Keeping the effort



EE3: Final energy intensity in industry

average annual change 2005 - 2015 [%]



Source: European Commission based on Eurostat data





ARTICLE 8 OF THE ENERGY EFFICIENCY DIRECTIVE



Energy Efficiency Directive 2012/27/EU

Article 3: National energy efficiency targets

Article 4: Long term building renovation strategies

Article 5: Renovation of central government buildings

Article 6: Public procurement

Article 7: Energy efficiency obligations (or alternatives)

Article 8: Energy audits and energy management systems

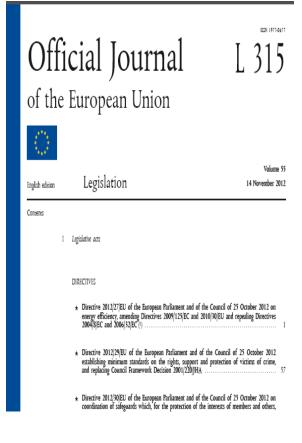
Articles 9-11: Smart metering and billing

Article 14: CHP and district heating and cooling

Article 15: Energy efficiency in grids and demand response

Article 16-17: Qualification, training and information

Article 18: Energy service markets





Major requirements

Member States shall:

- §1: **Promote** the availability to all final customers of cost-effective, independent and supervised high quality **energy audits**.
- §2: Develop programmes to **encourage SMEs** to undergo energy audits and the subsequent implementation of the recommendations from these audits.
- § 3: Also develop programmes to **raise awareness** among households about the benefits of such audits through appropriate advice services.
- §4-7: **Ensure** that **non-SMEs** are subject to an **energy audit** (first audit until 5 December 2015, thereafter every four years) based on minimum criteria (Annex VI) **or** they may implement an energy or environmental **management system** (which includes an audit).



The legislative framework



requirements for audits (Annex VI)

Mandatory requirements for large enterprises

Encouragement of SMEs

Article 8

Minimum

Monitoring, verification and penalties Encouragement of ISO 50001 and 140001

Qualification of energy auditors



Mandatory requirements for large enterprises

- Energy audits every four years (first by December 2015).
- Applies to all sectors, not only industry, but also services.
 Harmonised definition of large enterprises based on a EU definition of SMEs (Commission Recommendation 2003/361/EC of 6 May 2003).

Only one exemption:

 Enterprises having in place an Energy or Environmental Management Systems (ISO 50001).



Lesson learnt from EU implementation: Important to establish a national registry of large companies.



An overview of the SME identification process

Step 1. Am I an enterprise?

Step 2. Which criteria need to be checked and what are the thresholds?

Step 3. What do these criteria cover?

Step 4. How do I calculate these data?

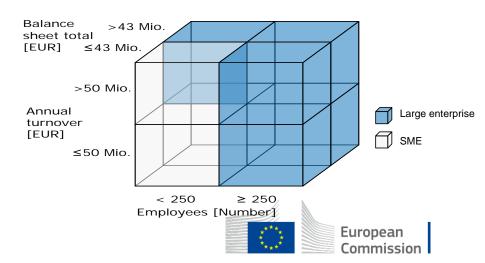
http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en



Large companies: Definition of a non-SME

Employees	Turnover	Balance Sheet Total	Outcome	Reason						
< 250	≤ €50m	≤ €43m	SME	Meets all criteria						
< 250	≤ €50m	> €43m	SME	Meets main and one secondary criteria						
< 250	> €50m	≤ €43m	SME	Meets main and one secondary criteria						
< 250	> €50m	> €43m	Large	Only meets primary criteria						
≥ 250	≤ €50m	≤ €43m	Large	Does not meet primary criteria						
≥ 250	≤ €50m	> €43m	Large	Does not meet primary criteria						
≥ 250	> €50m	≤ €43m	Large	Does not meet primary criteria						
≥ 250	> €50m	> €43m	Large	Does not meet any criteria						

EU Definition



Note: Illustration focuses on the three main criteria. It does not take into account partner or linked companies.

Instruments addressing SMEs across the EU28

Financial instruments



Regulatory instruments*



Information instruments



Voluntary agreements



Energy audits:

Austria, Bulgaria, Croatia, Denmark, France, Germany, Italy, Luxembourg, Malta, Poland, Portugal, Slovakia and Sweden

Energy management systems:

Austria, France, Germany, Luxembourg, Malta, Spain and Sweden

Energy audits:

Bulgaria, Croatia, Czech Republic, Ireland, Italy, Luxembourg, Portugal, Romania, Romania and Slovenia

Energy management systems:

None

Energy audits:

Belgium (Flanders) and Germany

Energy management systems:

Belgium (Flanders), Denmark and Sweden

Energy audits:

Bulgaria, Finland, Malta** and the Netherlands

Energy management systems:

Denmark, Finland and the United Kingdom



Minimum requirements for audits (Annex VI)

- High-quality energy audits.
- Cost-effective energy audits.
- Up-to-date, measured and traceable data.
- Life-cycle cost analysis.
- Proportionate and representative audits.
- Detailed and validated calculations.



Lesson learnt from EU implementation: need for a dedicated Guidance document for enterprises with clear methodologies and examples to implement these principles (beyond primary legislation transposing Article 8).



Auditors qualifications

(Example for some countries, updated December 2015)

	IE	IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	SP	SE	UK
Art 8 transposed	√	√	X	×	X	√	√	×	√	✓	√	√	X	√	√
Accreditation scheme	√	√	√	√	√	√	X	_	√	√	✓	√	X	√	√
Mandatory training (might include an exam)	√	√	×	√	√	√	×	-	×	conditions apply	√	√	_	×	×
Energy auditors register	√	√	√	√	√	√	×	_	√	√	n/a	n/a	_	n/a	√
Mutual recognition	×	√	n/a	n/a	n/a	×	√	n/a	×	conditions apply	n/a	n/a	√	√	X



Lesson learnt from EU implementation: training and accreditations schemes are essential to ensure high quality service. A public registry needs to be kept up to date





NEXT STEPS



A new Guidance Document on Article 8



Aim:

Prepare Guidelines for the application of the criteria on cost-effectiveness, proportionality and representativeness of energy audits -> make audits more cost-effective.



Process:

Member State authorities involved through the EED Committee.

Update of the existing Guidance document to be adopted by the European Commission.

Approach:

Guidance prepared on the basis of best practice in auditing, proposing voluntary methodologies, focus on small sites with law energy consumptions and multi-site and multi-national companies.



Next steps

- Complete the work on the Guidance document (next round of audits in 2019).
- Non-conformity checks of national implementation of the EED.
- Overall evaluation of energy audits provisions (several studies already ongoing at national level in AT, DE, DK, IT, UK, etc.).



Further information

- Implementation of Article 8 of the EED:
 https://ec.europa.eu/energy/sites/ener/files/documents/EED-Art8-Implementation-Study_Task12_Report_FINAL-approved.pdf
- Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (notified under document number C(2003) 1422), OJ L 124, 20.5.2003 (2003/361/EC).
- (Existing) Guidance note on Article 8: <a href="http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52013\$C0447
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