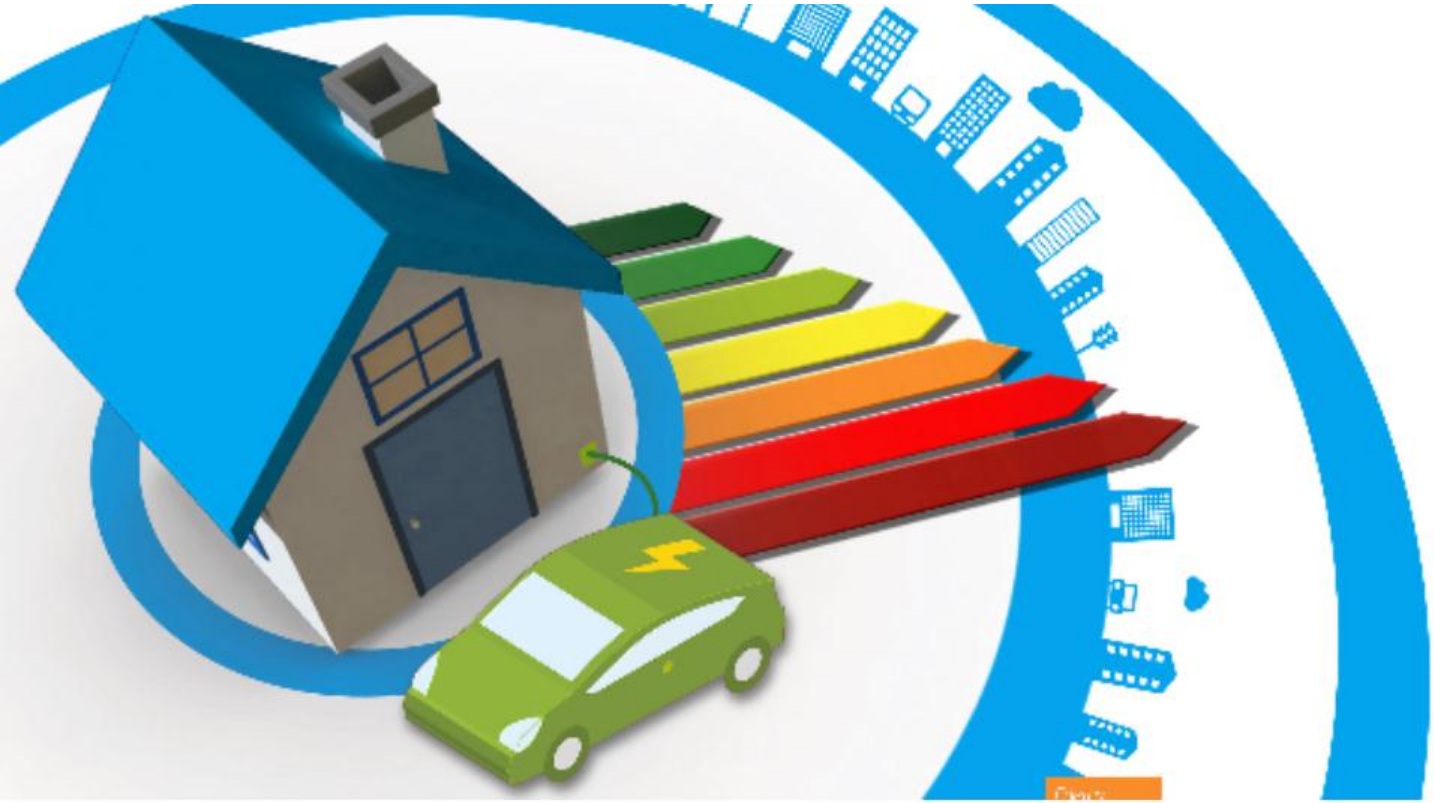
European Commission



Energy efficiency: lessons learned and future challenges

