

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 cost-effective way of achieving Energy Union objectives...



Security of supply



Global leadership in renewables



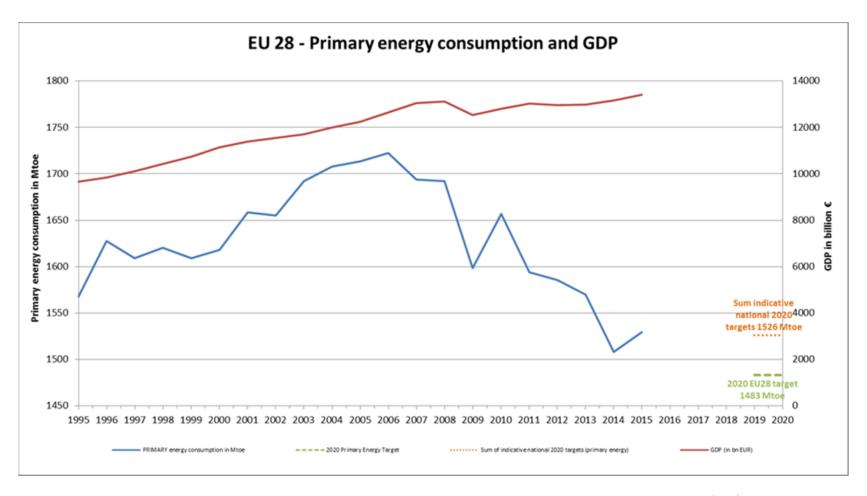
Decarbonization (Paris Agreement)



Promoting growth, jobs and investments

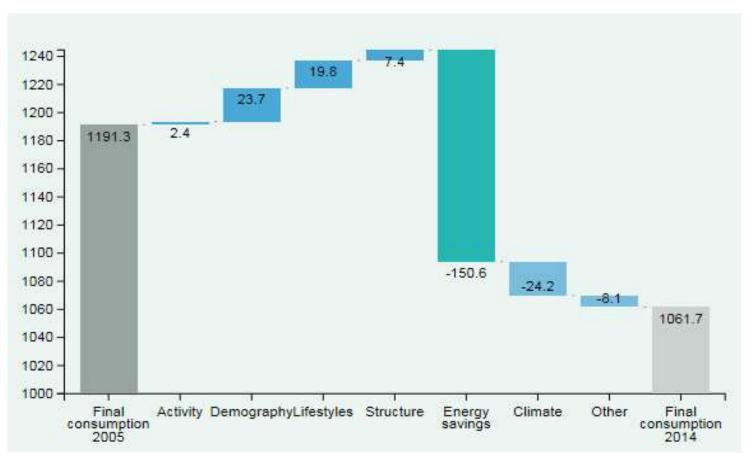


It's not a dream...



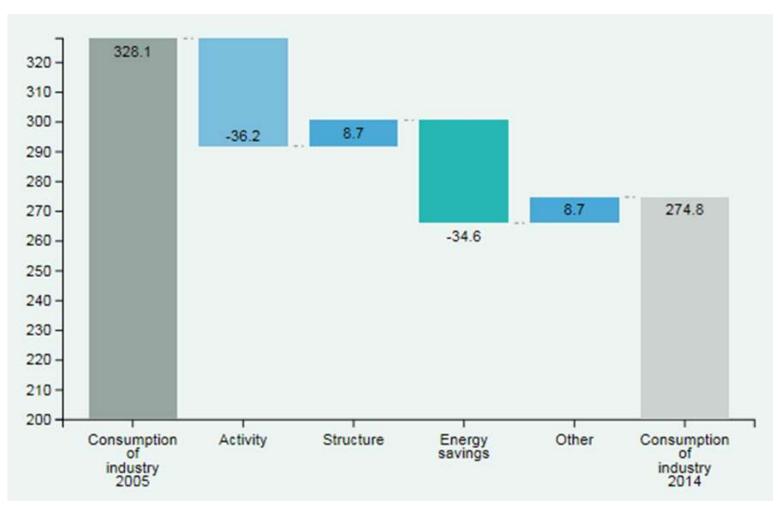


It's not only the economy...



