EU Energy policy

EUROSAI WGEA
Spring session on Auditing Energy Issues

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Source: Directorate-General for Energy
Agenda

1. Cornerstones of EU policy:
   • the 2020 and 2030 frameworks
   • European Energy Union
   • Towards the Paris Protocol (UNFCCC)

2. Energy Efficiency framework

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2030 Framework for Climate and Energy

New governance system + indicators

2020
-20% Greenhouse Gas Emissions
20% Renewable Energy
20% Energy Efficiency
10% Interconnection

2030
≤ - 40% Greenhouse Gas Emissions
≥ 27% Renewable Energy
≥ 27%* Energy Efficiency
15% Interconnection

* To be reviewed by 2020, having in mind an EU level of 30%
Energy in the EU: Results achieved

- **Greenhouse gas** emissions fell **ca 19%** (1990-2013)
- **Energy efficiency** savings: **15.5 %** (2013)
- Share of **Renewables**: **15.0%** (2013)
- European renewable energy businesses have a combined annual turnover of €129 billion, **employing over 1 million people**

**to be improved**

- EU: the **largest energy importer** in the world
- **Competitiveness** of energy prices (higher than in the US)
- Internal energy market **not yet completed**
- 12 Member States still **insufficiently connected**
- **Transparency** of gas markets
- **Overdependence** on single supplier

*Source: Directorate-General for Energy*
2030 Framework: Key indicators

- Energy price differentials
- Diversification imports, share of indigenous energy
- Smart grids & connections between Member States
- Intra-EU coupling energy markets
- Competition and market concentration
- Technological innovation
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I want to reform and reorganise Europe’s energy policy in a new European Energy Union.

Jean Claude Juncker
The way towards:

The Energy Union

**Where** we want to go:
A secure, sustainable, competitive, affordable energy for every European

**What** this means:
- Energy security, solidarity and trust
- A fully integrated internal energy market
  - Energy efficiency first
- Transition to a long-lasting low-carbon society
- An Energy Union for Research, Innovation and Competitiveness

**How** we want to reach it:

- 5 **Guiding Dimensions**
- 15 **Concrete Actions**
- 43 **Initiatives**
1 Secure supplies
2 Internal energy market
3 Energy efficiency
4 Emissions reduction
5 Research & Innovation

Source: Directorate-General for Energy
1 Secure supplies

We have to become less dependent on energy from outside the EU

This means increasing transparency on gas supply; diversifying sources, supplies and routes; working together on security of supply and developing a stronger European role in global energy markets.
Secure supplies
Concrete actions

Revision of security of gas supply regulation

EU Energy and climate policy diplomacy and trade policy

Comprehensive LNG strategy

Revision of the Decision on Intergovernmental Agreements

Develop alternative suppliers, including Southern Gas Corridor and with the Mediterranean

Source: Directorate-General for Energy
Energy should flow freely across the EU – without any technical or regulatory barriers

This means connecting markets through interconnections and implementing and upgrading the internal market's software while enhancing regional cooperation and empowering consumers.
Internal energy market
Concrete actions

- Implementation of major infrastructure projects (PCIs)
- Energy Infrastructure Forum
- Legislation on security of supply for electricity
- European electricity market design
- Reinforced European regulatory framework
- Guidance on regional cooperation
- Analysis of Energy prices and costs
- Vulnerable consumers protection
3 | Energy efficiency

Rethink energy efficiency as an energy source in its own right

This means increasing energy efficiency, in particular in the building sector, and promoting an energy-efficient and decarbonized transport sector as well as efficient products.
Energy efficiency
Concrete actions

- Review the Energy Efficiency Directive
- Review the EPBD
- EU strategy for Heating and Cooling
- Strengthened financial instruments to support investments in energy efficiency
- Review the Energy Labelling and Ecodesign Directives

Source: Directorate-General for Energy
An ambitious climate policy is an integral part of our Energy Union.

The next challenge will be to enforce the 2030 energy and climate framework, while becoming the number one in renewables.
Emissions reduction
Concrete actions

Legislation to achieve the 40% GHG reduction target (both in ETS and non ETS)

Increased deployment of alternative fuels and clean vehicles

Renewable Energy Package: RES directive revision, best practices for self-consumption and support schemes

Comprehensive road transport package

Source: Directorate-General for Energy
5 Research & innovation

Developing EU technological leadership in low carbon technologies

This will reduce energy consumption, empower consumers, create huge industrial opportunities and boost growth and jobs.
Research & innovation
Concrete actions

- Initiative on EU global technology and innovation leadership
- Integrated SET Plan, including smart cities and smart financing
- Strategic transport research and innovation R&I agenda

Source: Directorate-General for Energy
The Commission will launch a dynamic governance process for the European Energy Union.

