



# Energy Efficiency Trends in Buildings in the EU



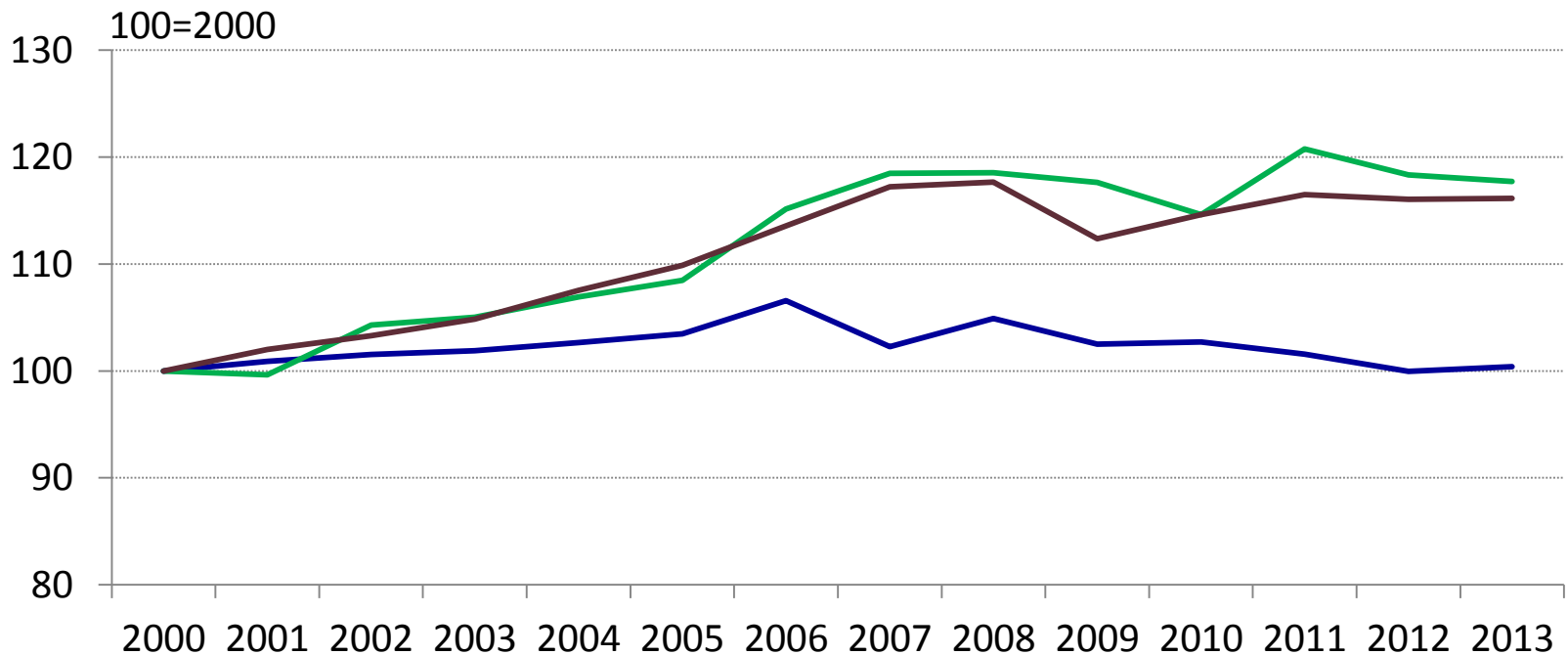
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- Buildings represent about 40% of EU final consumption and 60% of electricity consumption.
- Decreasing energy consumption of buildings since 2008 (-0.9%/yr), not fully explained by the economic recession (-0.3%/yr for GDP);
- Stability of electricity consumption since 2008, following a rapid increase until 2008, at the same rate as GDP (2.2%/year);

## Energy consumption trends in residential & non residential buildings (EU)



\*at normal climate

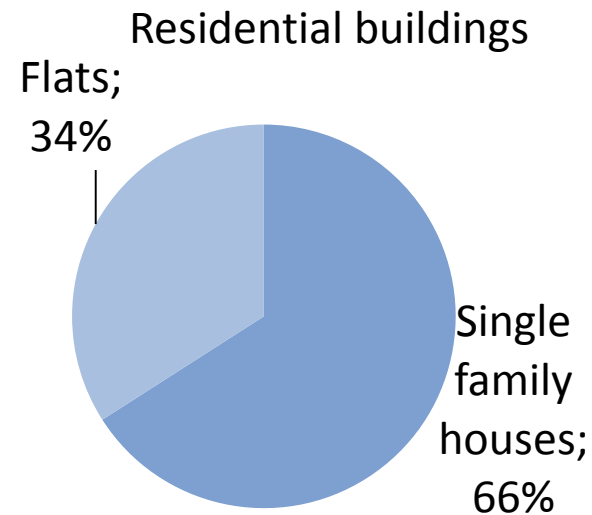
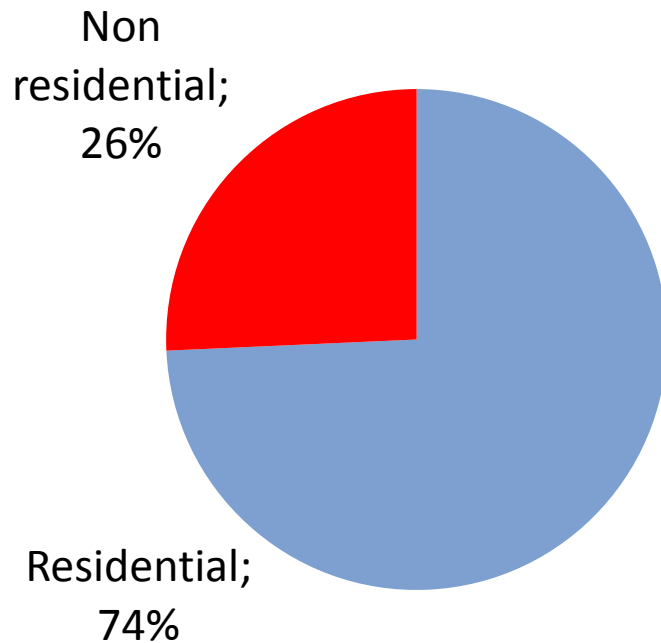
— Total