Paul Hodson,
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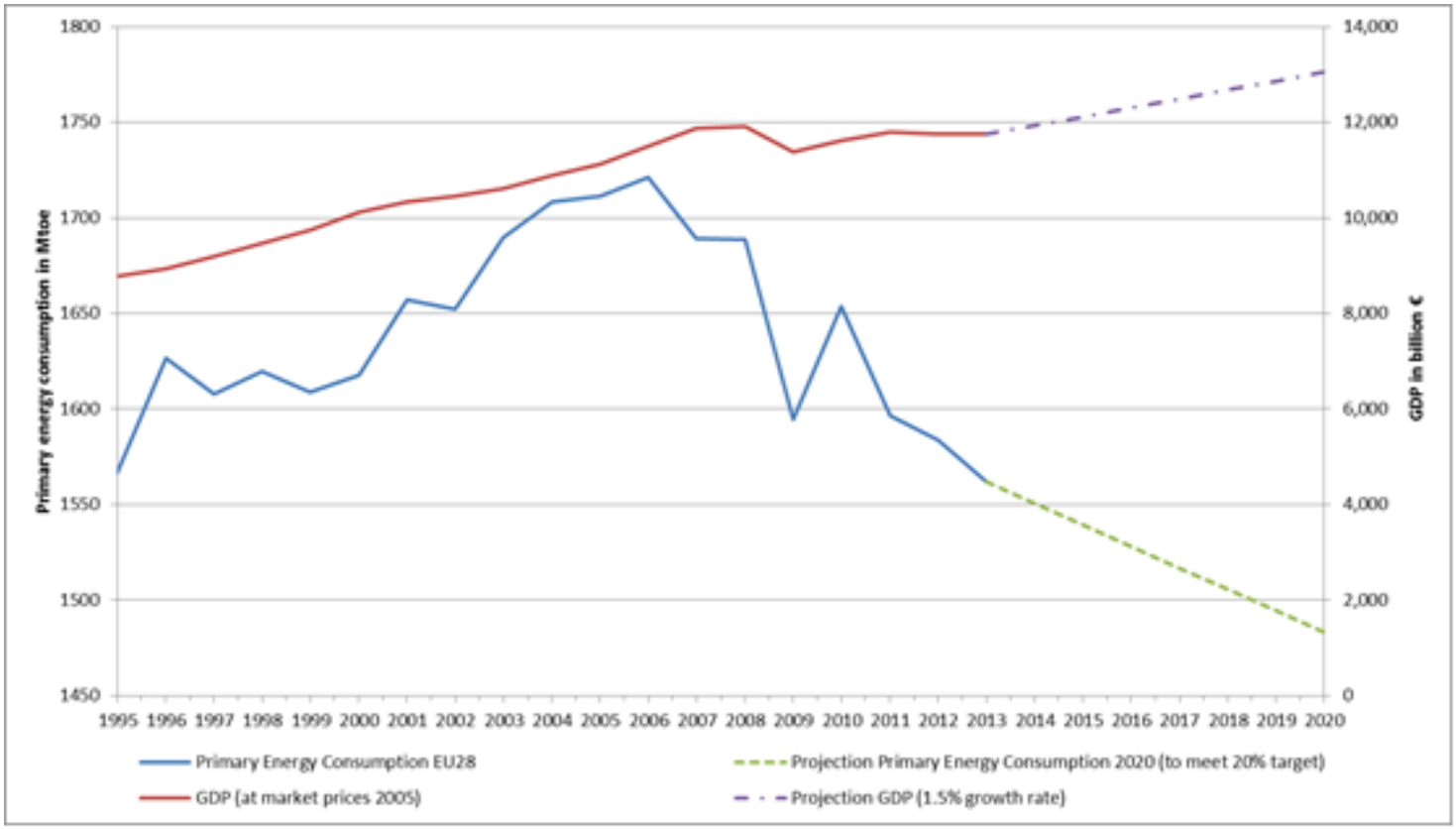
Bratislava, 25.11.2014

