



SMART AND CLEAN ENERGY FOR ALL

Energy efficiency – Valletta, 20 May 2017
Paul Hodson, European Commission

ENERGY EFFICIENCY FIRST PRINCIPLE

WHY?



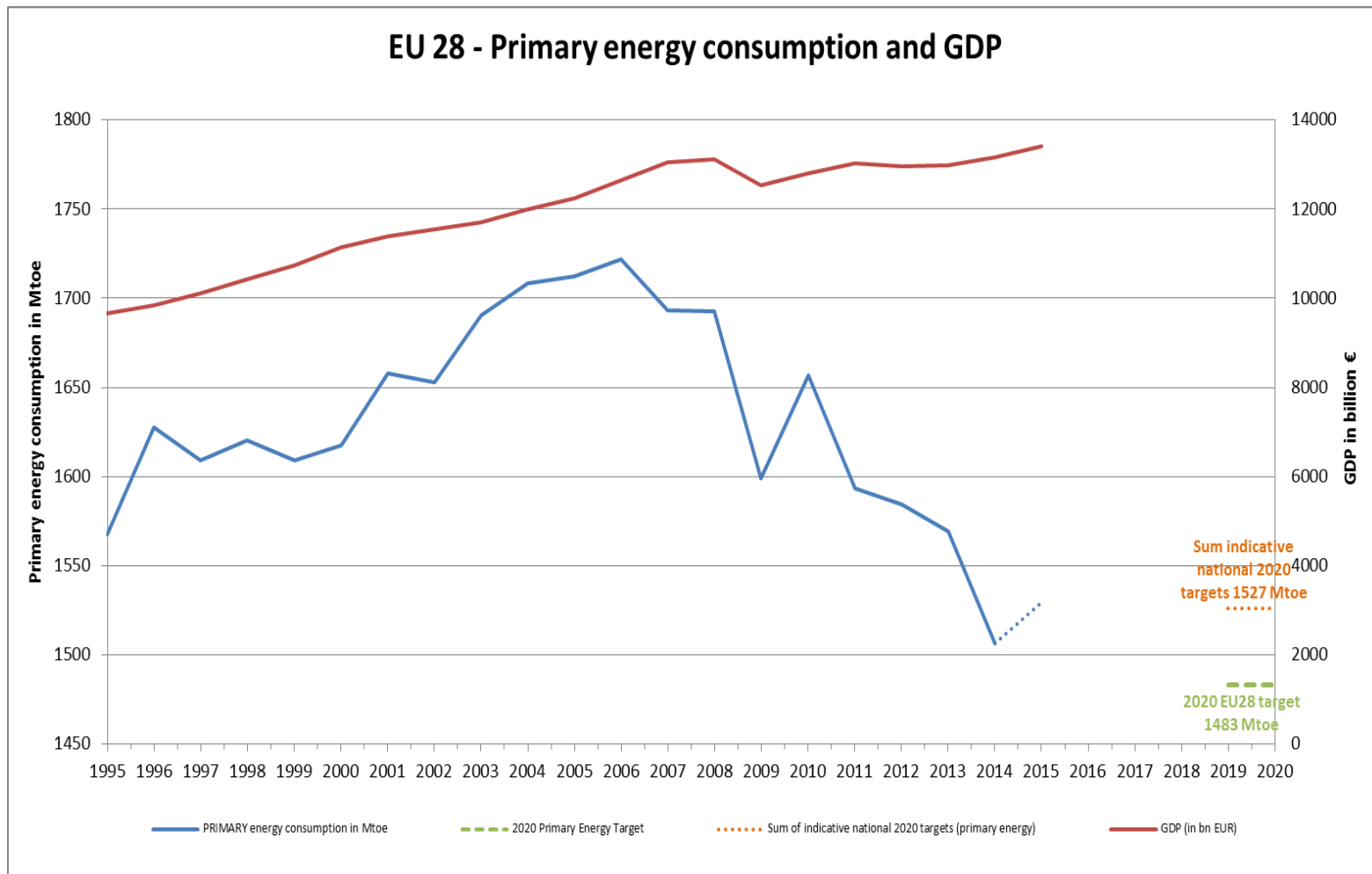
The cheapest energy is the one that we do not consume



