



# European Energy Efficiency Policy - Energy Diet through Legal Act?

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# EU Energy Policy: Main Goals & Policy Areas

Competitiveness

Security  
of supply

Sustainability

Internal Market for Energy

International Cooperation

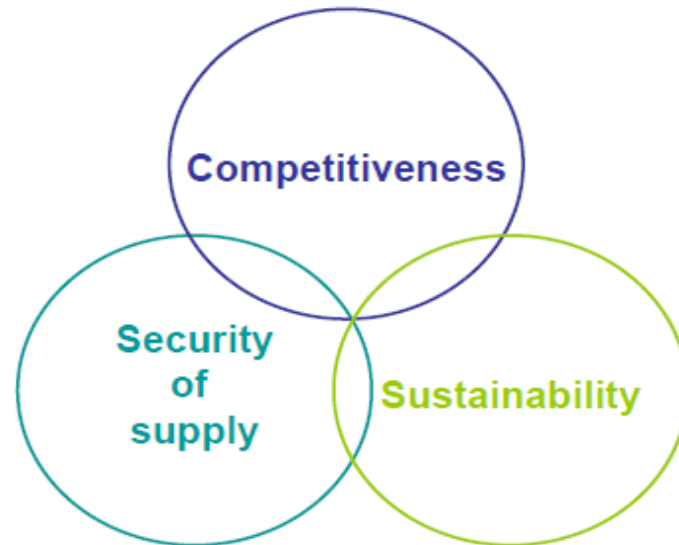
Energy Efficiency/Energy Savings

Renewable Energy

Climate Policy

# Energy efficiency: Win - Win - Win

- ↓ Reduce EU's energy bill by about € 200 bn annually in 2020
- ↑ Create up to 2 million new jobs by 2020
- ↑ Boost R&D & markets for EU global leadership



- ↓ Reduce EU's energy dependence
- ↓ Reduce investments in energy infrastructures
- ↑ Improve the energy trade balance

- ↓ Reduce CO<sub>2</sub> emissions
- ↓ Limit environmental degradation

Source: European Commission

# The 2020 Climate and Energy Package

- Proposed in 2007 and adopted by 2009, the Climate and Energy Package is a set of EU legislative measures designed to reach three headline targets by 2020 (known as the "20-20-20 by 2020").