2020: outlook and lessons learned

European Commission

Energy efficiency of the EU economy is steadily increasing; and economic growth is being decoupled from energy consumption



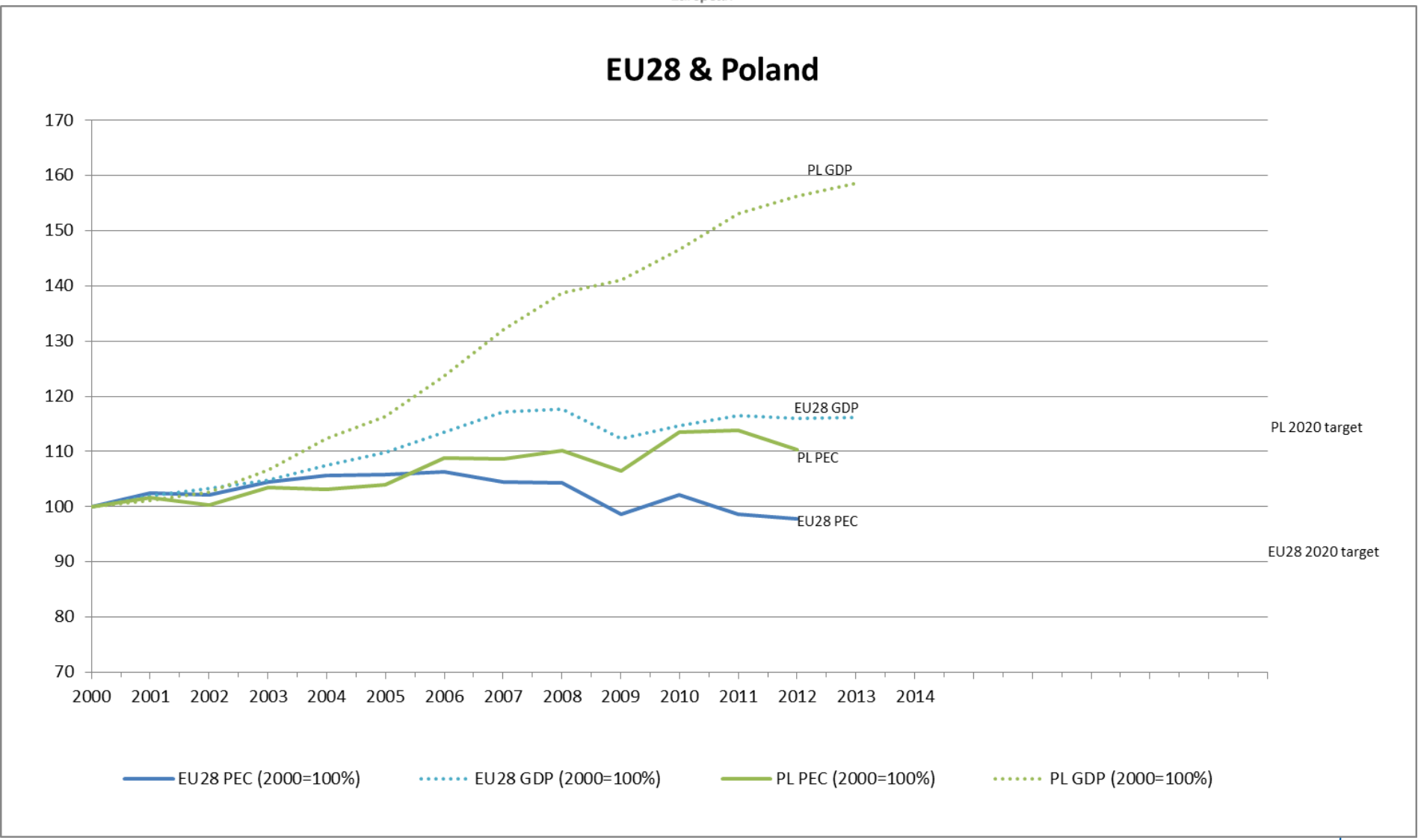
Energy efficiency progress can be observed across all sectors:

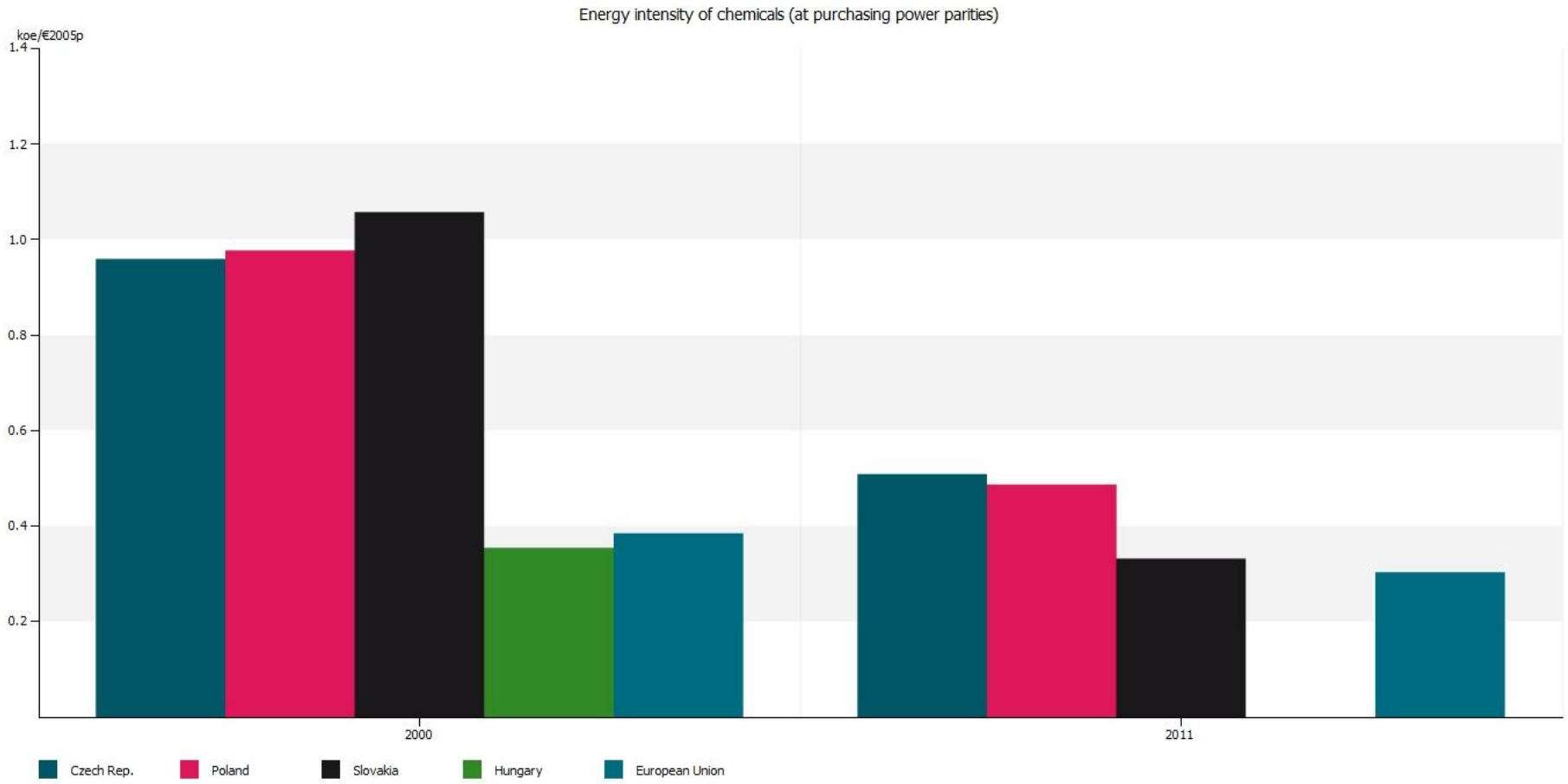
Between 1995 and 2010 the average consumption of new cars in the EU decreased by 27%