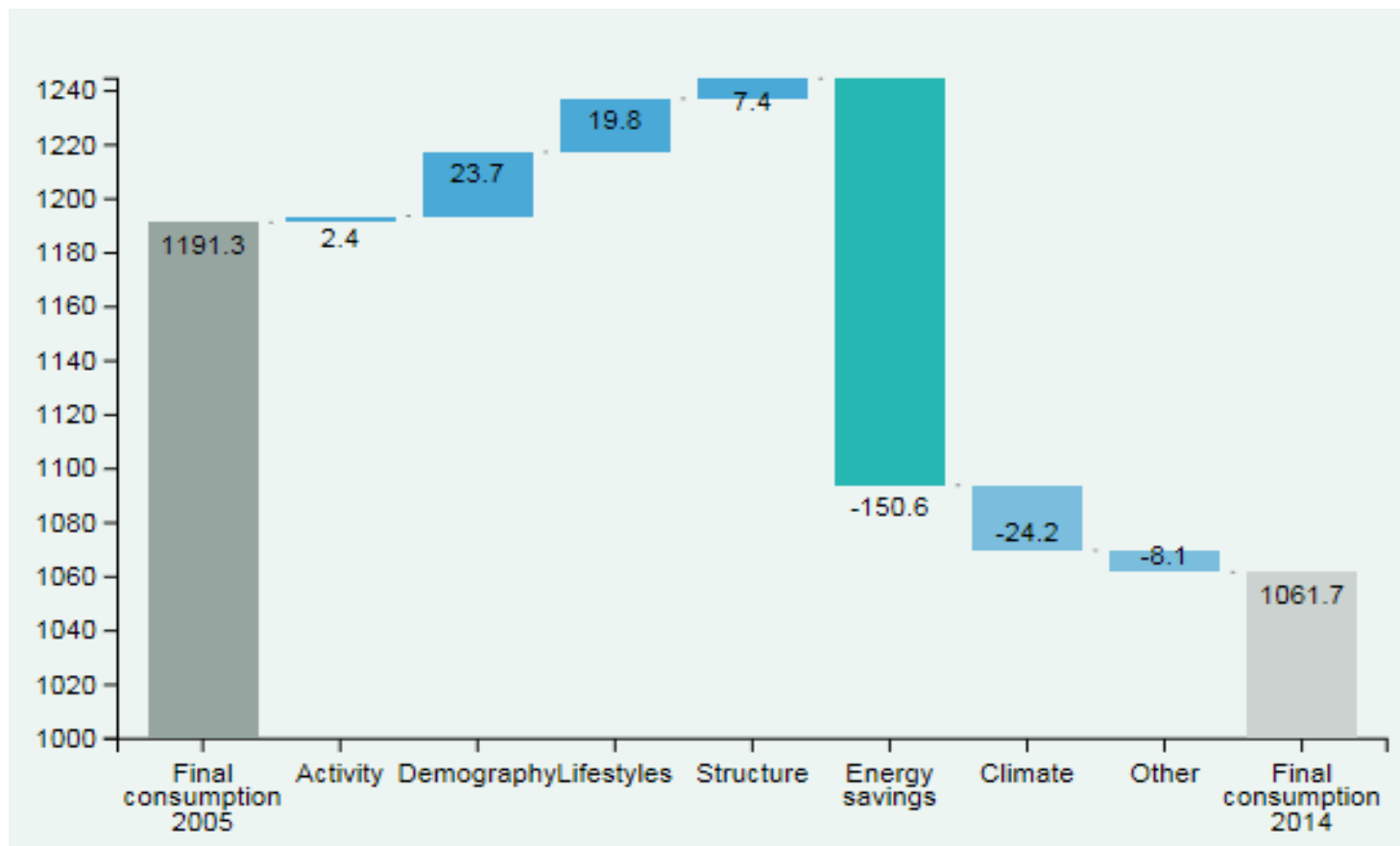
Energy efficiency should be considered as a source of energy in itself:

