



# **“Monitoring of EU and National Energy Efficiency Targets” (ODYSSEE-MURE 2010)**

## **Kick-Off Meeting**

### **TRENDS OF ENERGY EFFICIENCY INDICATORS IN SPAIN**

**Madrid, 21-22 June 2010**

*Pilar de Arriba Segurado*  
*Planning and Studies Department*  
**IDAE**  
**Spain**

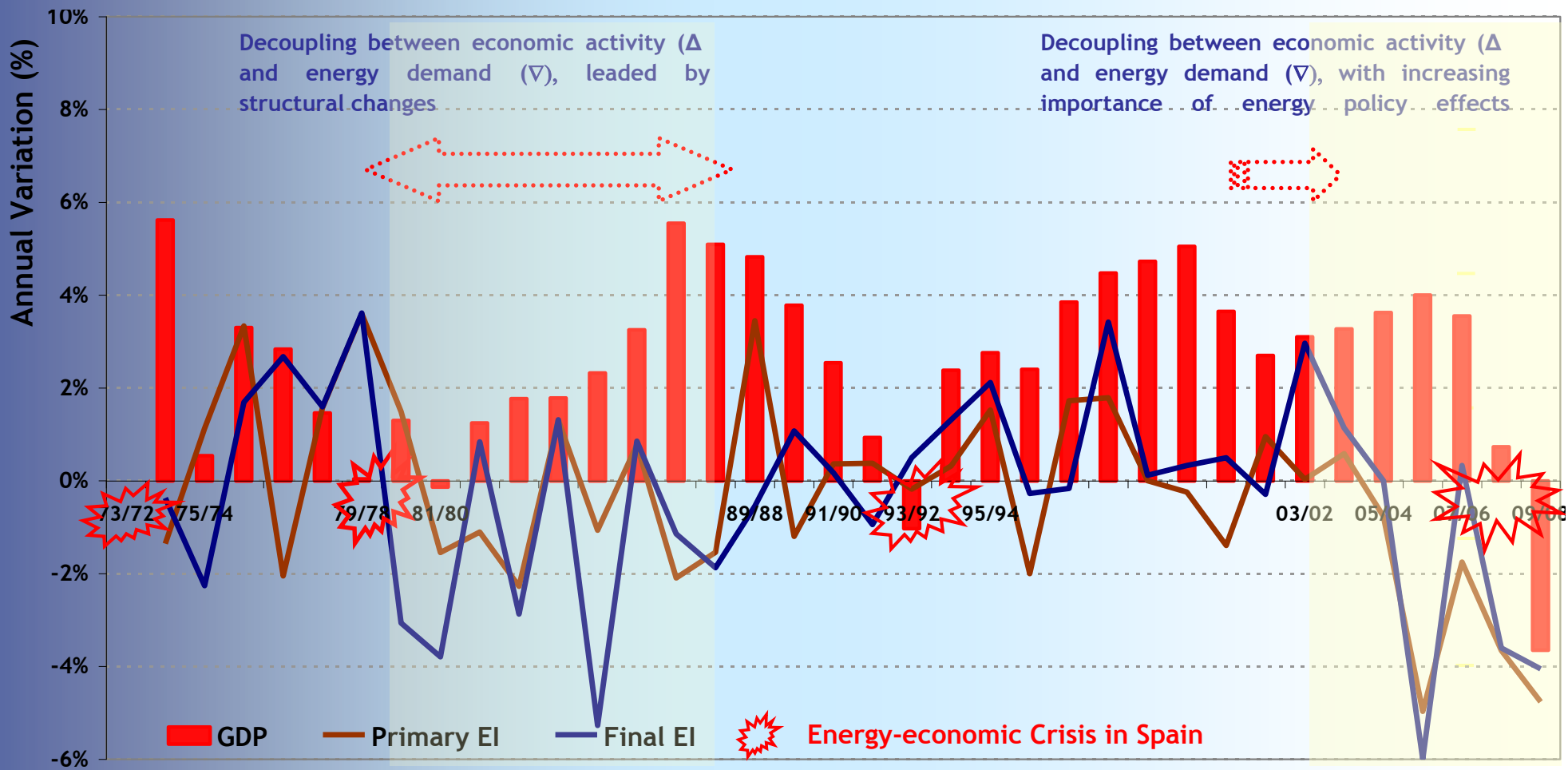


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# Trends of Primary and Final Energy Intensities in Spain