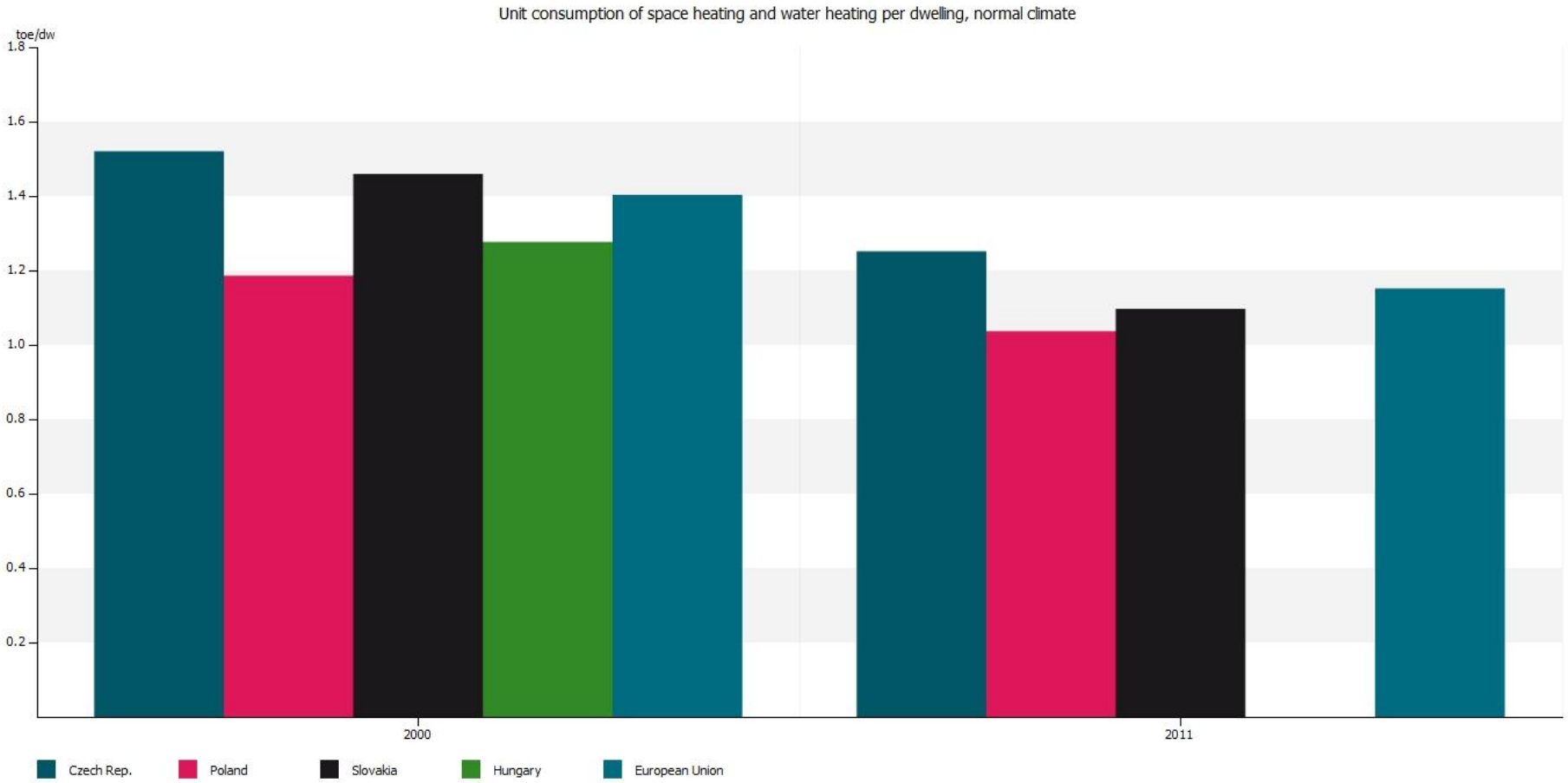
New dwellings built today consume on average 40% less than dwellings built 20 years ago

