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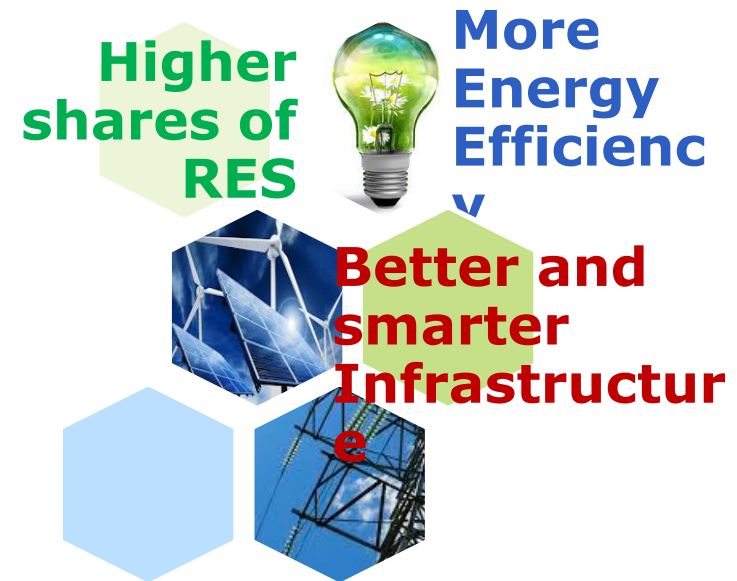
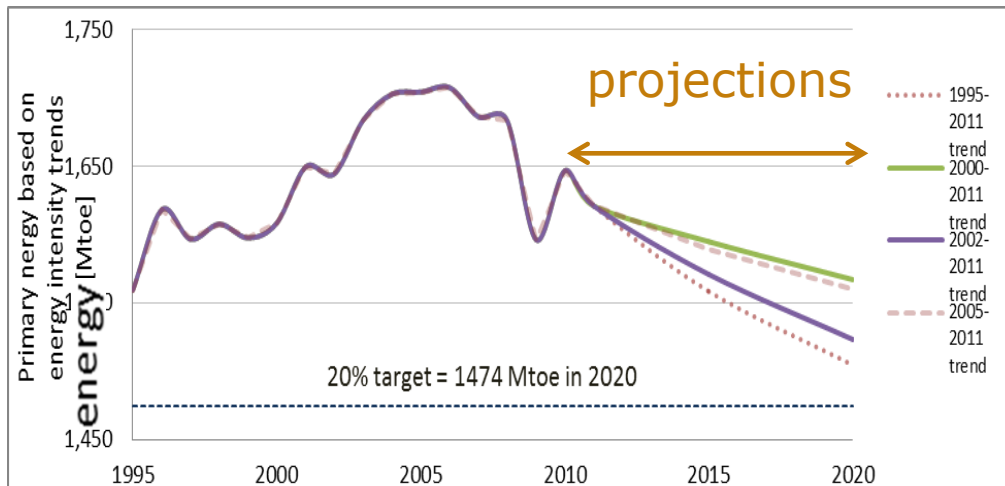
Examples of Regional Energy Efficiency Policies and the Use of Standards in Support of Policy Development and Implementation

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***Eva Hoos, Unit Energy Efficiency
Directorate-General for Energy
European Commission***

Wider EE Policy Context

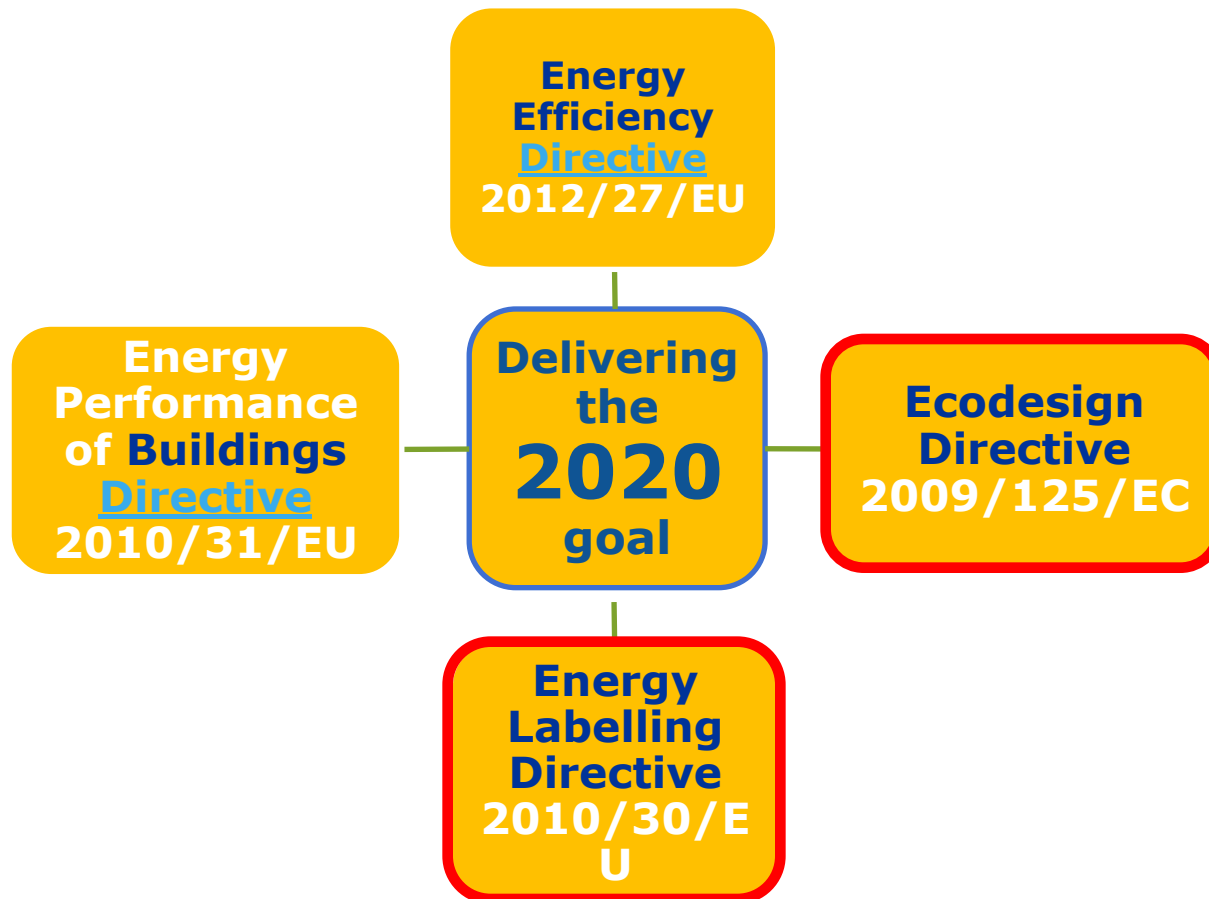
- Good progress towards the **2020** EE target → Review due in **2014**