- **It is endless**
- **It is available everywhere**

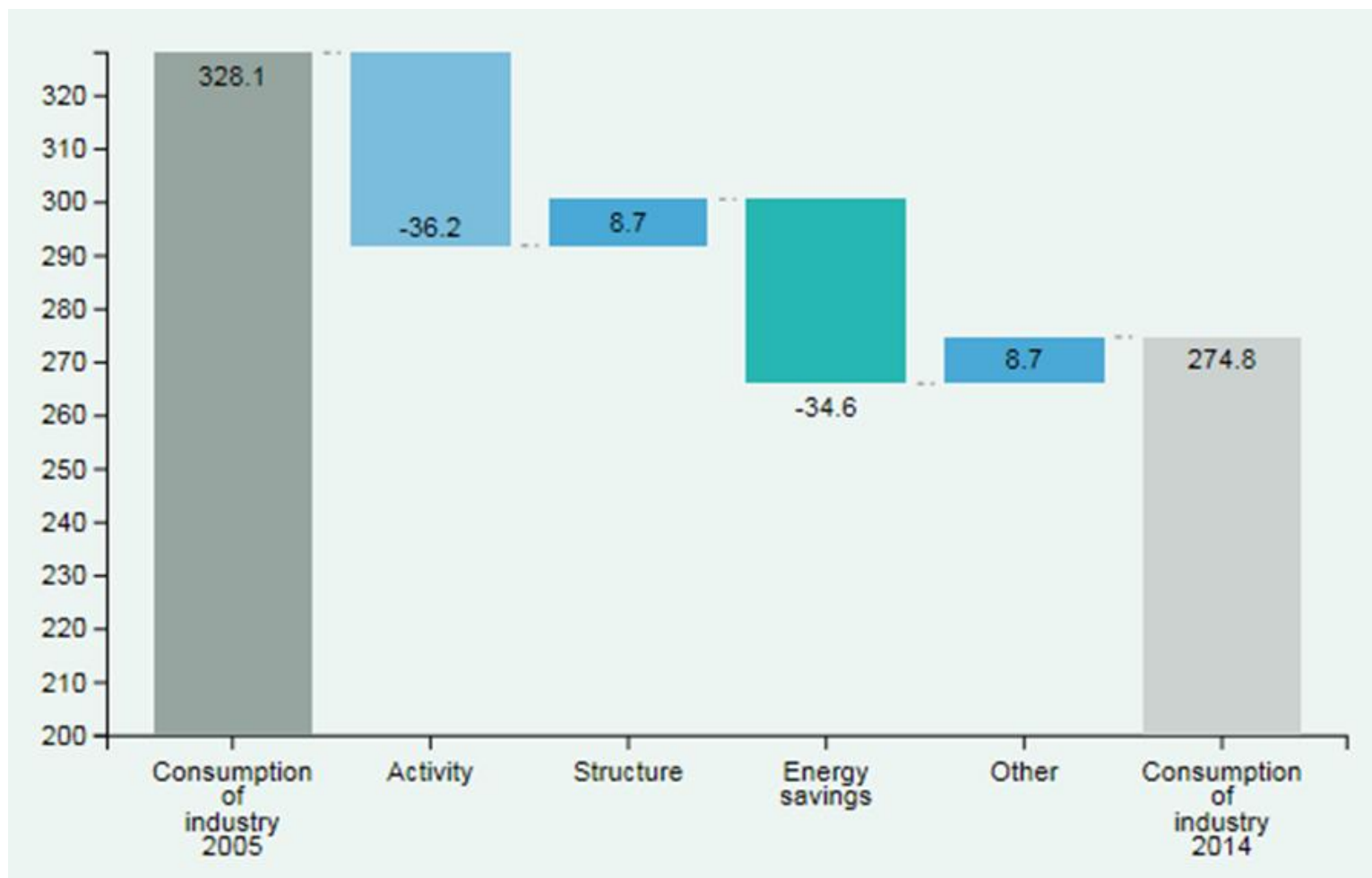
IT'S NOT A DREAM...



