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…

EU 28 - Primary energy consumption and GDP

- **Primary energy consumption in Mtoe**
- **2020 Primary Energy Target**
- **Sum of indicative national 2020 targets (primary energy)**
- **GDP in billion €**

Key points:
- 2020 EU28 target 1483 Mtoe
- Sum indicative national 2020 targets 1527 Mtoe

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

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

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.
EU 28 - 30% Primary Energy Consumption target

- 173 Mtoe in 10 years

- 162 Mtoe in 10 years

20% target 2020 (1483 Mtoe)
30% target (1321 Mtoe in 2030)
WHY DO WE NEED NEW POLICY THEN?

12 lm/W
~ 8.3W

-82%

65 lm/W
~ 1.5W

-45%

120 lm/W
~ 0.83W

~ 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