

Overview of the Energy Efficiency Directive (EED)

Workshop on Articles 7, 8 and 16 of the European Union Energy Efficiency Directive (EED) with focus on industry



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Austrian Energy Agency (AEA)

Gregor Thenius | 5th June 2018, Tbilisi

The EED

Energy Efficiency Directive (EED)

Directive 2012/27/EU

- Repeals Directives 2004/8/EG (Combined Heat and Power) and 2006/32/EG (Energy Services Directive)
- Changes Directives 2009/125/EG (Ecodesign) and 2010/30/EU (Labelling)
- In force since 5th December 2012

EED is one of the 4 pillars in EU energy efficiency legislation

- Energy Efficiency Directive (EED)
- Energy Performance of Buildings Directive (EPBD)
- Ecodesign Directive
- Labelling Directive



EED – Most Important Messages

- Current efforts will not secure the achievement of EU 2020 energy efficiency targets (20% reduction of energy consumption as compared to the PRIMES 2007 business-as-usual scenario)
- Additional and mandatory measures are needed
- More quantitative and binding targets
- More concrete measures and requirements
- Sanctions in case of non-compliance



EED – Content

Efficiency in Energy Use

Article 3	Energy efficiency targets
Article 4	Building renovation
Article 5	Exemplary role of public bodies' buildings
Article 6	Purchasing by public bodies
Article 7	Energy efficiency obligation schemes
Article 8	Energy audits and energy management systems
Article 9	Metering
Article 10	Billing information
Article 11	Cost of access to metering and billing information
Article 12	Consumer information and empowering programme
Article 13	Penalties



EED – Content

Efficiency in Energy Supply

- Article 14 Promotion of efficiency in heating and cooling
- Article 15 Energy transformation, transmission and distribution

Horizontal Provisions

- Article 16 Availability of qualification, accreditation and certification schemes
- Article 17 Information and training
- Article 18 Energy services
- Article 19 Other measures to promote energy efficiency
- Article 20 Energy efficiency national fund, Financing and technical support



Energy Efficiency Target (Art 3)

Indicative national energy efficiency target 2020

Primary or final
energy
consumption

or

Primary or final
energy savings

or

Energy intensity

In any case expressed in primary and final energy consumption in the year 2020

EU 20% reduction target has to be taken into account (20% reduction of energy consumption as compared to the PRIMES 2007 business-as-usual scenario)

European Commission evaluates the national targets



Building renovation and public procurement (Art 4 and 6)

- **Long-term strategy** for the mobilisation of investment to refurbish the national building stock (public and private)
 - Overview of national building stock
 - Identification of cost-effective refurbishment potentials
 - Strategies and measures for triggering refurbishment of buildings
 - Future oriented perspective (long-term)
 - Assessment of expected savings and other benefits
 - First version by 30.4.2014, then every 3 years
 - JRC report on the Long-term strategies in Member States:
http://publications.jrc.ec.europa.eu/repository/bitstream/JRC97754/syntesis%20report%20building%20renovation%20strategies_online%20fin.pdf
- Central government purchases only products, services and buildings with high energy efficiency



Public buildings (Art 5)

- 3% refurbishment rate
 - Buildings owned and occupied by central government
 - Floor area over 500m², as from 9.7.2015 floor area over 250m²
 - Buildings that do not meet the national minimum requirements according to the EPBD
 - The following building categories can be excluded: (1) with special architectural or historical merit, (2) serving national defense purposes, (3) for religious activities
- Inventory of buildings
 - Floor area in m²
 - Energy performance
- Alternative
 - Same amount of savings through other cost-effective measures in buildings



Energy efficiency obligation schemes (Art 7)

- Obligated: Distributors or retail energy sales companies
- Annual new savings of 1.5% of previous annual energy sales to final customers
- Measures at final customers (installation of efficient technologies, advice...)
- Penalties in case of non-compliance

BUT

- **Alternatives to obligation scheme** possible
- Equivalent savings as in an obligations scheme have to be achieved
- Taxes, subsidies, standards, labelling schemes, voluntary agreements...