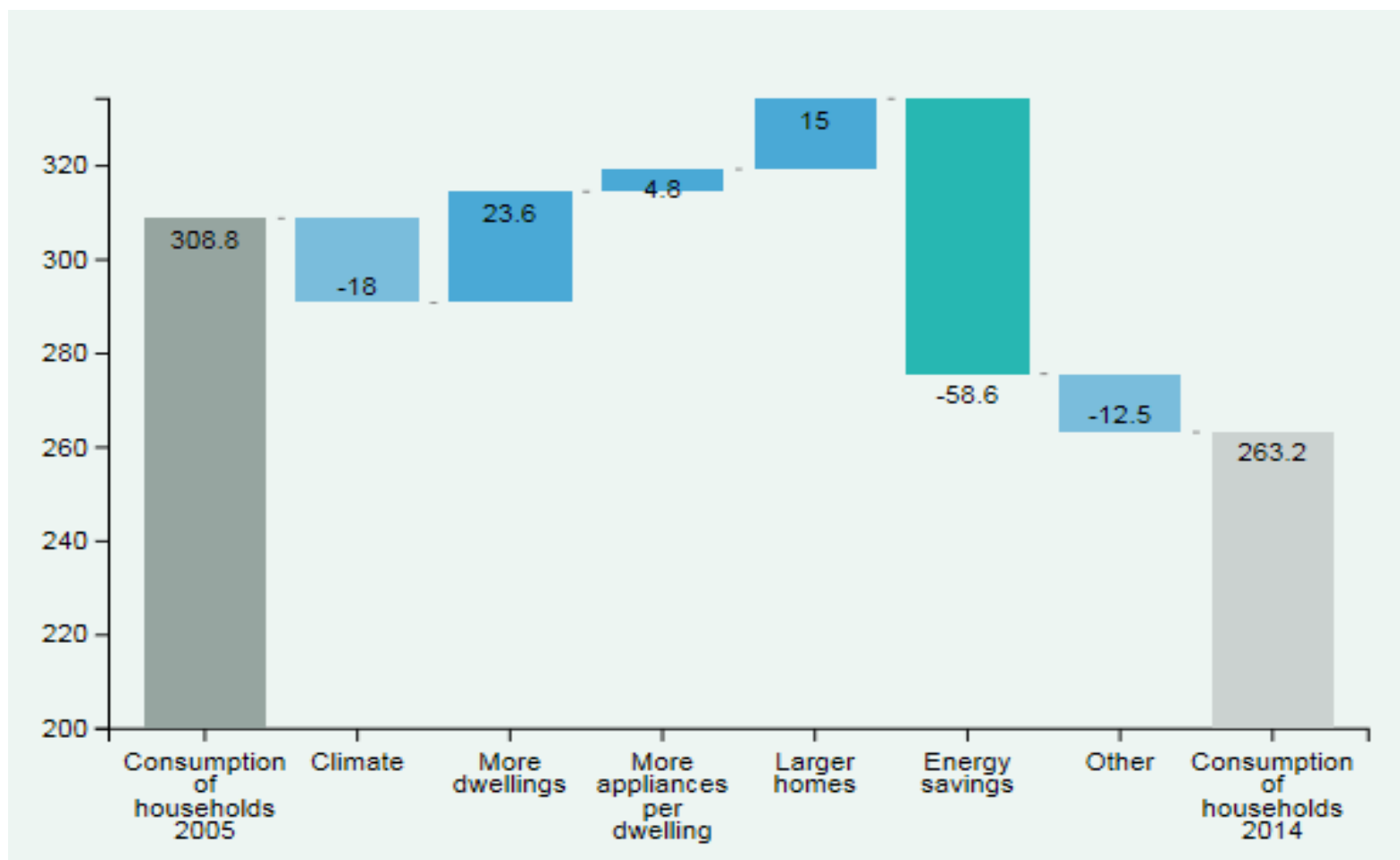
IT'S NOT ONLY THE ECONOMY...



