

ENERGY EFFICIENCY FIRST PRINCIPLE

WHY?



The cheapest energy is the one that we do not consume



Energy efficiency should be considered as a source of energy in itself:

- **≻It is endless**
- ➤ It is available everywhere



ENERGY EFFICIENCY IS THE MOST <u>COST-EFFECTIVE</u> WAY OF ACHIEVING ENERGY UNION OBJECTIVES...





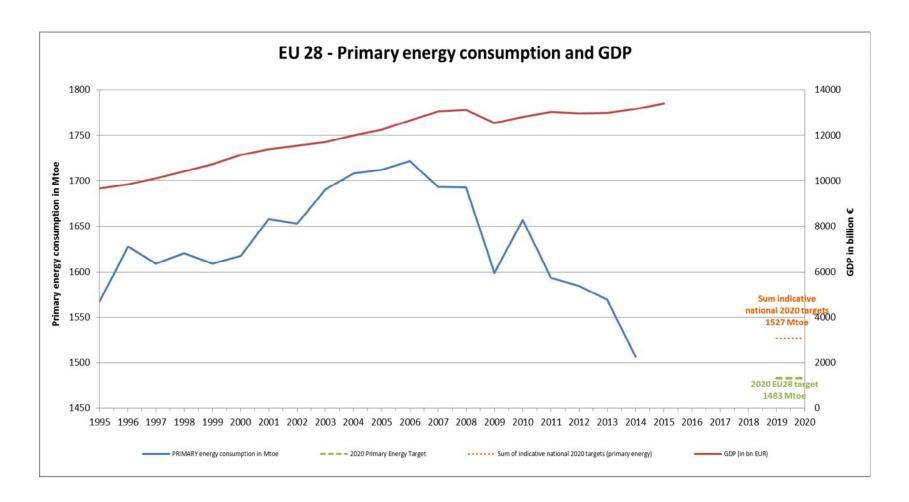


Promoting growth, jobs and investments



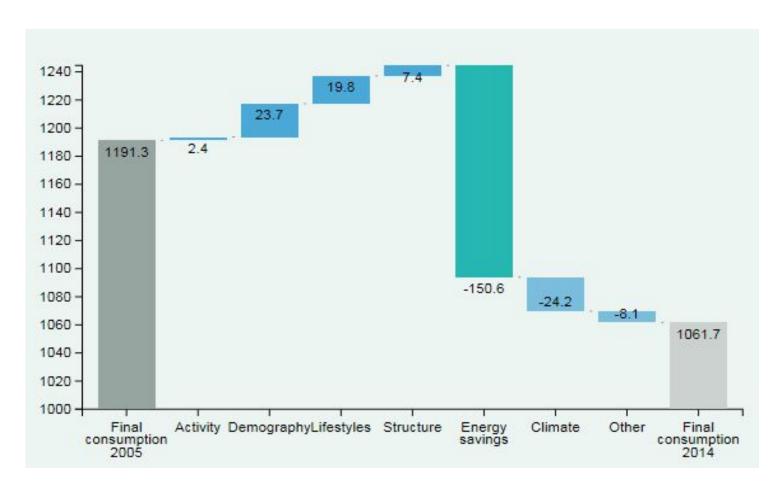


IT'S NOT A DREAM...





IT'S NOT ONLY THE ECONOMY...



Variation final energy consumption - European Union - Mtoe (2005-2014), Odyssee-Mure



WHY DO WE NEED NEW POLICY THEN?



POLICY CONCLUSIONS FOR 2030



Building renovation has to do more

- → Review of EPBD
- → Review of Art. 7 EED



Financing has a more important role to play

→ Smart Finance for Smart Buildings



Digital/ICT has a big potential to contribute

- → Capture behavioural change potentials
- → Contractually guaranteed energy savings as business model
- → Capture demand response potentials
- → Development of a 'Smartness indicator for buildings'
- **→ Promote electro-mobility**
- → Review of Art. 9-11 EED



WHAT PIECES OF LEGISLATION?

Amending Directive 2012/27/EU on Energy Efficiency



Amending Directive
2010/31/EU on Energy
Performance of
Buildings



Ecodesign Working Plan 2016-2019





ENERGY EFFICIENCY DIRECTIVE (EED)

OBJECTIVES



Adapting to **Energy and Climate 2030 Framework**



Streamlining, simplifying and increasing coherence with other **elements** of the package, namely:

- New governance regulation
- New electricity market design
- Update of legislation on renewables



WHAT NEEDS TO BE DONE?

ACHIEVING THE 30% ENERGY EFFICIENCY TARGET BY 2030



With a 30% target, the Union's 2030 energy consumption cannot exceed 1321 Mtoe of primary energy consumption and 987 Mtoe of final energy consumption.