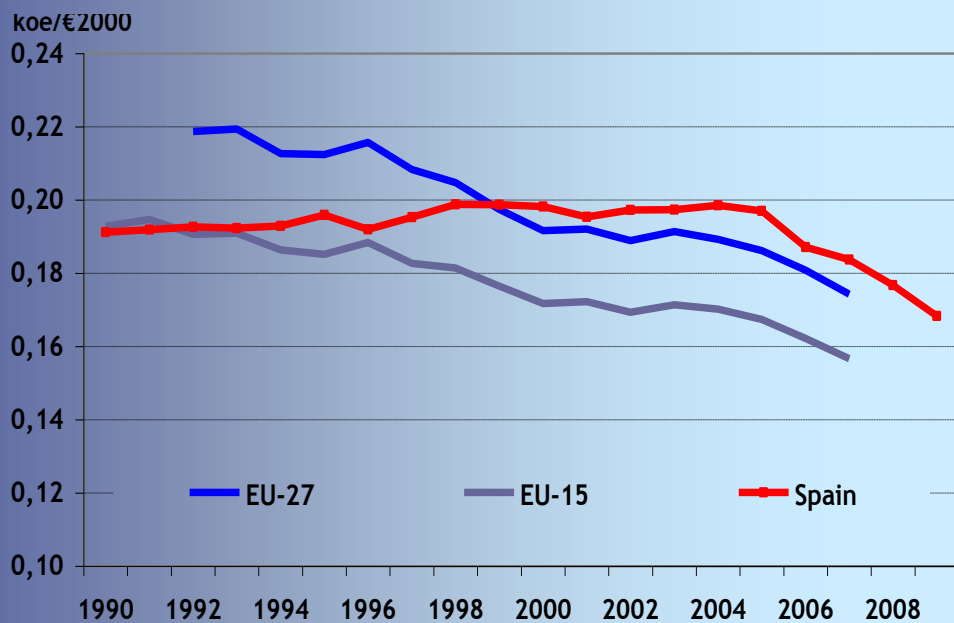


Source: IDAE/MITyC/INE

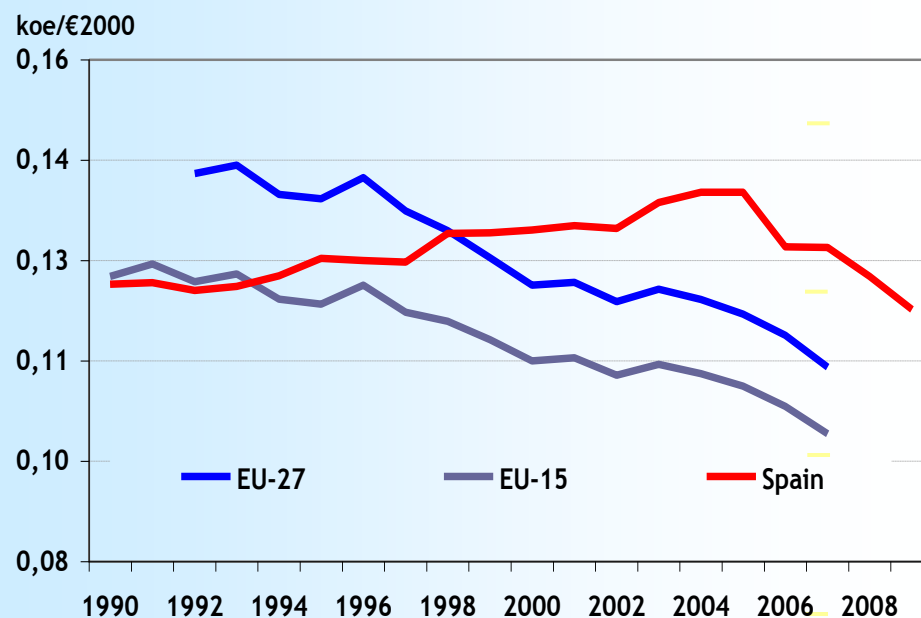


# Trends of Primary and Final Energy Intensities in Spain and EU

## Primary Energy Intensity