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

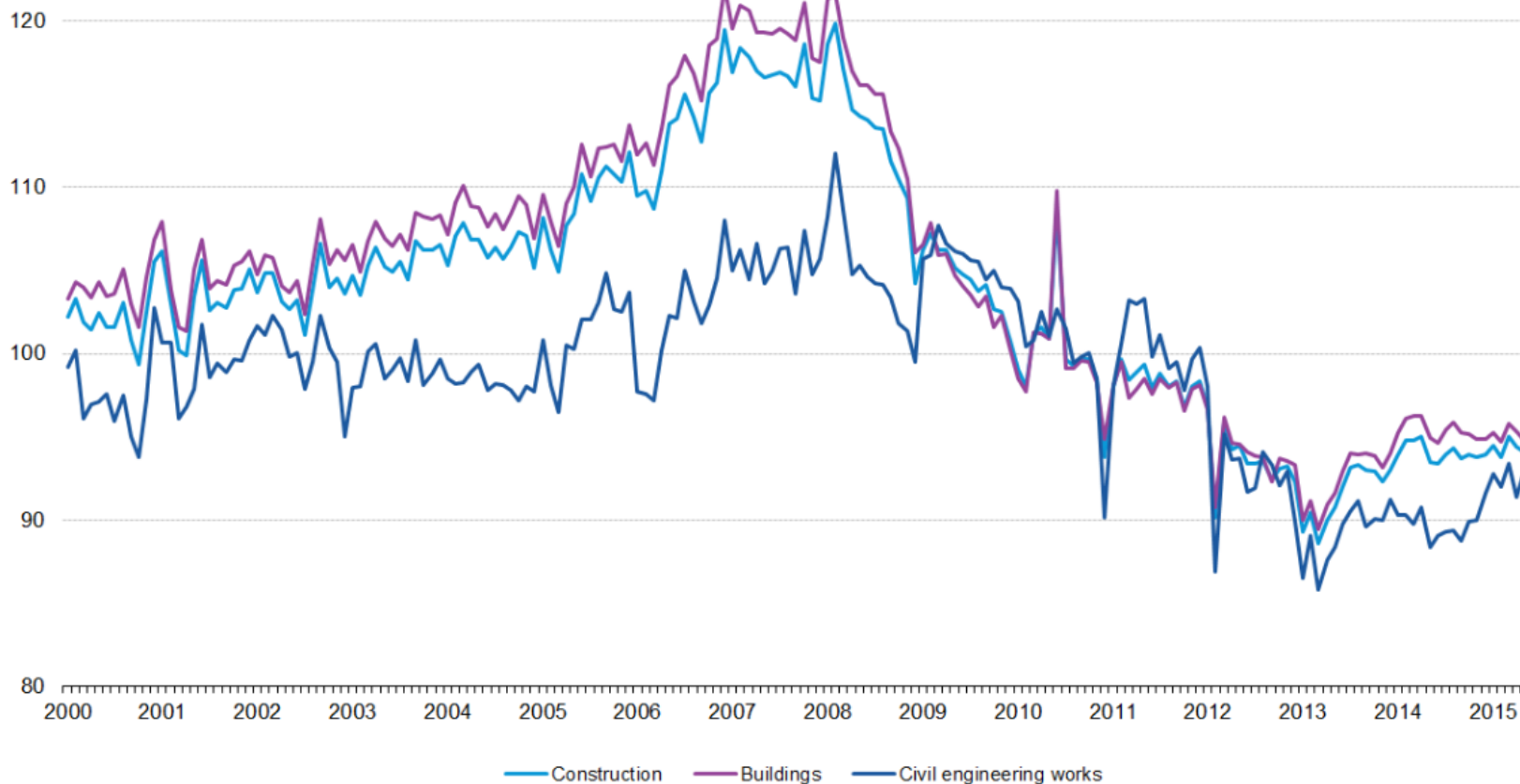


Variation industry energy consumption - European Union - Mtoe (2005-2014), Odyssee-Mure



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?