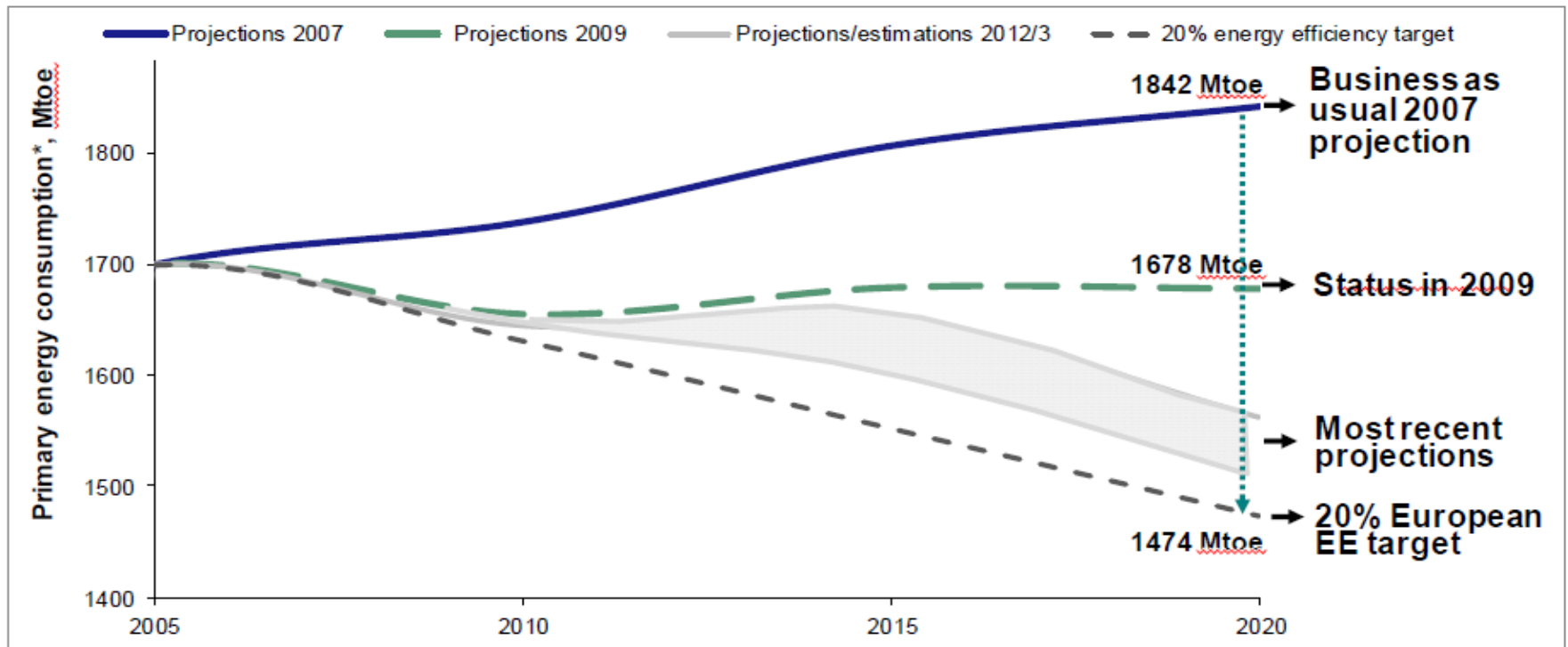
**20%**  
greenhouse  
gas reduction

**20%**  
renewable  
energy

**20%**  
energy savings

# Will we achieve the 20% energy savings target?

## Trends in primary energy consumption compared to EU target in 2020 (1474 Mtoe)



**Encouraging recent developments - more results in Commission's '2014 report' on the progress towards the EU target (due June 2014)**

