

EED ARTICLE 8

Best practices in Member States' implementation of the Energy Efficiency Directive Article 8 PRELIMINARY RESULTS

EU Sustainable Energy Week - Policy Conference - 17 June 2015

Anke BREMS – DNV GL



EU EED Article 8 – Energy audits and energy management systems

- Promote availability to all final customers of high-quality, cost-effective energy audits:
 - Carried out independently by qualified and/or accredited experts
 - Internal or external auditors allowed
 - Minimum energy audit criteria according to Annex VI
- Develop programmes to encourage SMEs to undergo energy audits and implement resulting recommendations, and to raise awareness among households about the benefits of energy audits



EU EED Article 8 – Energy audits and energy management systems

- Mandatory energy audits for non-SMEs:
 - 4-yearly, first on by 5 December 2015
 - Exemption for certified energy of environmental management system (according to relevant European or international standards), provided that it includes an energy audit meeting the minimum criteria
 - Audits may stand alone or be part of a broader environmental audit
 - Incentives or support schemes for implementing audit recommendations are allowed, provided that they do not interfere with the Union State Aid Law



Implementation of EED Article 8 into national legislation*

Only limited amount of Member States have published updated national legislation to include implementation of EED Article 8:

- Austria
- Belgium – Flanders
- Cyprus
- Denmark
- Finland
- France
- Germany
- Italy
- Malta
- Portugal
- Sweden
- UK

* Preliminary analysis – based on information available at 17 June 2015



Large enterprise – European definition

- Commission Recommendation of 6 May 2003 concerning the definition of **micro, small and medium-sized enterprises** (2003/361/EC), Annex, Title 1, Article 2
*"The category of micro, small and medium enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons **AND** which have an annual turnover not exceeding 50 million Euros **AND/OR** an annual balance sheet total not exceeding 43 million Euros."*
- Definition of **large enterprise** can be deducted:
*"A large enterprise can be defined as an enterprise employing at least 250 persons **OR** having an annual turnover exceeding 50 million Euros **AND** an annual balance sheet total exceeding 43 million Euros."*

Large enterprise – definitions in different Member States*

| Member State | # employees | AND/OR | Annual turnover | AND/OR | Annual balance sheet |
|---------------|-------------|--------|-----------------|--------|----------------------|
| EU | ≥ 250 | OR | > €50 million | AND | > €43 million |
| Austria | ≥ 250 | OR | > €50 million | AND | > €43 million |
| Flanders (BE) | > 250 | OR | > €50 million | OR | > €43 million |
| France | > 250 | OR | > €50 million | OR | > €43 million |
| Germany | ≥ 250 | OR | > €50 million | AND | > €43 million |
| Italy | ≥ 250 | OR | > €50 million | AND | > €43 million |
| Malta | ≥ 250 | OR | > €50 million | AND | > €43 million |
| Spain | > 250 | AND | > €50 million | OR | > €43 million |
| Sweden | ≥ 250 | AND | > €50 million | OR | > €43 million |
| UK | ≥ 250 | OR | > €50 million | AND | > €43 million |

* Preliminary analysis – based on information available at 17 June 2015

Exemption from energy audit obligation – Management systems

- In general, ISO 50001 is allowed as compliance route, but Member States apply different deadlines to ISO 50001 implementation:
 - Most Member States: 5 December 2015
 - Germany: 5 December 2016
 - Ireland: implementation process to start before 5 December 2015
- Environmental management systems are not allowed as compliance route in every Member States:
 - UK: ISO 14001 under strict requirements
 - Belgium – Flanders: no compliance with an environmental management system



Exemption from energy audit obligation – Voluntary agreements

- Voluntary agreements only available in a few Member States
- Belgium:
 - EnergieBeleidsOvereenkomst EBO Flanders
 - Accords de Branche AdB Wallonia (cfr. presentation Jean-Benoit Verbeke – Pirotech)
- Netherlands:
 - MeerJarenAfspraak MJA
 - Meerjarenafspraken Energie-efficiëntie ETS ondernemingen MEE
- Austria:
 - EntsorgungsfachBetriebe EFB and Responsible Care Companies

Voluntary agreement – EBO Flanders (Belgium)