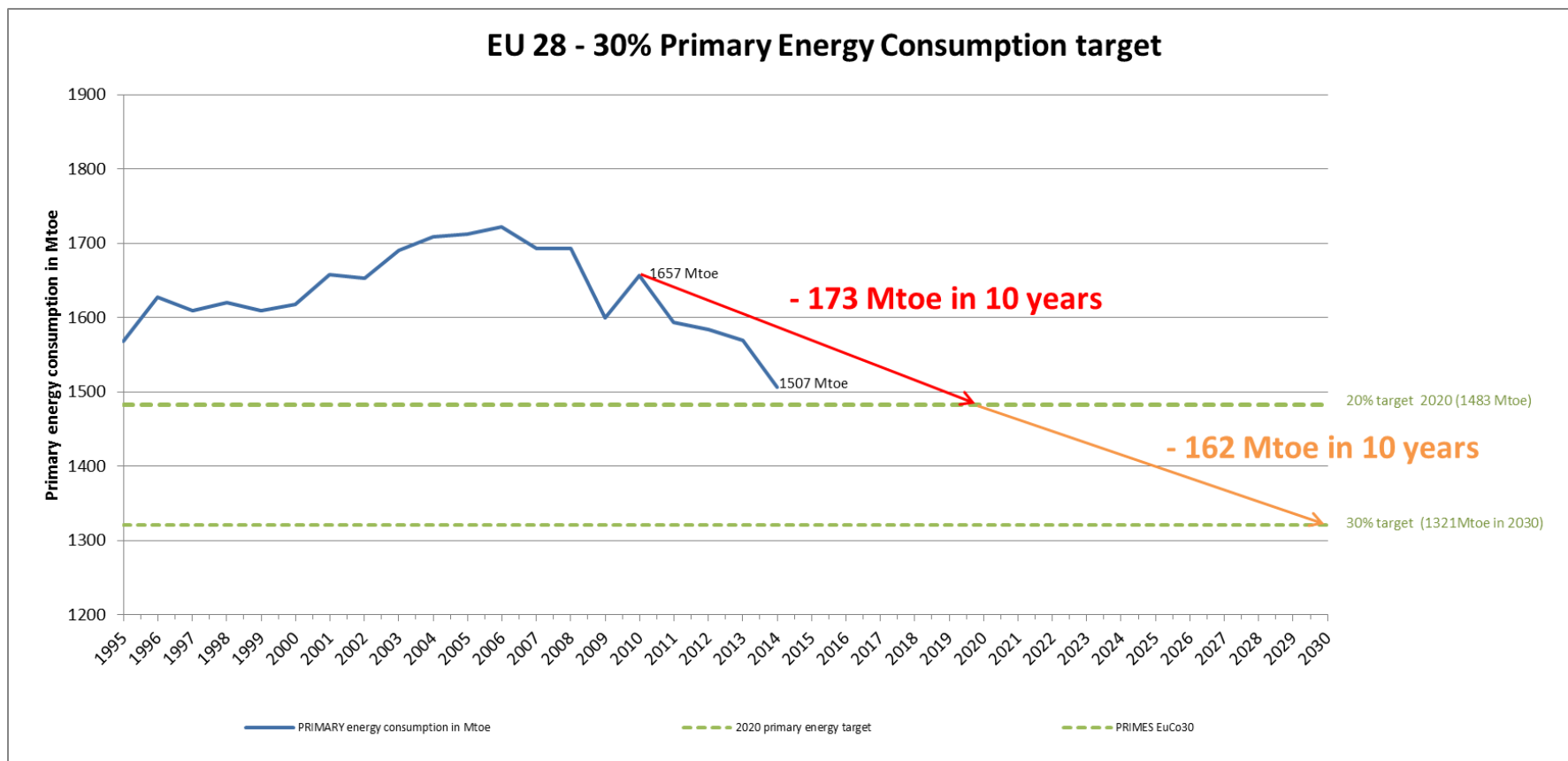
The share of refrigerators meeting the highest energy efficiency labelling classes (A+ and above) increased from less than 5% in 1995 to 98% in 2014.



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?



12 lm/W
~ 8.3W



65 lm/W
~ 1.5W



120 lm/W
~ 0.83W

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 behavioral change potentials
- Contractually guaranteed energy savings as business model
- Capture demand response potentials

- **How to do more in industry?**
- **How to do more in transport?**

SPECIFIC MEDITERRANEAN ISSUES

- Water heating
- Energy consumption in services – including for cooling
- Islands (especially where dependent on diesel generators)
- Transport (public transport often has low share)
- Industry



European
Commission

ENERGY UNION