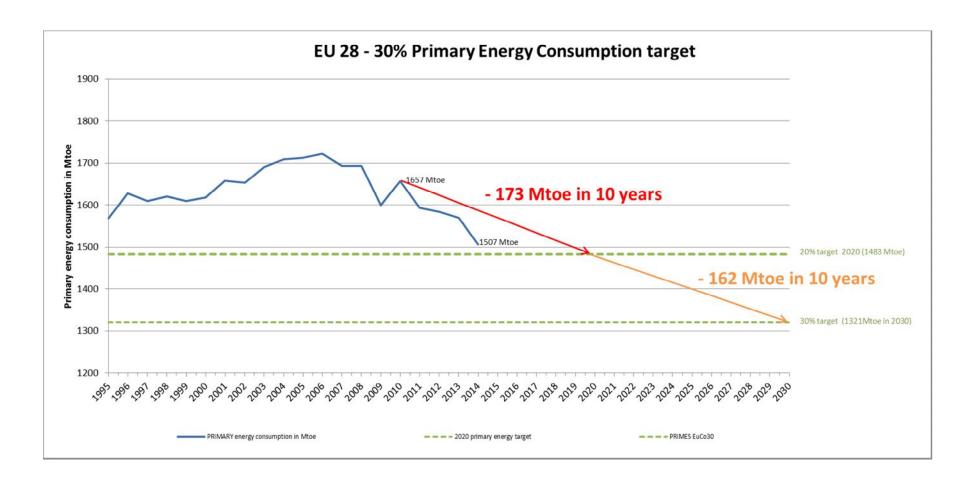
This equals a 23% reduction in primary energy consumption compared to historical 2005 energy consumption levels (-17% in final energy consumption).



Keeping the momentum: We need approximately the **same energy efficiency effort** from 2020 to 2030 as from 2010 to 2020.



THE WAY FORWARD





WHY DO WE NEED AN EU BINDING TARGET?

OBJECTIVES



Union's commitment towards its international climate and energy goals in 2030 and beyond



Energy efficiency on equal footing with the other 2030 climate and energy targets



Endorse the Union's commitment under the Energy Union Framework to put 'energy efficiency first'



Give investors the security that it is worth investing in energy efficiency, with positive impact on the technology costs and payback periods.

Coherent governance process is needed to ensure that there is no ambition and delivery gap towards the Union's 2030 energy efficiency target.



ENERGY SAVINGS

(ARTICLE 7 EED)

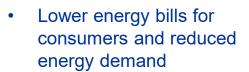


Extending existing energy saving obligations beyond 2020 (1.5%/year)

 Attracting private investment for energy efficiency renovations



Strengthening the social dimension



 Requiring MS to consider energy poverty in designing energy efficiency obligation schemes or alternative measures



- Increasing buildings renovation rate
- Simplifying and streamlining



METERING AND BILLING PROVISIONS

(ARTICLES 9-11 EED)



Contribute to deliver a **New Deal for Energy Consumers**:



Clarification of the EED provisions on metering and billing for **thermal energy** (district heating/cooling, central supply of heat/cooling/hot water).



Ensuring access to clearer consumption information and more frequent feedback for consumers in multiple-apartment buildings.



New **meters to be remotely readable** by 2020, and existing meters to be adapted to be remotely readable by 2027 where this is cost effective.



ENERGY PERFORMANCE OF BUILDINGS DIRECTIVE (EPBD)

SMARTER AND MORE SUSTAINABLE BUILDINGS FASTER



Smart

- To encourage the use of ICT and smart technologies ensuring buildings operate efficiently:
 - By introducing building automation and control systems as alternative to physical inspections;
 - By encouraging the roll out of the required infrastructure for e-mobility (with focus on large commercial buildings and excluding public buildings and SMEs);
 - By introducing a **smartness indicator** to assess the technological readiness of the building to interact with the occupants, the grid, while managing itself efficiently



Simple

 By streamlining outdated or cumbersome provisions that have not delivered the expected output



ECODESIGN AND LABELLING DIRECTIVES



Supporting market transformation and innovation towards high-quality products with lower environmental impacts by:



Banning inefficient products from the market through ecodesign

- by setting minimum requirements for energy-related products to improve their environmental performance
- by regularly updating existing minimum requirements to align with technological progress



Informing consumers about efficient products through energy labelling

- by improving the effectiveness of the energy label (e.g. abolishing the A+ to A+++
 classes)
- by strengthening compliance (e.g. product registration)



SMART FINANCE FOR SMART BUILDINGS

More effective use of public funds

- Deploying Financial Instruments and flexible energy efficiency and renewable financing platforms
- Building on EFSI II blending with ESIF funds



Assistance and aggregation

- Supporting the project pipeline at EU and local level
- Project Development Assistance facilities
- "One-stop-shops"



De-risking

- Understanding the risks and benefits for financiers and investors
- The De-risking Energy Efficiency Platform
- Commonly accepted underwriting framework





