

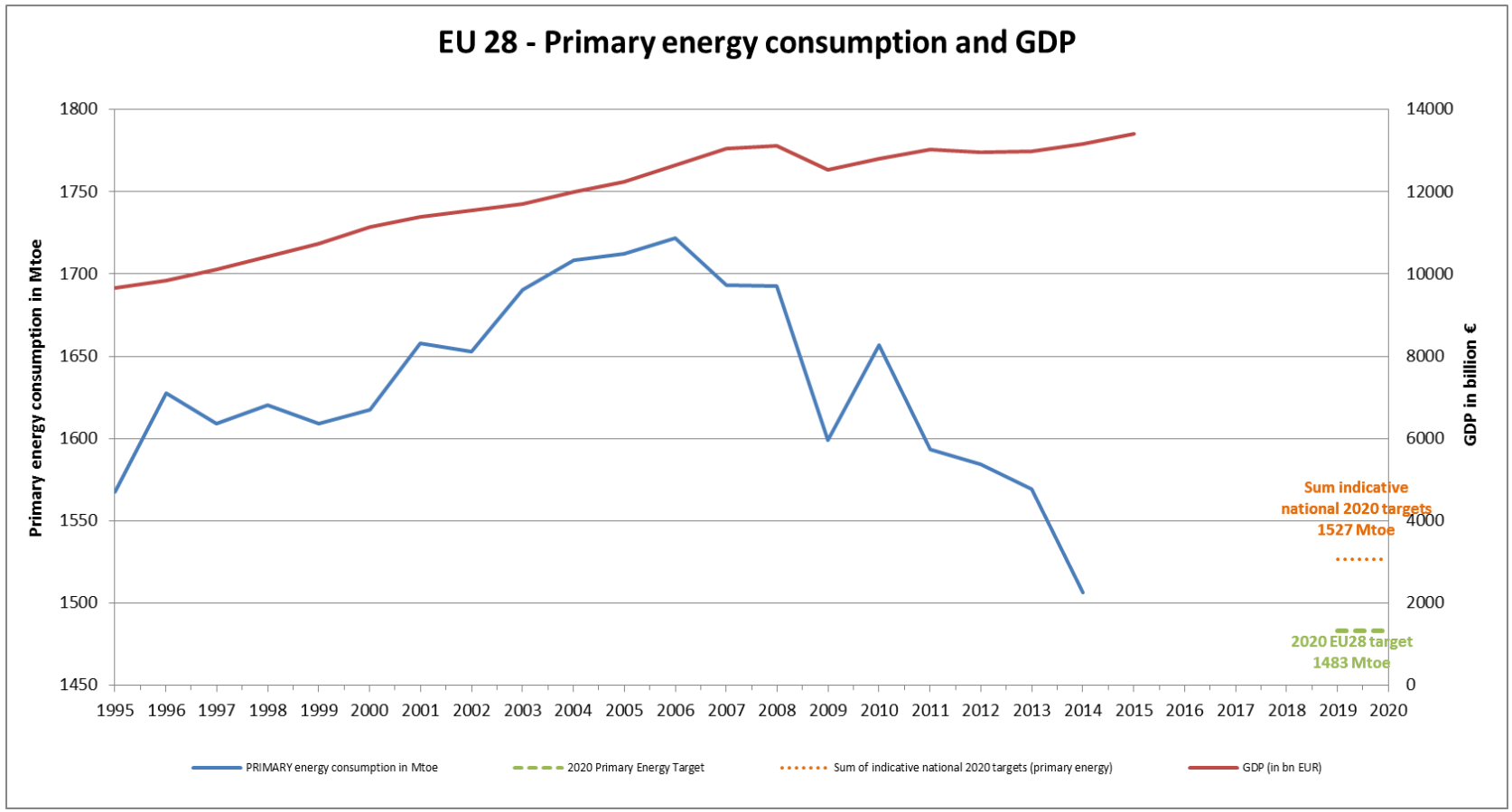
eceee annual policy seminar

Energy Efficiency

Brussels, 24 November 2016