— Electricity

— GDP

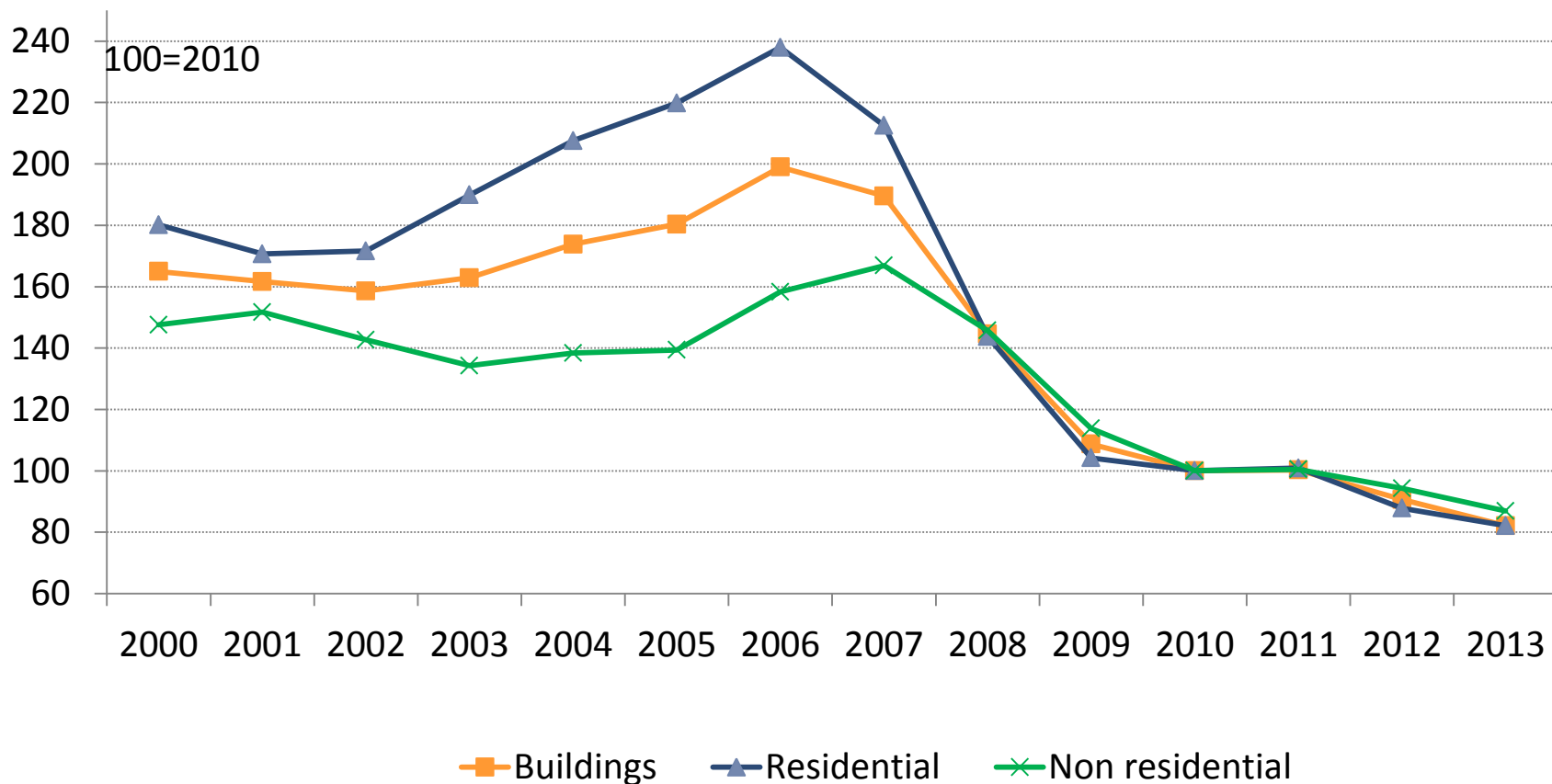
Total floor area of buildings represents around 25 billion m<sup>2</sup> in EU. Residential sector represents about  $\frac{3}{4}$  of total floor area. Single family houses represent 66% of residential floor space, against 34% for apartments

### Total floor area of buildings by type (EU) (2012)



Between 2002 and 2006, the number of buildings permits increased rapidly at EU level. Since 2011, the number of permits fell dramatically and was in 2013, 18% lower than in 2010.