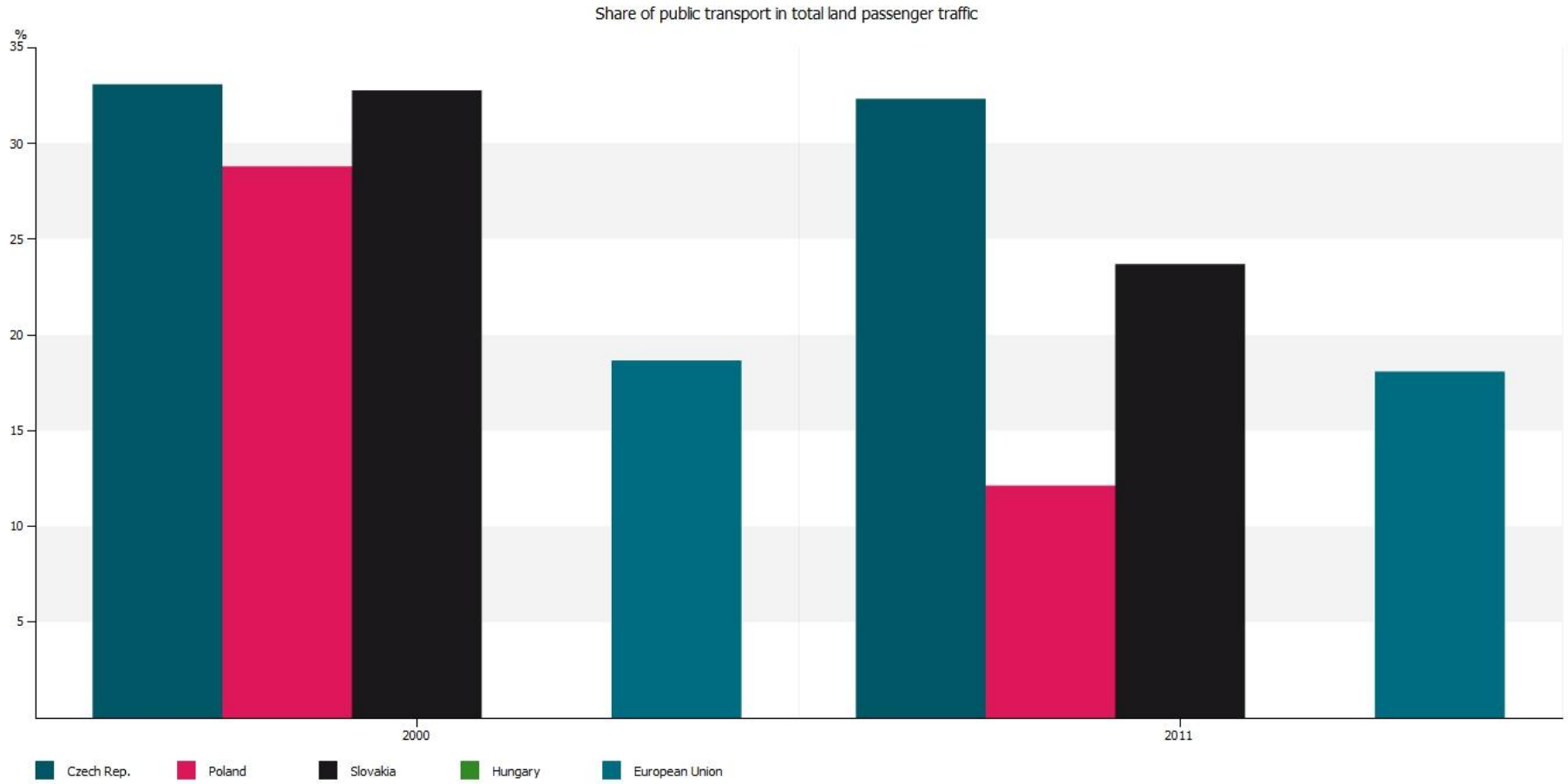
The share of refrigerators meeting the highest energy efficiency labelling classes (A and above) increased from less than 5% in 1995 to more than 90% 15 years later