- **2030** debate ongoing

- EE: no regret options Energy Roadmap **2050**

The legal framework of the EU energy efficiency policy



Standards in EU Energy Efficiency Legislation



- **Eco-design, Energy Labelling Directives**
 - » Harmonised standards
 - » Reference published in OJ
 - » Compliance – presumption of conformity
- **Energy Performance of Buildings Directive**
 - » Calculation methodology for the energy performance of building to take into account European Standards
- **Energy Efficiency Directive:**
 - » Energy audits to take into account EU, Int. standards
 - » Mandatory energy audits – guidance and/or compliance path through ISO and EN standards (EN ISO 50001, 14000; EN 16247-1)

Examples: EU Eco-design framework



- The Ecodesign mandate M/495 (27 July 2011, accepted by CEN/CNL on 9 November 2011) or product specific mandates
- CEN Work-Program
- Harmonised standards for products published in OJ
 - Example: Commission communication 2013/C 355/04, 5.12.2013 - EN 60456:2011 Clothes washing machines for household use — Methods for measuring the performance IEC 60456:2010 (Modified)
- Standards on measurement of eco-design requirements of products set by EU legislation
- Compliance measured according to harmonised EU standards creates presumption of conformity with eco-design requirements
- Implementation tools of eco-design requirements for producers and market surveillance authorities
- Internal market harmonisation

Example: Energy Performance of Buildings



- Mandate M/480 – establishes a set of standards for the calculation methodology of the energy performance of buildings
- Overarching Standard EPBD: prEN 15603
- Many specific standards
- Common calculation framework, consistency, transparency (->reliability energy performance certification)
- Flexibility: different building types, purposes (certification, compliance, Nearly zero-energy buildings), national and climatic conditions
- Internal market: more integration
- Global standards harmonisation (CEN standards could be taken up at ISO level)

Energy Efficiency Directive: Audits (Art.8)



- Promotion of audits for SME, Households
- Mandatory 4-yearly audits for large enterprises (all sectors) – 1st audits by 5 December 2015
- Minimum quality criteria (Annex VI)
- Qualification, certification for auditors
- Supervision by Member States
- EN, ISO standards on energy and environmental management system may exempt, if energy audits on the basis of minimum criteria are included
- Relevant EN, ISO standards may be used as guidance



Scope of an energy audit

- **Buildings or groups of buildings**
- **Industrial operations or installations**
- **Transportation**

Criteria

- » **Representative**
- » **Reliable**
- » **Based on measured, traceable operational data**
- » **Build when possible on LCCA**

Annex VI

Minimum criteria



The energy audits referred to in Article 8 shall be based on the following guidelines:

- (a) be up-to-date, measured, traceable operational data on energy consumption and (for electricity) load profiles;
- (b) comprise a detailed review of the energy consumption profile of buildings or groups of buildings, industrial operations or installations, including transportation;
- (c) build, whenever possible, in life-cycle cost analysis (LCCA) instead of Simple Payback Periods (SPP) in order to take account of long-term savings, residual values of long-term investments and discount rates;
- (d) be proportionate, and sufficiently representative to permit the drawing of a reliable picture of overall energy performance and the reliable identification of the most significant opportunities for improvement.

Energy audits shall allow detailed and validated calculations for the proposed measures so as to provide clear information on potential savings.

The data used in energy audits shall be storable for historical analysis and tracking performance.

Relevant EN, ISO standards for Article 8



- M/479 – mandate for energy audits (13 December 2010)
- General part and sectoral parts on buildings, processes, transport, energy auditors
- EN 16247-1, 2, 3, 4, 5,
- Challenges: ensure alignment with Annex VI
- ISO 50002 (alignment with EN 16247-1), ISO 50001, ISO 14000
- Benefits: harmonisation through informing national minimum criteria; internal market, regulatory certainty, global competitiveness

Conclusions



- Standard are an important implementation tools for EU energy efficiency legislation
- Certainty, Flexibility, Guidance
- Internal market: harmonisation, support of compliance with requirements, reduced risk
- Link between EU and global markets
- Enterprises' competitiveness

More at:

http://ec.europa.eu/energy/efficiency/eed/eed_en.htm

**Thank you for
your attention!**



Eva Hoos

+32 2 295 1894

Eva.Hoos@ec.europa.eu