- Participating companies are committed to carry out 4-yearly energy audits and develop an energy plan based on the audit results
- Every economically feasible measure needs to be implemented: $IRR \geq 12.5\%$ for non-EU ETS companies, $IRR \geq 14\%$ for EU ETS companies
- Annual reporting to the Verification Office on implemented measures, studies of potentially economic measures, energy use, CO₂ emissions
- Feasibility study on CHP and cooling/heating networks
- Mandatory implementation of ISO 50001 or other energy management measures within 3 years
- In return: no additional energy or CO₂ taxes, no extra energy efficiency or emissions reduction targets

Voluntary agreement – MJA3 and MEE Netherlands

- Participating companies need to develop, implement and annually report on an energy efficiency plan
- Defined cost-effective measures need to be implemented
- Mandatory implementation of an energy management system according to the “Reference Energy Management” (ISO 50001 suggested) within 3 years
- Potential (random sample) audit of the energy management system, unless companies have a certified ISO 14001 in place (including an energy audit)
- In return: no additional regulations regarding energy efficiency or CO₂ emissions reductions are imposed

Voluntary agreement – EFB and Responsible Care Austria

- EFB = EntsorgungsfachBetriebe = Waste Management Companies:
 - Companies that collect, transport, sort, store, use or otherwise deal with waste
 - EFBs are required to develop a report including an environmental policy and a description of an environmental management system
 - Annual update and verification by EMAS auditor required
- Responsible Care Companies:
 - Voluntary agreement with the chemical industry to improve the health, safety and environmental situation in the sector
 - Companies that meet the requirements (energy, safety, environment, employee protection, etc.) are awarded a 3-year certificate
 - Companies with different sites need to pass separate checks for each individual site



“De minimis” energy audit requirement

- Several Member States (e.g. UK, Germany, Malta, Latvia, Denmark and Austria):
 - Up to 10% of total energy consumption can be excluded from the energy audit obligation

- Some Member States take a different approach:
 - France: allowable exclusion up to 35% during the first compliance phase, falling back to up to 20% thereafter
 - Ireland: allowable exclusion up to 30%
 - Italy: allowable exclusion up to 20% (for sites consuming less than 100 toe)
 - Spain: allowable exclusion up to 15%

Representative energy audit sampling

- Organisations with a large number of similar operations may use a sampling approach
- Different Member States apply different definitions of “representative sample”:
 - France: square root of total number of sites rounded to closest integer, only for buildings and fleet, not allowed for industrial processes, at least 25% of the sample needs to be selected randomly
 - Germany: square root of total number of sites rounded to closest higher integer, applicable for buildings and fleet but also for industrial processes
 - Italy: recommended sampling sizes based on total energy consumed
 - UK: no official definition, lead assessor and organisation to decide on suitable approach and report on it in evidence pack
 - Bulgaria: no sampling allowed

Energy auditor qualification

- Many Member States have accreditation registers
 - Austria, UK: auditors must be accredited in public registers
 - Ireland: expected that UK accredited auditors can also perform audits in Ireland
- Most energy auditors are either specialised in industrial processes and buildings, but there is a lack of available qualified auditors for transport
- Most of these registers do not differentiate in the type of auditors
- Best practice example in Cyprus:
 - Auditor accreditation process in 3 categories
 - Differentiation between buildings, industry and transport
 - EED compliant audits must be carried out by auditor accredited in the right category
 - Ensures high-quality audits
 - Might result in companies requiring multiple auditors

Energy audits and energy management systems for SMEs



- SPICE³ = Sectoral Platform in Chemical Energy Efficiency Excellence:
 - Co-funded by the European Commission
 - Aim: boost energy efficiency across European chemical industry, particularly in SMEs
 - Cfr. Presentation Lieven Stalmans (Borealis)

- PINE = Promoting Industrial Energy Efficiency:
 - Co-funded by the EU Intelligent Energy Europe Programme
 - Focus: increasing energy efficiency in industrial SMEs
 - Technical partners and stakeholders (energy agencies, research institutions, chambers of commerce, etc.) in Austria, Bulgaria, Cyprus, Italy, Romania, Slovakia and Spain
 - Objectives: helping SMEs to implement cost-effective measures, building a self-financing network to foster investments in highly energy-efficient equipment and machinery, developing auditing procedures and tools, and providing auditor training



VISIT OUR PROJECT WEBSITE AT
www.energy-audits-and-management.eu

Anke Brems

anke.brems@dnvgl.com

www.dnvgl.com

SAFER, SMARTER, GREENER