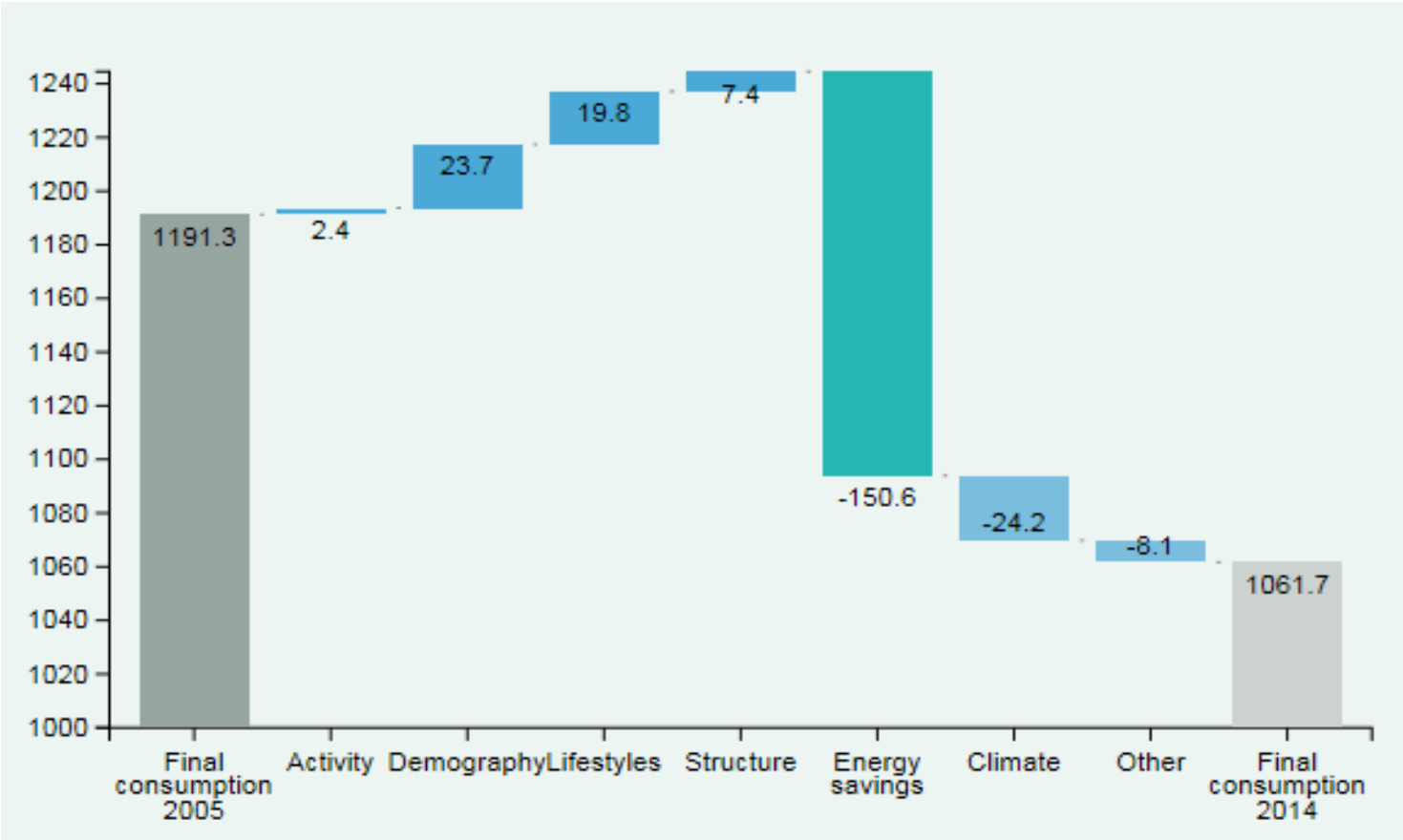
Paul Hodson
Head of Unit – Energy Efficiency Unit
DG ENER, European Commission