\* Gross inland consumption minus non-energy uses

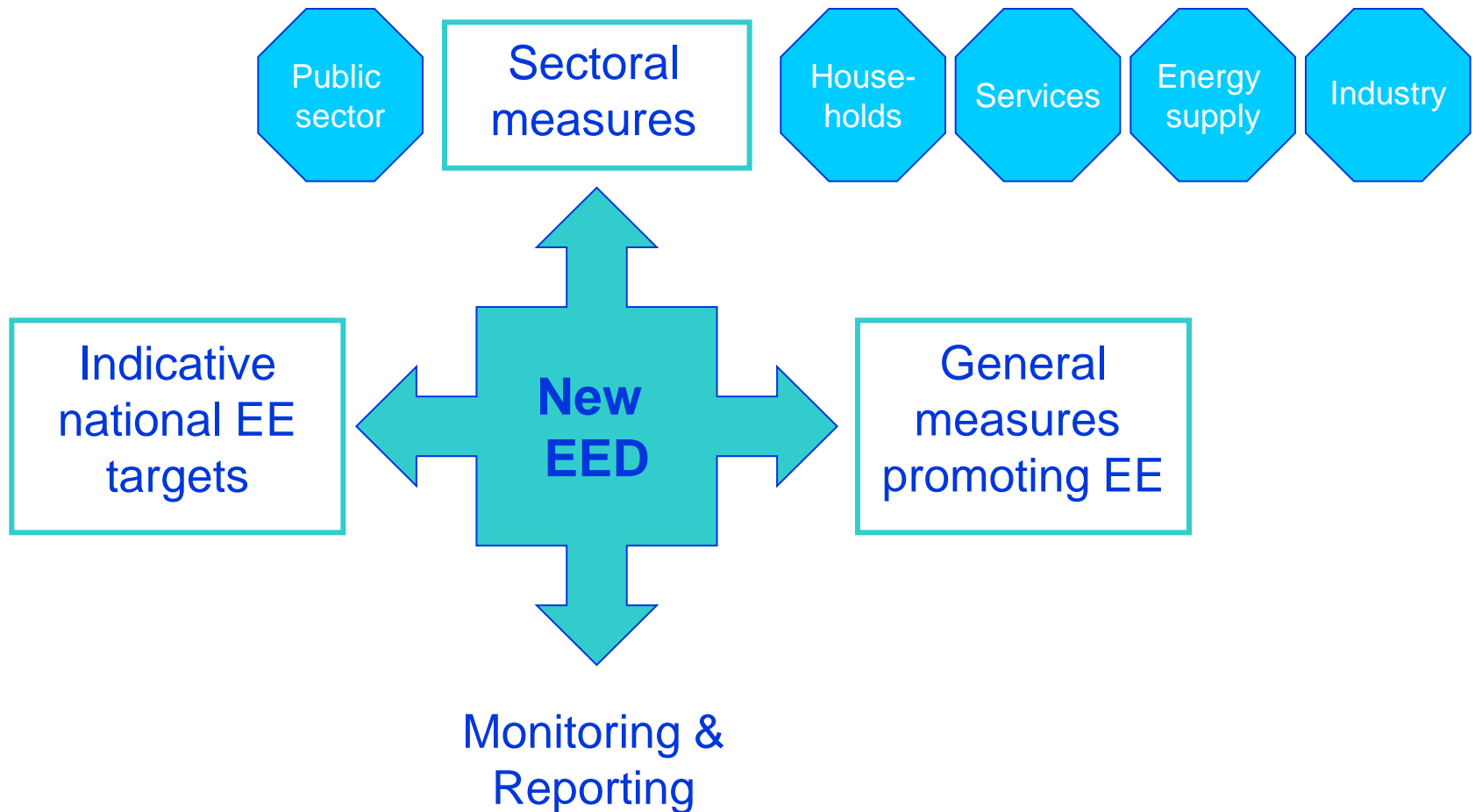
Source: European Commission

# Introduction: The EU Energy Efficiency Directive

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- The Directive aims to close the gap between projected energy use and the 20% energy efficiency target.
- The Agreement in July 2012 was the result of tough negotiations between Council, Parliament and Commission.
- The Energy Saving Obligation prescribed by Article 7 is the core measure of the Directive.
- The Directive gives the Member States many freedoms regarding implementation.
- The Directive entered into force on 4 December 2012. Most of its provisions will have to be implemented by the Member States by 5 June 2014.

# The EU Energy Efficiency Directive



# Energy Efficiency Directive - Targets

- The legal definition and quantification of the EU energy efficiency target as the "Union's 2020 energy consumption of no more than 1 474 Mtoe primary energy or no more than 1 078 Mtoe of final energy".
  - With the accession of Croatia the target was revised to "1 483 Mtoe primary energy or no more than 1 086 Mtoe of final energy".
- The obligation on each Member State to set an **indicative national energy efficiency target** and, by 30 April 2013, to notify it together with its 'translation' in terms of an absolute level of primary energy consumption and final energy consumption in 2020. These are parts of their National Energy Efficiency Action Plans (NEEAPs).



# Energy Efficiency Directive - Obligation Schemes

- The obligation on Member States to achieve certain amount of final energy savings over the obligation period (01 January 2014 - 31 December 2020) by using energy efficiency obligations schemes or other targeted policy measures to drive energy efficiency improvements in households, industries and transport sectors.
  
- The target shall be at least equivalent to achieving savings of 1.5% per year in the energy consumed by all final-user sectors.
  - The Directive lists four possibilities to reduce target by 25%.
  - Can be achieved through Energy efficiency obligation schemes or other policy measures.

# Energy Efficiency Directive - Audits

- The obligation for large enterprises to carry out an **energy audit** at least every four years, with a first energy audit at the latest by 5 December 2015.
  - Energy or environmental management system may be implemented instead of audits.
  - Audits can be performed by in-house experts.
  
- Incentives for SMEs to undergo energy audits to help them identify the potential for reduced energy consumption, including the subsequent implementation of the recommendations from these audits

# Energy Efficiency Directive - Other Provisions

- **Public sector to lead by example by:**
  - renovating 3% of buildings owned and occupied by the central governments starting from 01 January 2014
  - including energy efficiency considerations in public procurement
  
- **Efficiency in energy generation:**
  - monitoring of efficiency levels of new energy generation capacities
  - national assessments for co-generation and district heating potential and measures for its uptake to be developed by 31 December 2015
    - including recovery of waste heat, demand side resources
  
- **Consumers: easy and free-of-charge access to data on real-time and historical energy consumption through more accurate individual metering.**

# Energy Efficiency in the Buildings Sector

- In 2010, the EU adopted the Energy Performance of Buildings Directive 2010/31/EU (EPBD), the main legislative instrument to reduce the energy consumption of buildings.
- Under this Directive, Member States must:
  - establish and apply minimum energy performance requirements for new and existing buildings
  - ensure the certification of building energy performance
  - require the regular inspection of boilers and air conditioning systems in buildings.
  - Moreover, Member States must ensure that by 2021 all new buildings are so-called 'nearly zero-energy buildings'.

# Energy Efficiency of Products

## ■ Energy Labelling of Products

- In 2010, the EU adopted the Directive 2010/30/EU on energy labels.
- Energy labels help consumers choosing products.
- Also provide incentives for the industry to develop and invest in energy efficient product design.

## ■ Eco-design of Energy-Related Products

- In 2009, the EU adopted the Directive 2009/125/EC on ecodesign.
- Ecodesign aims at reducing the environmental impact of products, including the energy consumption throughout their entire life cycle
- It makes no direct provision for mandatory requirements for specific products. This is done for given energy-related products via **implementing measures** and voluntary agreements.
- Examples: heating and water heating equipment, electric motors, lighting, domestic appliances; office equipment, consumer electronics, HVAC (heating, ventilation and air conditioning) systems.

# Financing Energy Efficiency

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- Financial support is available through various EU programs and instruments aimed at assisting Member States in supporting EU policy implementation and initiating associated investments.
  - European Energy Efficiency Fund (EEE F)
  - Intelligent Energy - Europe
    - Including EUREM
  - ELENA Facility
  - Mobilising Local Energy Investments (MLEI)
  - Cohesion policy
  - FP7 Funding

# A look ahead - Energy Efficiency post-2020