EU industry improved its energy intensity by almost 19% between 2001 and 2011, compared with 9% in the US


EU28 & Poland
170
160
150
140
130
120
110
100
90
80
70
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
PL GDP
EU28 GDP
PL PEC
EU28 PEC
PL 2020 target
EU28 2020 target
EU28 PEC (2000=100%)
EU28 GDP (2000=100%)
PL PEC (2000=100%)
PL GDP (2000=100%)


Energy intensity of chemicals (at purchasing power parities)
koe/€2005p
1.4
1.2
1.0
0.8
0.6
0.4
0.2
2000
2011
Czech Rep.
Poland
Slovakia
Hungary
European Union


Unit consumption of space heating and water heating per dwelling, normal climate
toe/dw
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
2000
2011
Czech Rep.
Poland
Slovakia
Hungary
European Union


Share of public transport in total land passenger traffic
%
35
30
25
20
15
10
5
2000
2011
Czech Rep.
Poland
Slovakia
Hungary
European Union

There is progress in setting the right legislative framework:

- NEEAPs point to a **strengthening of current MS policies and the setting in place of new ones**
- The number of Member States applying **energy efficiency obligation schemes** for utilities is expected to rise from five to sixteen.
- **Financing mechanisms** under the European Structural and Investment Funds are being diversified, with greater use of financial instruments.

At the same time in several cases the transposition and enforcement of relevant rules is delayed:

- Only six Member States have so far notified full **transposition of the EED**
- At the moment, there are nine Member States that still have not completed the **transposition process of the EPBD** (deadline July 2012).
- Only a handful of Member States are conducting a proper **market surveillance** of products covered by efficiency requirements.

Based on an analysis of Member State actions and additional forecasts, the Commission now estimates that **the EU will achieve energy savings of around 18-19% in 2020**.