Energy audits and energy management systems (Art 8)

- Audit obligation for non-SMEs
 - Obligation to undergo an energy audit until 5.12.2015, after that every 4 years
 - Cost-effective, independent, qualified and/or accredited experts
 - Minimum quality criteria (Annex VI)
 - Supervised by independent authorities
 - Companies that are implementing an energy or environmental management system are exempted from the audit obligation
- Member States implement programmes to encourage SMEs and households to undergo energy audits
- Challenges in implementation of audit obligation
 - Definition of non-SME
 - Treatment of multi-nationals
 - International transport (aviation , maritime)
 - Proportionality, representativeness

Promotion of efficiency in heating and cooling (Art 14)

Main obligations:

- Prepare comprehensive assessment of the potential for high-efficiency cogeneration and efficient district heating and cooling
- Take adequate measures where there is a potential with cost benefit surplus
- Adopt policies for local and regional levels to encourage the due taking into account of potential
- Adopt authorisation/permit criteria to ensure
 - individual installations carry out cost-benefit analysis
 - outcome of comprehensive assessment and the CBA are reflected
- Notify exemptions
- Guarantee the origin of high efficient (HE) CHP
- Report annually and in NEEAP

Availability of qualification, accreditation and certification schemes (Art 16)



- To ensure technical competence, objectivity and reliability
- Implementation of qualification and/or accreditation and/or certification schemes

For:

- Providers of energy services
- Energy auditors
- Energy managers
- Installers



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Energy services (Art 18)

Promote the energy services market and access for SMEs to this market:

- Disseminate information on energy service contracts and clauses, on financial instruments, incentives, grants and loans
- Encourage the development of quality labels
- List of available energy service providers in accordance with Article 16
- Support the public sector in taking up energy service offers, in particular for building refurbishment, by: providing model contracts and best practices
- Qualitative review in the NEEAP regarding energy services market.

Support the proper functioning of the energy services market:

- Identify and publish point(s) of contact for information
- Remove the regulatory and non-regulatory barriers
- Consider putting in place or assigning the role of an independent mechanism, such as an ombudsman
- Enable independent market intermediaries



EED wrap-up: Mandatory measures

- 3% refurbishment rate public buildings Art. 5:
 - Refurbishment of buildings owned and occupied by the central government
- Energy efficiency obligation scheme Art. 7:
 - annual 1.5% energy savings
 - Energy distributors/providers or alternative measures
- Mandatory regular energy audits Art. 8:
 - For non-SME
 - minimum criteria to be defined
- Penalties
 - Effective, proportionate and dissuasive

Summary

From ESD to EED

ESD – 2006/32/EC

EED – 2012/27/EU

Duration

2008 - 2016

2014 - 2020

Targets

- 9% in 2016
- Interim target for 2010
- Basis: Final energy consumption excluding consumption of companies subject to the Emission Trading Scheme and military
- Average 2001 – 2005
- indicative

- absolute value of primary and final energy consumption in 2020
- EU 20% reduction target has to be taken into account
- Evaluation by Commission until 30 June 2014
- indicative

Financial sanctions

➤ None

➤ Have to be defined



ESD – 2006/32/EC

EED – 2012/27/EU

Requirements for the public sector

- Exemplary role
- implement at least two measures concerning public procurement (Annex VI of the Directive)
- Exchange of best-practices, capacity building

- Procurement: only products, services and buildings with high energy efficiency
- Public buildings:
 - from 1.1.2014 min. 3% p.a. refurbishment rate
 - Basis: central government buildings > 500m², from June 2015 > 250m²
 - Alternative measures to achieve same amount of savings
- Public inventory of public buildings
- Energy efficiency plan with saving targets
- Introduction of energy management



ESD – 2006/32/EC

EED – 2012/27/EU

Requirements for energy distributors and energy providers

- Provide data and information for energy efficiency programmes
- Refrain from measures that impede energy efficiency gains
- Offer to customers
 - Energy services
 - Energy audits
 - or participate in energy efficiency funds or other financing instruments
- Voluntary agreements possible

- Obligation: Realise savings at customers that amount to 1,5% of energy sales
- Saving target can be expressed in primary or final energy
- Annual publication of companies savings
- Alternative to obligation is possible, but has to achieve same amount of savings

ESD – 2006/32/EC

EED – 2012/27/EU

Energy audits and energy management

- Secure availability of energy audits
- Focus on small consumers

- Obligation for large companies (non SME) to conduct an energy audit every four years
- Or implement an energy management system (equivalent)

