Energy efficiency trends for households in EU New Member Countries (NMC’s) and in the EU 25

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Average consumption per dwelling
(scaled at EU-25 average climate)

Decreasing trends of the average energy consumption per dwelling in most NMC’s; values in a range of 1 to 2 toe (outside Malta and Cyprus)

Deciding trends

Increasing trends

Malta and Cyprus: actual data: non adjusted
Average consumption per m\textsuperscript{2} for thermal uses (electricity excluded) (adjusted to EU 15 average climate) (2004)

- Only 3 countries with data on space heating consumption ➔ strong limitation for assessing energy efficiency trends and levels ➔ non electric consumption as proxy for thermal uses.
- Differences in unit consumption per dwelling may be explained by different size of dwellings ➔ need to compare consumption per m\textsuperscript{2}.
- Per m\textsuperscript{2}, ranking of countries change: low value may not necessary reflect high energy efficiency, but the result of price increase and restriction of comfort; high value may indicate poorer efficiency.
Increase in the size of dwellings offset part of the reduction in the consumption per m²: around 30% in Poland, Czech Rep; in other words, without the size increase the reduction in the energy consumption per dwelling would have been 30% higher in Poland, Czech Rep.

Electricity excluded
Regulation on building codes in EU NMC’s

Poland

Lithuania

Czech Republic

Hungary

Estonia

Slovenia
Household space heating: possible targets

- Austria
- Belgium
- France
- Italy
- Spain
- Greece
- UK
- Finland
- Sweden
- Norway
- Netherlands
- Germany
- Denmark
- Bulgaria
- Lithuania
- Slovenia
- Sweden

Useful consumption per m² and degree-day

% central heating

Best practice

Spain
Electricity consumption per dwelling

Very unequal level and trends of electricity consumption per household: rapid progression (3 to 4%/yr) in Malta, Cyprus, due to air conditioning, and in Baltic countries; low growth in Slovenia, Hungary and Poland (~1%/year); decrease in 3 countries (Slovakia, Bulgaria, and Czech republic), partly due to substitution of other fuels to electricity for thermal uses.
Electricity consumption trend per dwelling

Very unequal progression across countries; low growth over the period 1990-2004 in UK, Sweden, Germany and Denmark

Since 2000, very low growth in Denmark, The Netherlands and UK, and to a lesser extent Finland; acceleration in Austria, Spain, Sweden & EU-15
Unit electricity consumption and price variations in the household sector (1996-2004)

Decrease in Slovakia explained by large price increase (almost a fourfold increase)
Decrease in Czech Rep or low growth in Slovenia, Hungary, Poland also linked to price increase

Price in €/kWh; source: Enerdata from Eurostat and IEA