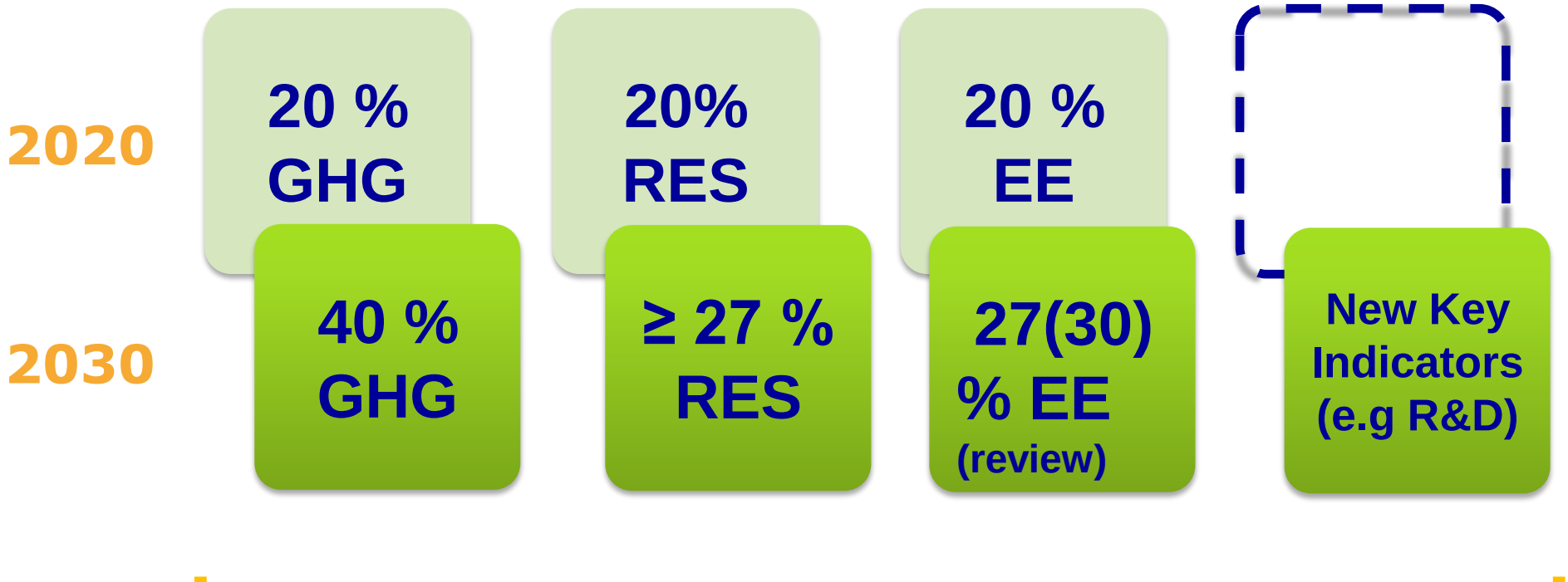
In order to bridge the gap to the target efforts should be concentrated on the following elements:

1. Strengthening local and regional verification of **national building codes** and accurately informing consumers of the energy performance of buildings for sale or rent;
2. Fully implicating **utilities i**n working with their customers to obtain energy savings;
3. Strengthening **market surveillance** of the energy efficiency of products.

Make full use of available financing, in particular ESIF

2030:target and main challenges

2030 climate and energy Framework



Main challenges…

Putting in place the right policy framework

- Effective implementation of current framework
- Revision in the short and mid-term of certain elements of the framework (e.g. Energy Labelling; Art 7 and other elements under the EED; Energy Performance of Buildings Directive)

Mobilising investments

- Effective use of European Structural and Investment Funds and other funding (EIC, H2020 etc.)
- Work with the financial sector to create the right framework conditions for investment (e.g. development of the right standards)
- Stimulate demand (through a robust implementation of existing and future rules, e.g. on EPCs)

The role of technology and innovation in fostering EE

Priorities

- Focus on deployment of existing technologies
- Promote innovation in services as well as products
- Ensure coherence between policy framework (e.g. Art 4 EED) and financing instruments (ESIF, H2020)

Instruments

- A minimum of €38 billion will be available for low carbon economy investments under the European Structural and Investment Funds 2014-2020. This sum will be multiplied by national and regional co-funding and by attracting private capital.
- Further support of Horizon 2020 and the ESI Funds will be invested in innovation for energy efficiency (2000 million Euro particularly through the Energy Efficiency focus of the H2020 Societal Challenge on Secure, Clean and Efficient Energy as well as the public-private partnerships on "Energy Efficient Buildings", on "Factories of the Future" and for a "Sustainable Process Industry through Resource and Energy Efficiency (SPIRE)"

Next steps to achieve the 2030 target

1. Review of the products framework
2. Review of certain elements of the EED
3. Review of certain elements of the EPBD
4. Governance framework: work on-going
5. Juncker's €300bn investment package: very soon
6. Assessment of instruments & measures for the promotion of emissions reduction and EE in transport, for electric transportation and for renewable energy in transport after 2020
7. Reviewed of 2030 target by 2020, having in mind an EU level of 30%

Thank you!