It’s not a dream…



It’s not only the economy…

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



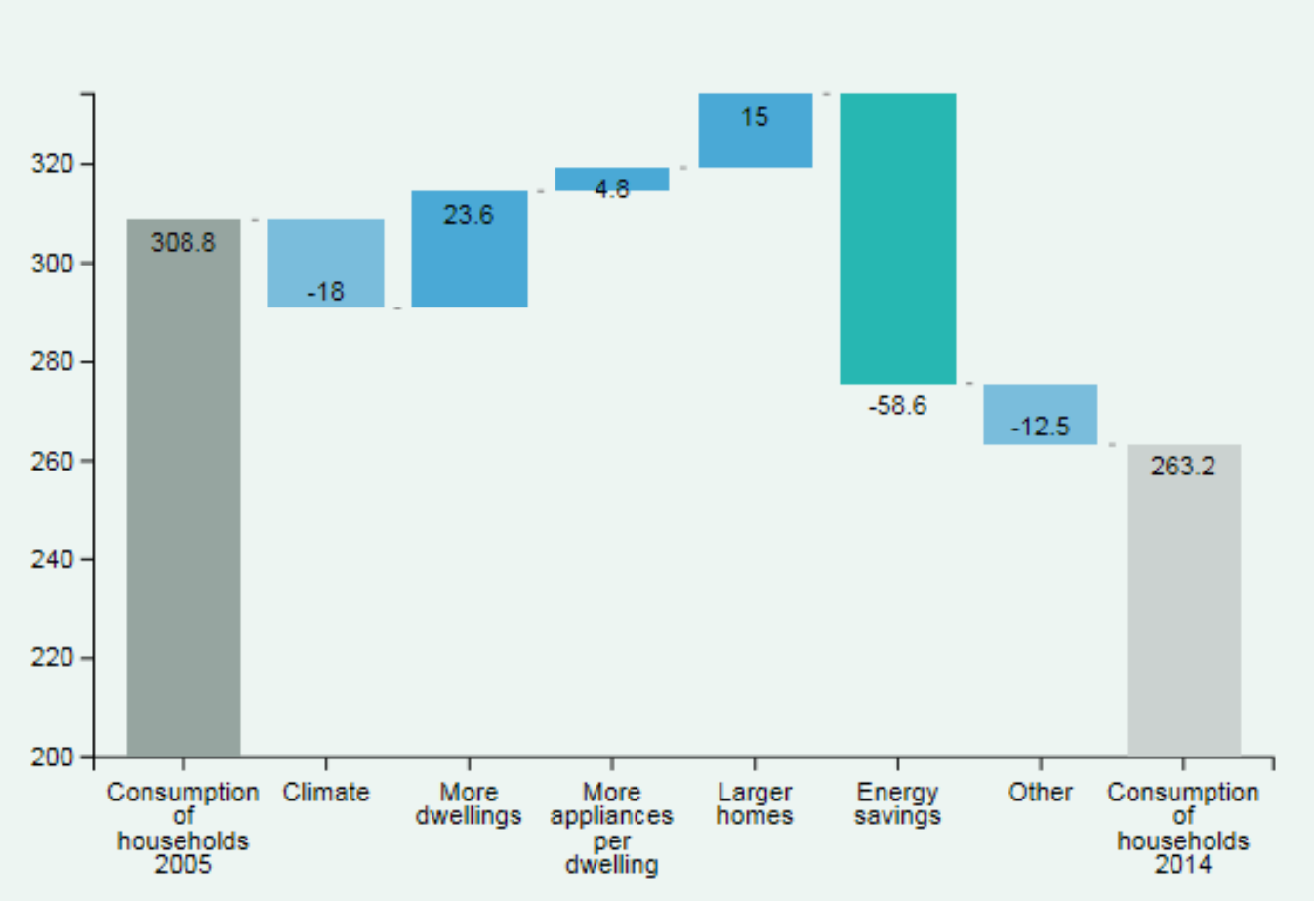
Source: Odyssee-Mure

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