Successful implementation depends on the political commitment of all actors concerned, including EU institutions and Member States!
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Commission Communication
The Paris Protocol – a blueprint for tackling global climate change beyond 2020

**EU vision for the Paris protocol**
- Long term goal
- Fair, ambitious and legally binding mitigation commitments for all Parties
- Dynamism - 5 yearly reviews to increase ambition
- Robust common rules for transparency and accountability
- Climate resilient sustainable development
- Efficient and effective implementation and cooperation
The EU’s "intended nationally determined contribution"

- **Adopted by the Council & submitted to UNFCCC:**
  - Binding at least 40% domestic reduction in GHG emissions by 2030 compared to 1990
  - Absolute reduction from base year emissions
  - Economy wide, 100% of emissions
  - Policy on how to include Land Use, Land Use Change and Forestry will be established
  - Fair and ambitious
Strengthening transparency & accountability – signal on the agreed direction of travel to all stakeholders – including investors

- Protocol must set out robust rules on monitoring, reporting, verification and accounting
- Essential to provide confidence that each Party is implementing its commitments and is on track to meet its target
- Also crucial to build trust, encourage ambition, and to provide predictability and legal certainty
- System should be fit for the long term
- Sufficiently flexible to cater for a diverse range of commitment types, national capabilities and circumstances, without undermining transparency, accountability and ambition
Dynamism through regular upward review of ambition - aligning cycle with related UNFCCC processes
Three key political issues will pervade the negotiations throughout 2015:

**Differentiation – evolving landscape**
- Aim for economy-wide mitigation commitments by all, onus on major economies
- INDCs as a vehicle to apply CBDR-RC in a contemporary way

**Legal form and force**
- Robustness of the new regime
- Accountability, compliance and rules on MRV

**Balance**
- Reducing emissions central objective of the Convention
- The agreement will need to also deliver on "political parity"
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Framework energy efficiency policies

- Delivering the 2020 goals
- Energy Labelling Directive 2010/30/EU
- Ecodesign Directive 2009/125/EC
Energy efficiency instruments in buildings

- **EPBD**
  - Directive 2010/31/EU
  - National plans
  - Cost-optimum energy performance requirements

- **EED**
  - Directive 2012/27/EU
  - 3% renovation for central government
  - Nearly-zero energy
  - Long term renovation roadmaps

- **ED & ELD**
  - Directives 2009/125/EC 2010/30/EU
  - Energy performance of building products

- **New buildings**
  - Energy performance certification of buildings (EPCs)

- **Existing buildings**
  - Major renovation
  - Building elements
    - Envelope and technical systems

- **Issue, handover, quality control**

- **Display in public buildings**
Energy efficiency progress can be observed across all sectors:

The share of refrigerators meeting the highest energy efficiency labelling classes (A and above) increased from less than 5% in 1995 to more than 90% 15 years later.

EU industry improved its energy intensity by almost 19% between 2001 and 2011, compared with 9% in the US.

Between 1995 and 2010 the average consumption of new cars in the EU decreased by 27%.

New dwellings built today consume on average 40% less than dwellings built 20 years ago.
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Energy Efficiency Directive 2012/27/EU

Transposition deadline was 5 June 2014

http://ec.europa.eu/energy/en/topics/energy-efficiency
THE ENERGY EFFICIENCY DIRECTIVE

Services

Sectoral measures

Households
Public sector
Energy supply
Industry

Indicative national EE targets

EED

Monitoring & Reporting

General measures promoting energy efficiency

Source: Directorate-General for Energy
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
Full implementation is essential:

July 2014 Communication on Energy Efficiency:
EU28 will achieve energy savings of around 18-19% in 2020 only.

Therefore, Member States need to

1. Fully implement existing EE legislation;
2. Strengthen local and regional verification of national building codes and accurately inform consumers of the energy performance of buildings for sale or rent;
3. Fully implicate utility companies in working with their customers to obtain energy savings;
4. Strengthen market surveillance of the energy efficiency of products;
5. Make full use of available financing, in particular ESIF.
Implementation Directive 2012/27/EU

- Guidance notes
- Bilateral meetings with Member States
- EED Committee meetings and Concerted Action
- Workshops
- Seminars
- Etc.
Thank you!

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Article 7 EED – measurement of savings in line with Annex V
POSSIBLE EXTRA SLIDES
Calculation and measurement - 1

- Which measurement methods as provided in Annex V(1) are to be used and how:
  - **Deemed savings** (e.g. for which categories of measures and/or individual actions, how are the values independently established)
  - **Metered savings** (e.g. for which categories of measures and/or individual actions, how are other factors affecting consumption considered)
  - **Scaled savings** (e.g. for which categories of measures and/or individual actions, how are other factors affecting consumption considered, how are the values independently established what benchmarks)
  - **Surveyed savings** (e.g. how are surveys set, how representative is the sample, how is the control group set)
Calculation and measurement – 2 key principles

- How are the basic **additionality** requirements as regards 'individual actions' met?
- How the notion of 'demonstrably material' defined and how is its application ensured?
- How **lifetimes** are taken into account?
- What **mechanisms** are put in place to ensure that the 'same' savings are not claimed by several actors?
- Are adjustments made due to **climatic conditions**?
- How is the impact of **taxation measures** calculated? Are price elasticities recent and sound?
Lifetimes of savings

Calculation of lifetimes (Annex V, part 2 (e)):

- Can be done by counting the savings each individual action will achieve between its implementation date and 31.12.2020 – attributing the "real" savings with the "straightforward" method;

- Ideally "real" lifetimes should be based on recognised market data (e.g. for heating, double glazing, appliances, etc.);

- A possibility to adopt an alternative approach that is estimated to achieve at least the same total quantity of savings (e.g. "index value", "cap", "discounted future savings").