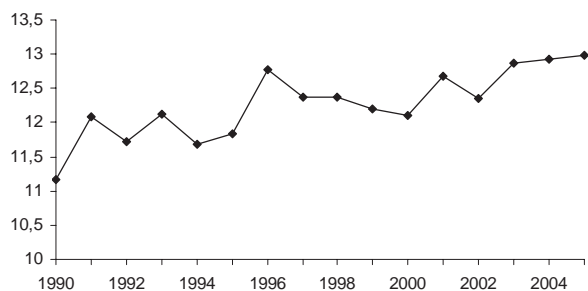


# Increased energy consumption in the EU residential sector

- a disaggregation of the technical and nontechnical parameters between 1990 and 2004

## Introduction

Final energy consumption in the EU Residential Sector has continued to rise between 1990 and 2004. During this period the energy efficiency of the sector has however improved. Non technical (lifestyle or population) parameters that influence the absolute level of energy consumption have nevertheless had a greater impact than efficiency, thus resulting in an overall increase in final energy consumption.



Final energy consumption in the EU Residential Sector (unit: EJ)

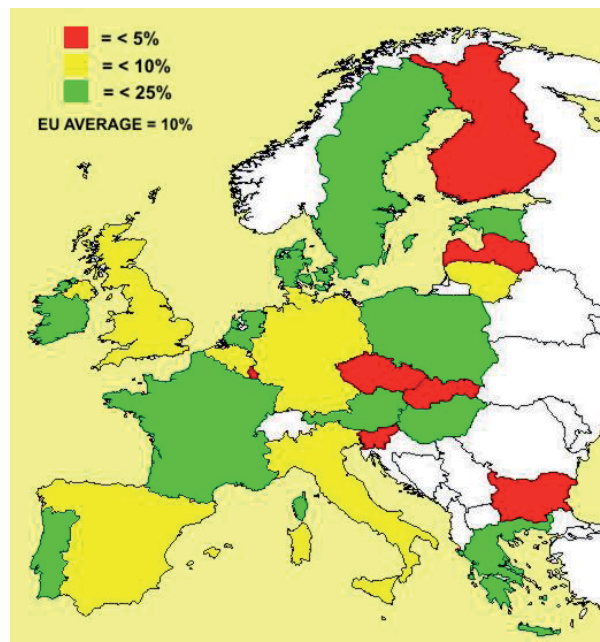
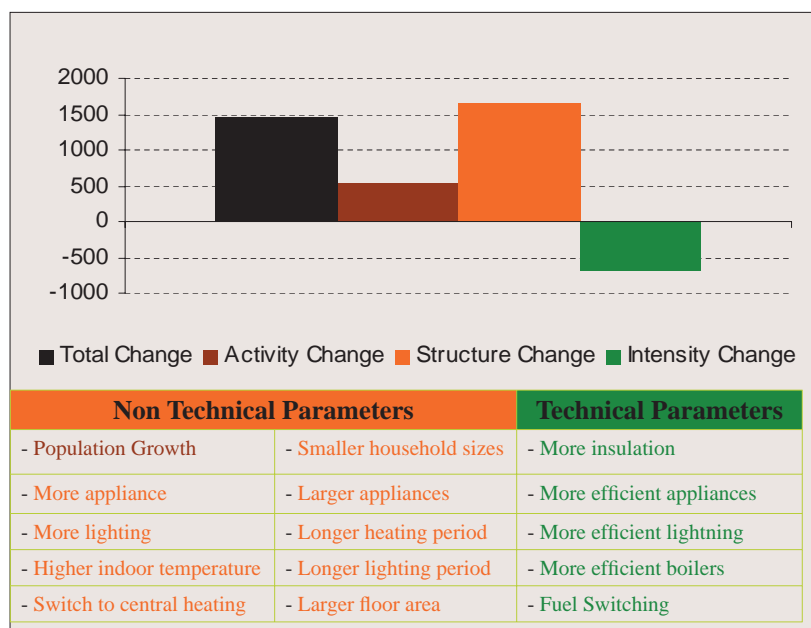


Diagram depicting improvement in energy efficiency of residential sector per EU member state from 1990 to 2004. Measured as difference in residential sector Odex for 1990 from that of 2004. Data from Odyssee Network (2007).

## Index Composition

The figure below shows that the combined contribution of the non technical parameters of population increase (activity change) and lifestyle (structural change) towards total final energy consumption was significantly greater than the contribution of technical parameters (intensity) thus leading to a net rise in total final energy consumption.



## Conclusion

The non technical parameters listed, which over time have offset the improvements in energy efficiency, are mostly related to rising standards of living brought about by rising affluence. These are now the main drivers of increasing energy consumption in the residential sector. Given that increased affluence and improved living standards are universal goals sought by all developed and developing countries, something has to change in order to address rising energy use. The European Environmental Agency states that the trajectories of energy consumption drivers need to be decoupled from those of energy use. This can occur through further improvements in energy efficiency or through a reappraisal of living standards that are appropriate to the respective energy supply and carbon emission constraints.

For further information:

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