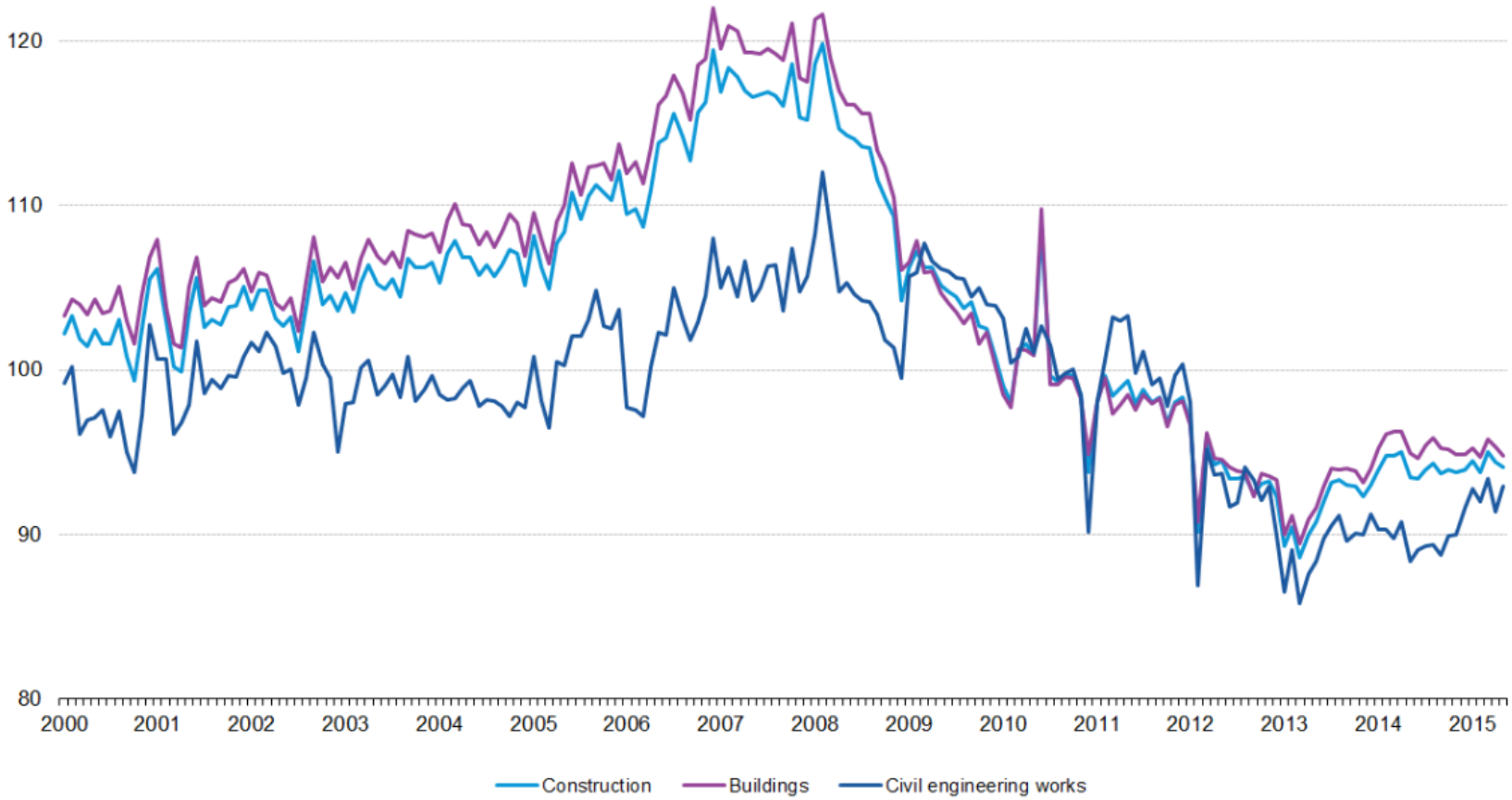
Source: Odyssee-Mure

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



Source: 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?