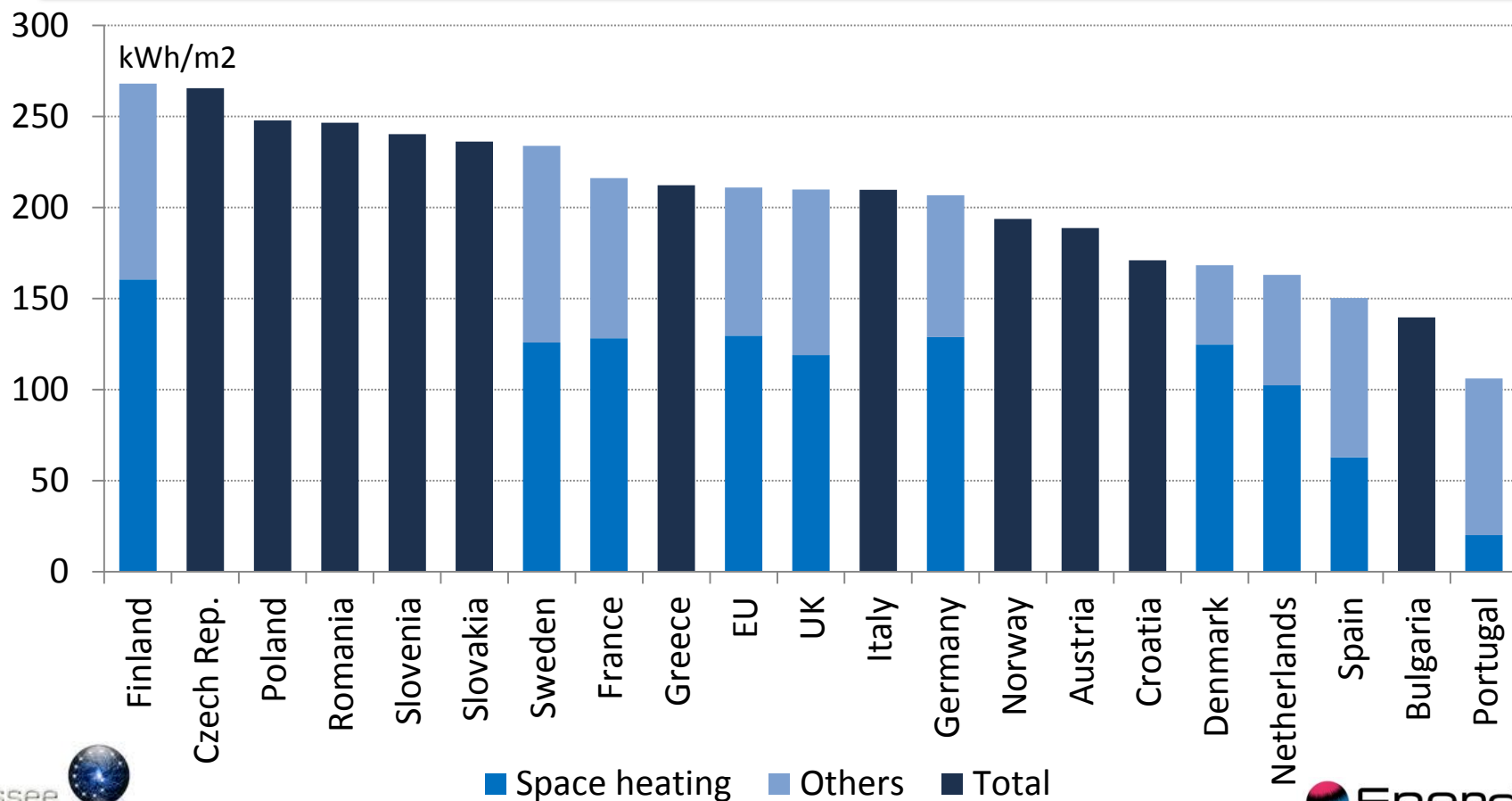
Buildings permits indices\* (2010=100)



Eurostat,  
\*Building permits - m2 of useful floor area

At EU level, the unit consumption per m<sup>2</sup> for buildings is around 210 kWh/m<sup>2</sup> in 2012, with a large gap between residential (185 kWh/m<sup>2</sup>) and non-residential (286 kWh/m<sup>2</sup>).

### Specific energy consumption of buildings per m<sup>2</sup> (2012)



Electricity consumption per m<sup>2</sup> varies significantly by type of buildings and countries. It is higher in Nordic countries (Norway, Sweden and Finland) mainly due the use of electricity for space heating