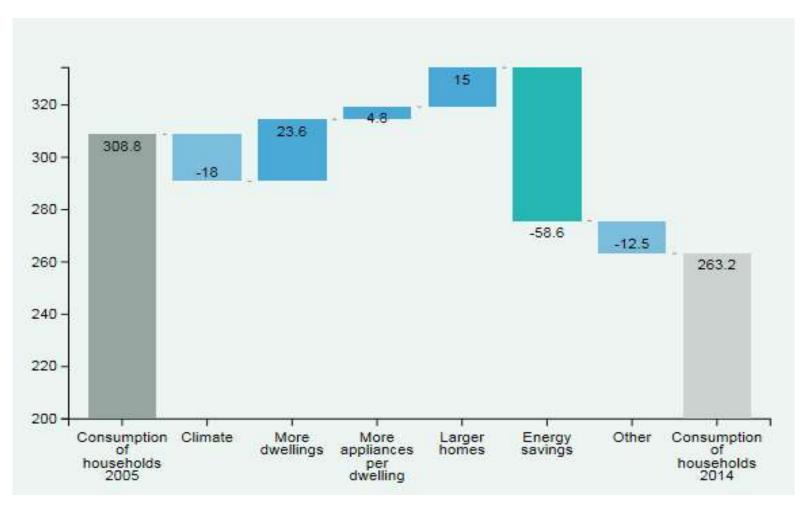
Variation final energy consumption - European Union - Mtoe (2005-2014), Odyssee-Mure





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

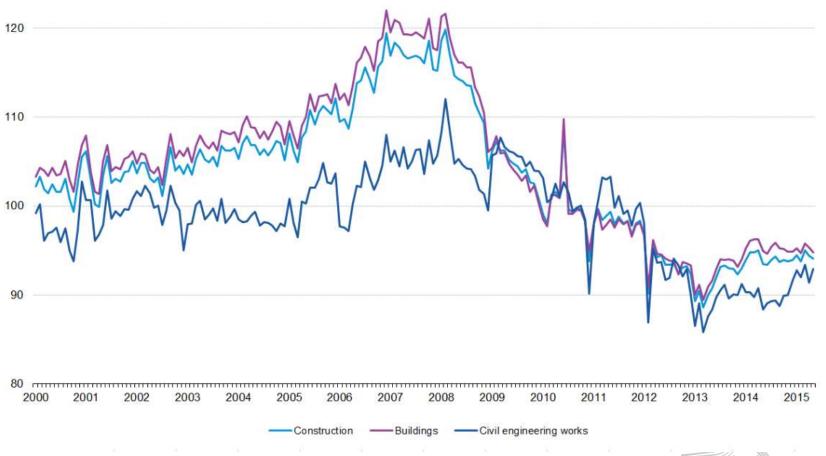




Variation residential energy consumption - European Union - Mtoe (2005-2014), Odyssee-Mure



Total construction, buildings and civil engineering activity index (2010=100)



Source: Eurostat, data table "sts_copr_a", 2000-2015, monthly data, seasonally and working day adjusted



What is it about?

What is the cause of the progress that Europe is making in energy efficiency?

Behavioural change?

Voluntary upgrades?

"Natural" turnover of capital assets?





The share of refrigerators meeting the highest energy efficiency labelling classes (A+ and above) increased from less than 5% in 1995 to 98% in 2014.

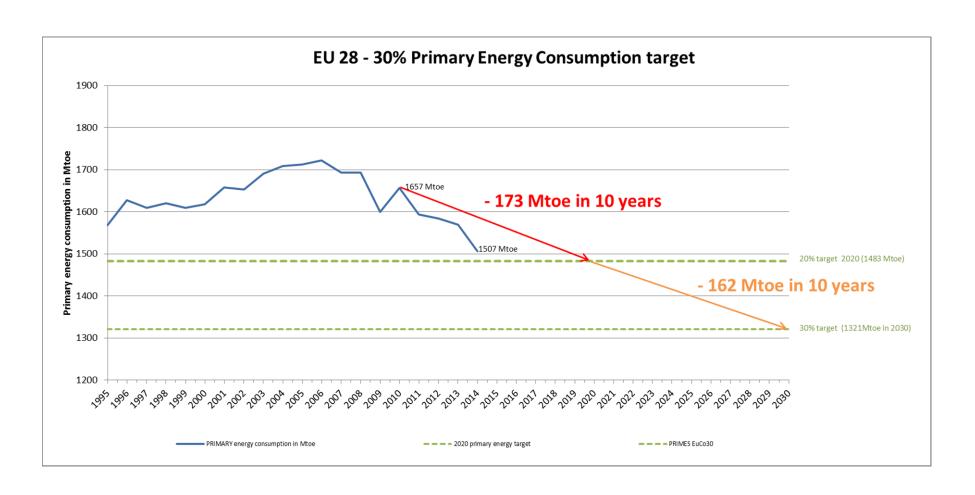


New dwellings built today consume on average 40% less than dwellings built 20 years ago.



Between 1995 and 2014 the average consumption of new cars in the EU decreased by 34%.







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

- a) Capture behavioral change potentials
- b) Contractually guaranteed energy savings as business model
- c) Capture demand response potentials
 - → Development of a 'Smartness indicator for buildings'
 - → 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





THE "SMART FINANCE FOR SMART BUILDINGS" INITIATIVE

MAJOR GOALS

More effective use of public funds

- Deploying Financial Instruments and flexible energy efficiency and renewable financing platforms
- Building on EFSI 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



...and of course, the right policy framework