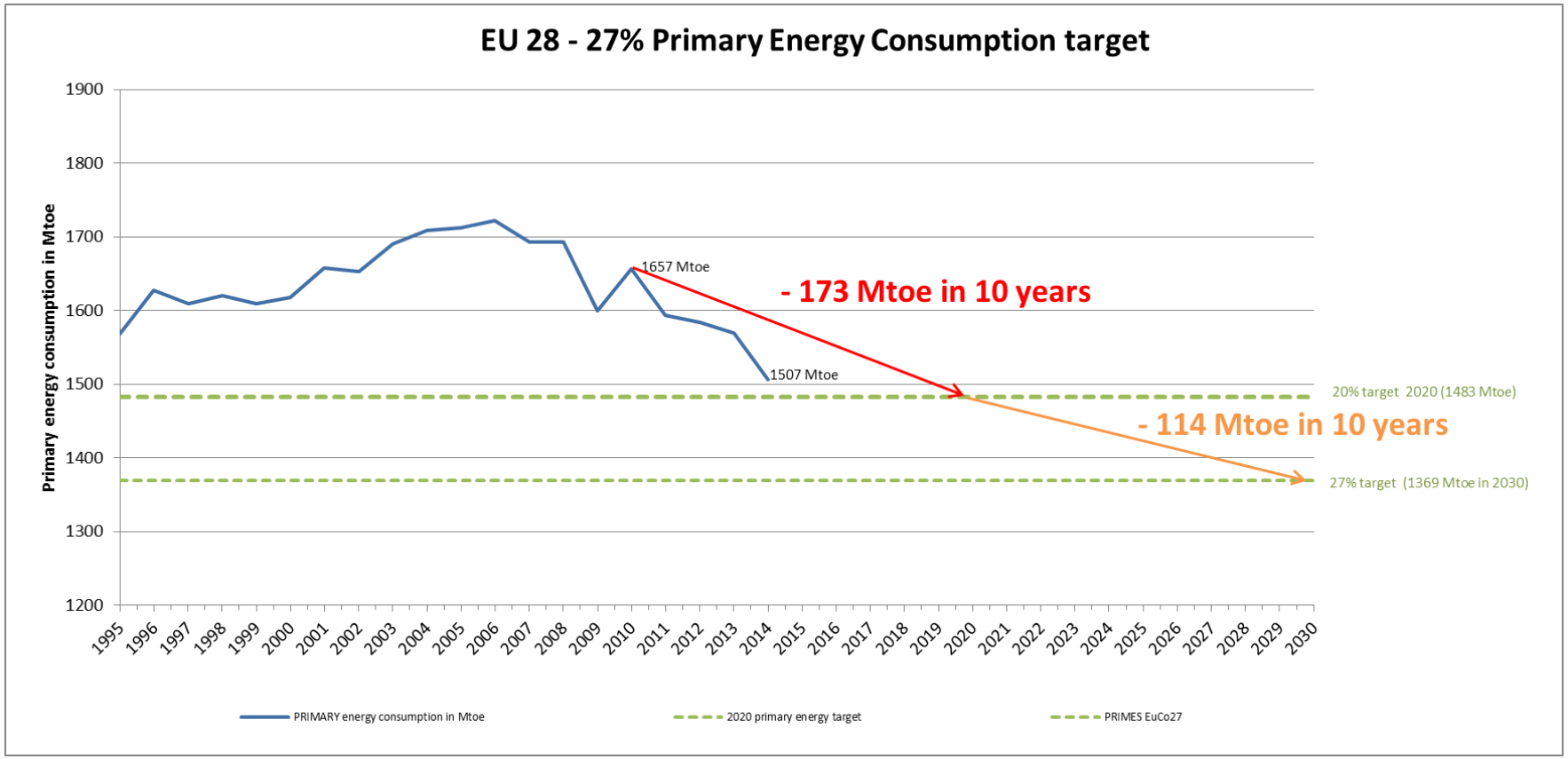
The share of refrigerators meeting the highest energy efficiency labelling classes (A+ and above) increased from less than 5% in 1995 to 98% in 2014.