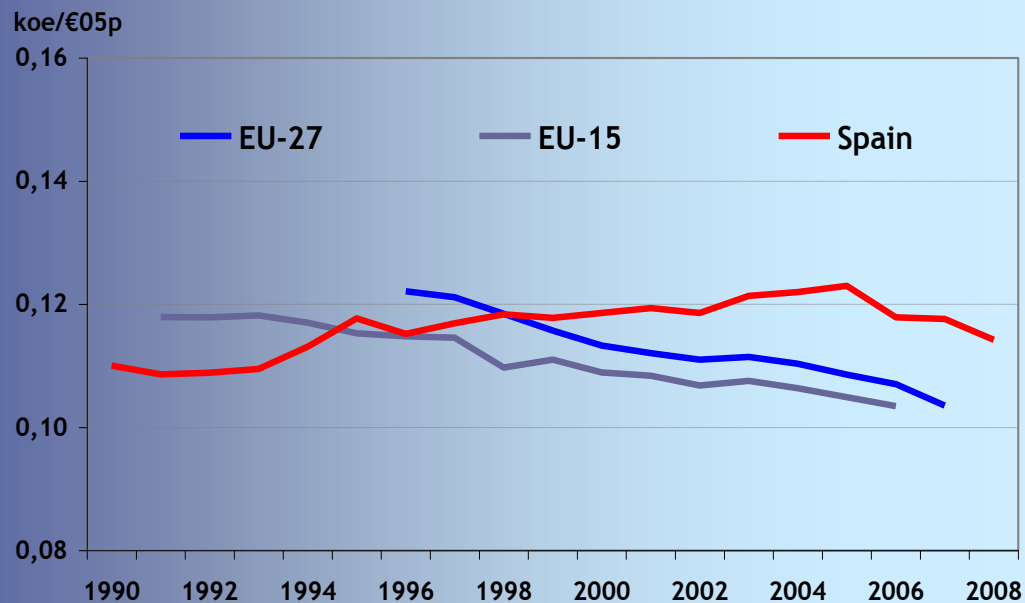
## Final Energy Intensity



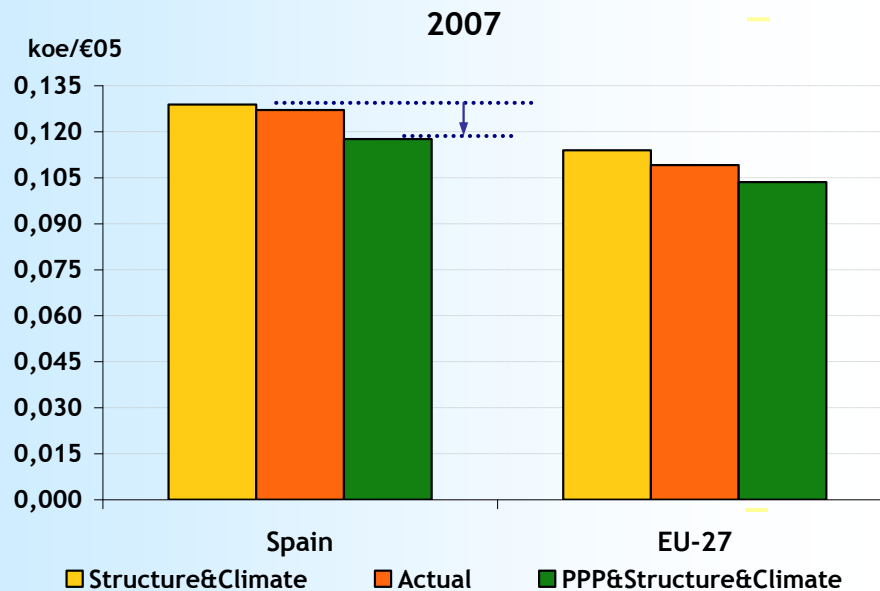
Source: EnR/IDAE



# Trends of Final Energy Intensity in Spain and EU with Adjustments:

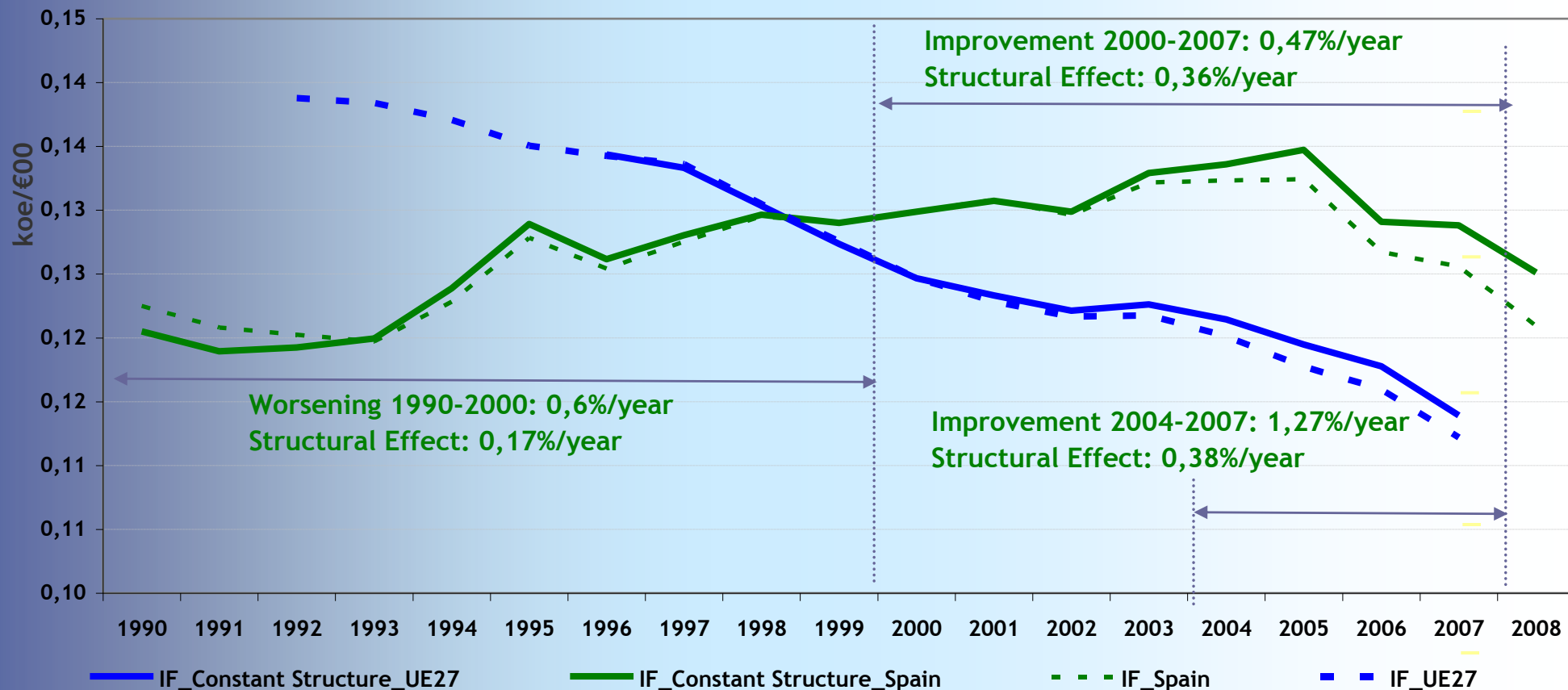