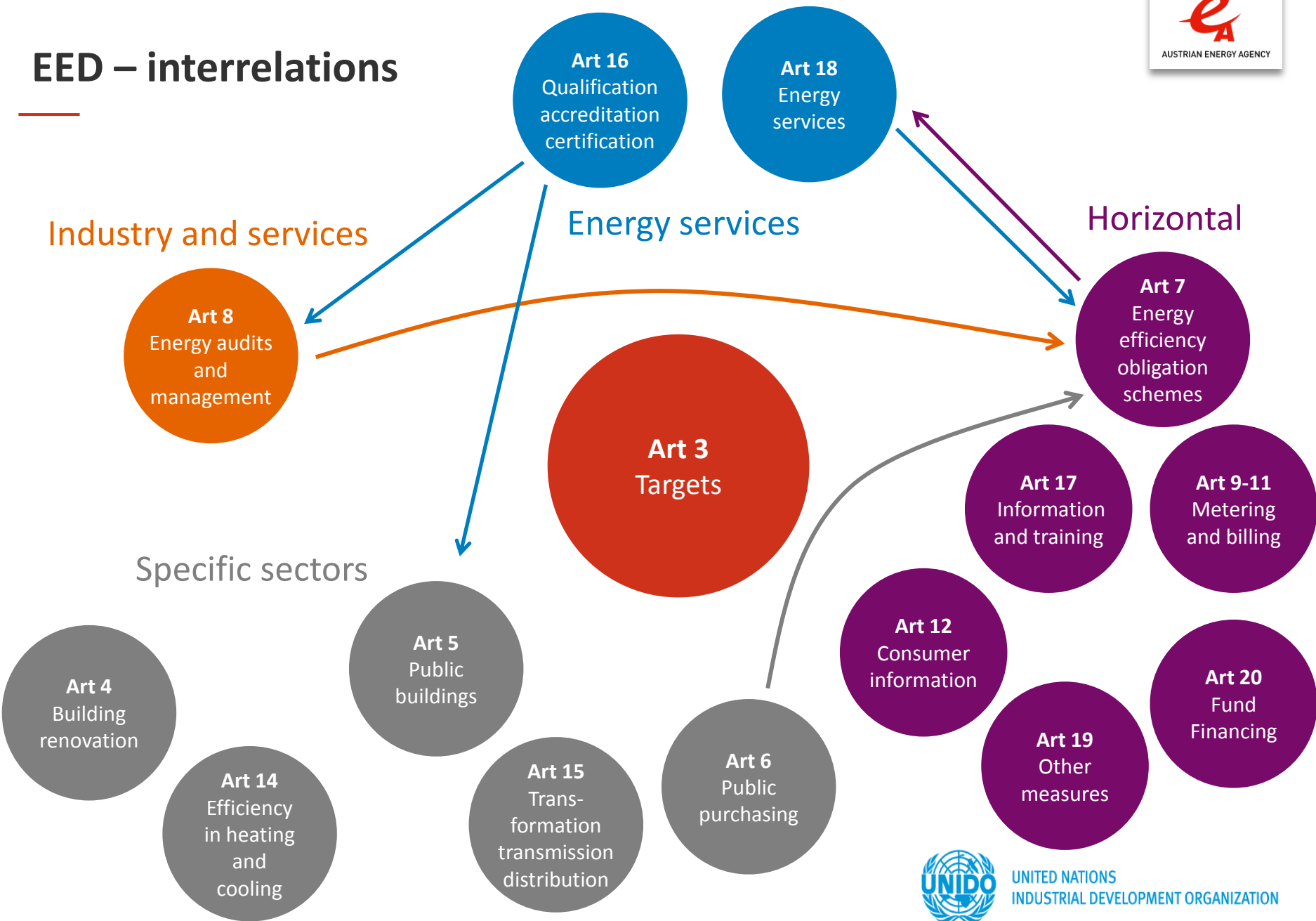
Reporting

- National Energy Efficiency Action Plans of Member States:
 - 30.6.2007
 - 30.6.2011
 - 30.6.2014

- Each year 30.4. : annual progress report
- 30.4.2014, then every three years National Energy Efficiency Action Plans of Member States
- 30.6.2018 report of the European Commission on possible additional measures



EED – interrelations



Contact

Gregor Thenius
Energy Policy Expert

Österreichische Energieagentur - Austrian Energy Agency

gregor.thenius@energyagency.at

Tel +43 (0)1 586 15 24 - 145

Mariahilfer Straße 136 | 1150 Vienna | Austria

www.energyagency.at

 @at_AEA



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