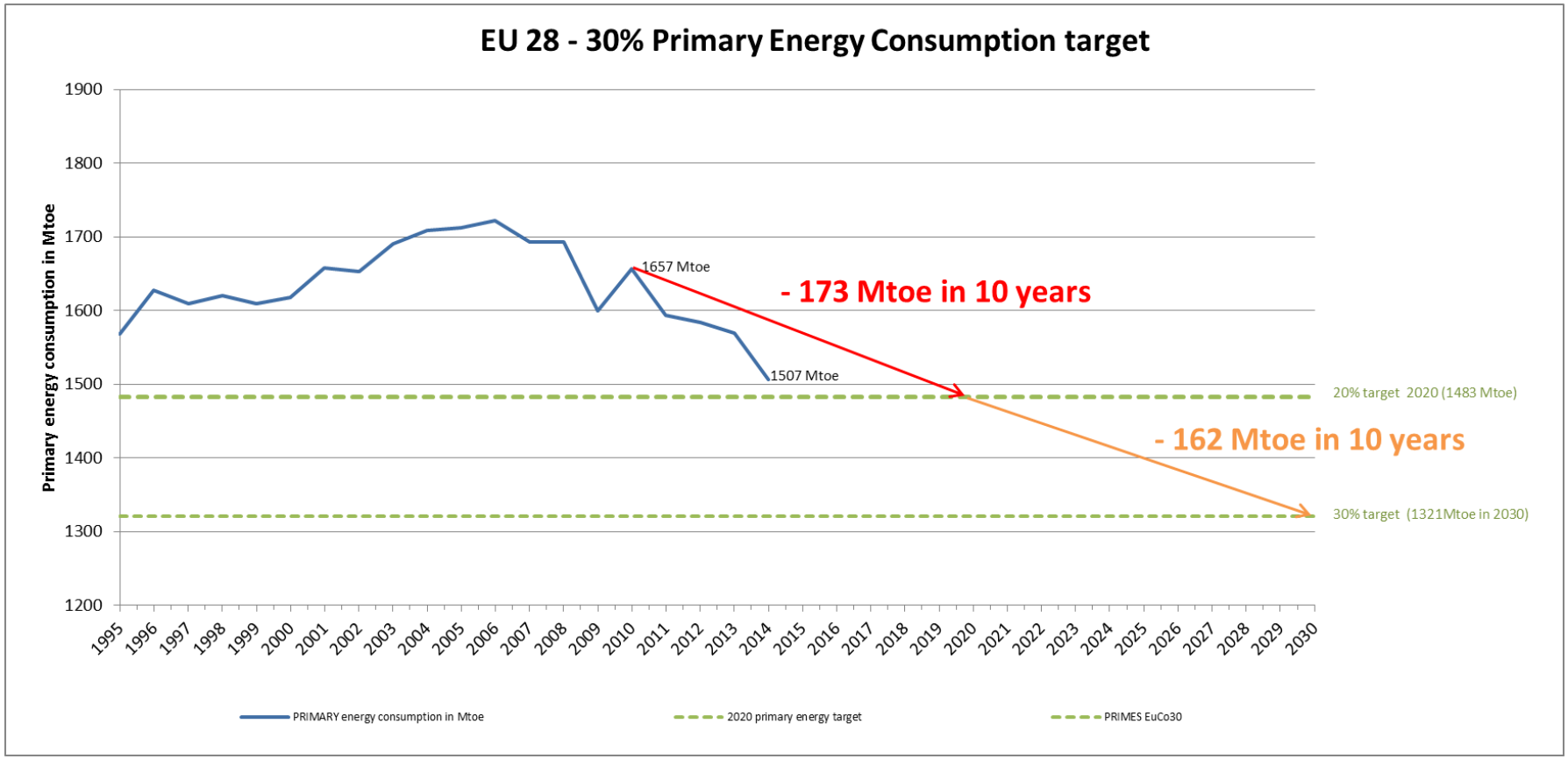


New dwellings built today consume on average 40% less than dwellings built 20 years ago.



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


EU 28 - 27% Primary Energy Consumption target
Primary energy consumption in Mtoe
1900
1800
1700
1600
1500
1400
1300
1200
1657 Mtoe
1507 Mtoe
- 173 Mtoe in 10 years
- 114 Mtoe in 10 years
20% target 2020 (1483 Mtoe)
27% target (1369 Mtoe in 2030)
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030
PRIMARY energy consumption in Mtoe
2020 primary energy target
PRIMES EuCo27


EU 28 - 30% Primary Energy Consumption target
Primary energy consumption in Mtoe
1900
1800
1700
1600
1500
1400
1300
1200
1657 Mtoe
1507 Mtoe
- 173 Mtoe in 10 years
- 162 Mtoe in 10 years
20% target 2020 (1483 Mtoe)
30% target (1321Mtoe in 2030)
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030
PRIMARY energy consumption in Mtoe
2020 primary energy target
PRIMES EuCo30

Why do we need new policy then?



12 lm/W
~ 8.3W

-82%



65 lm/W
~ 1.5W

-45%



120 lm/W
~ 0.83W

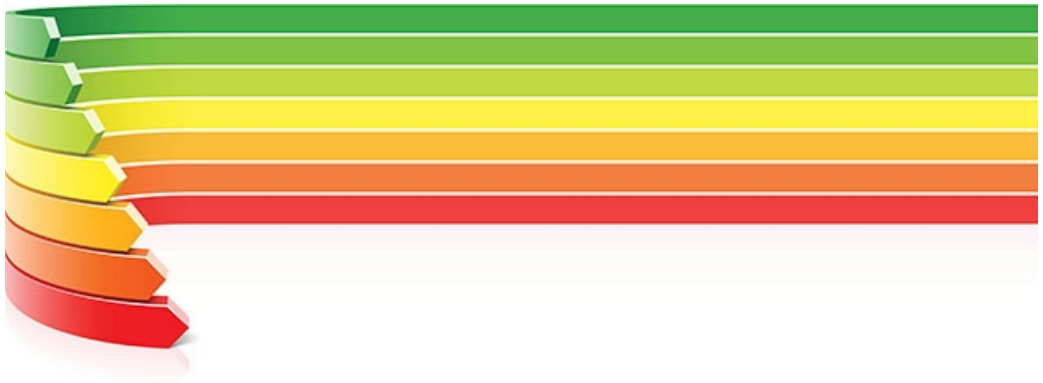
Policy conclusions for 2030

1. Building renovation has to do more

2. Financing has a more important role to play

3. 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



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