Source: EnR/IDAE





# Influence of the Structural Changes in the Final Energy Intensity in Spain (1)

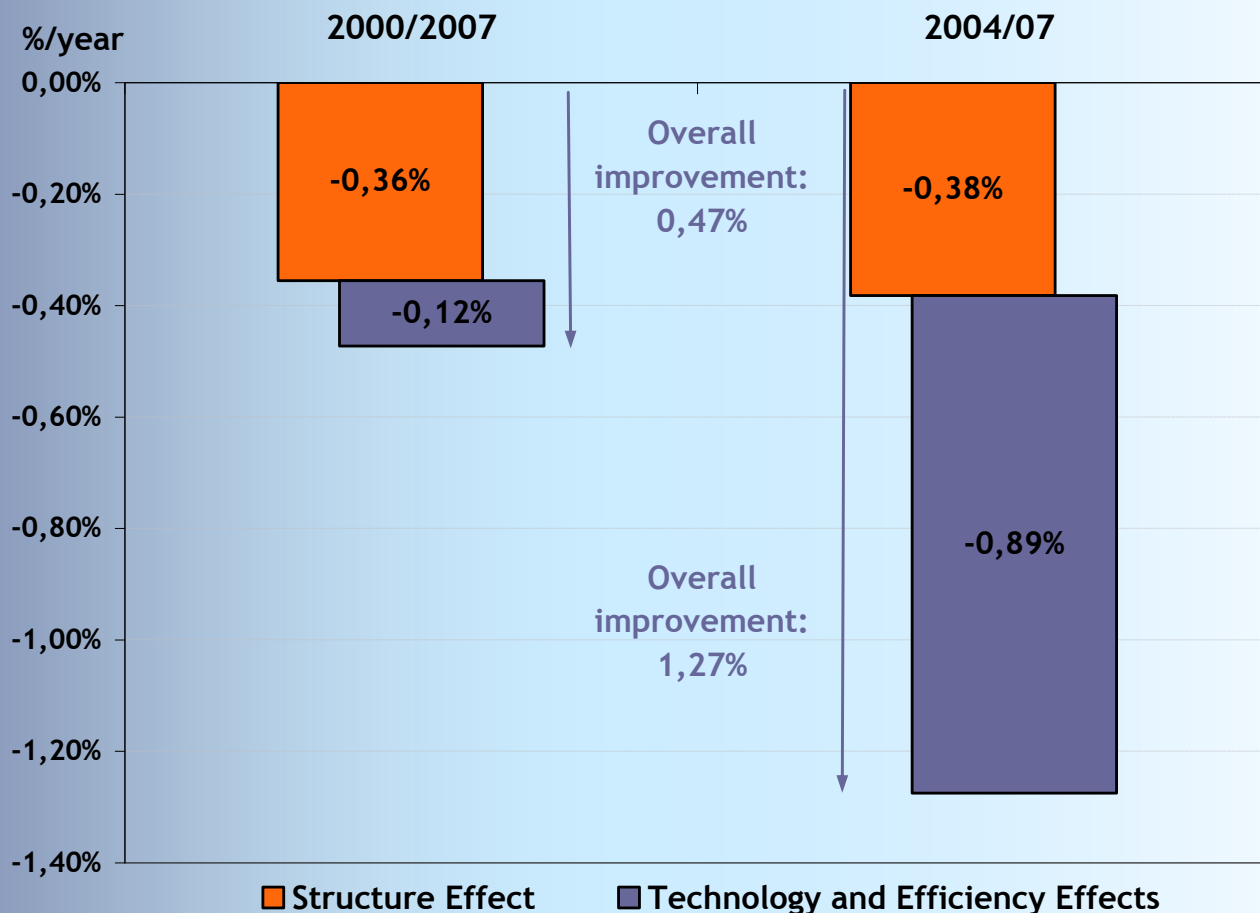


Source: EnR/IDAE

Note: Intensities with Climate Corrections



## Influence of the Structural Changes in the Final Energy Intensity in Spain (2)

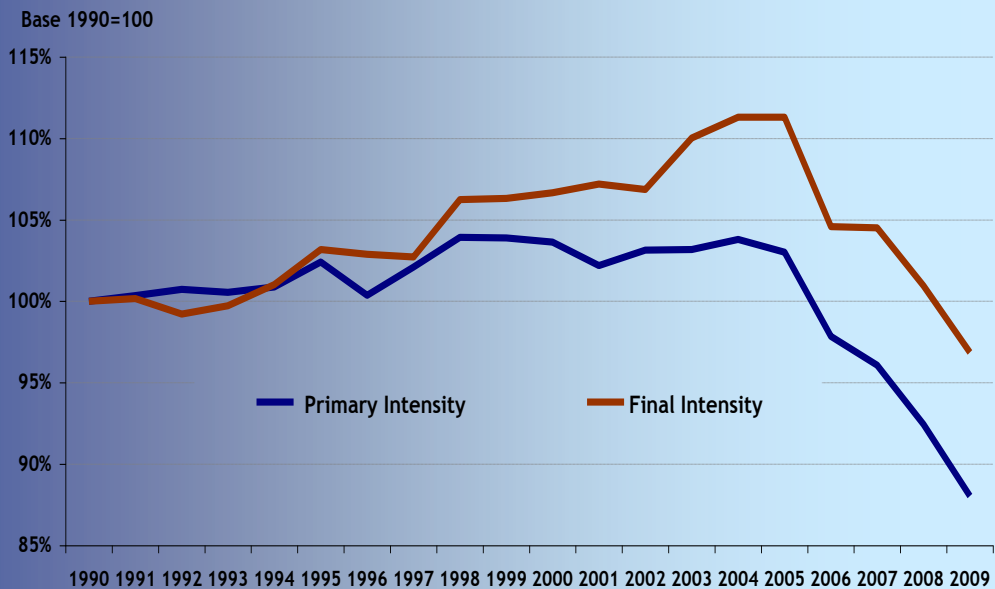


Source: EnR/IDAE

Note: Intensities with Climate Corrections

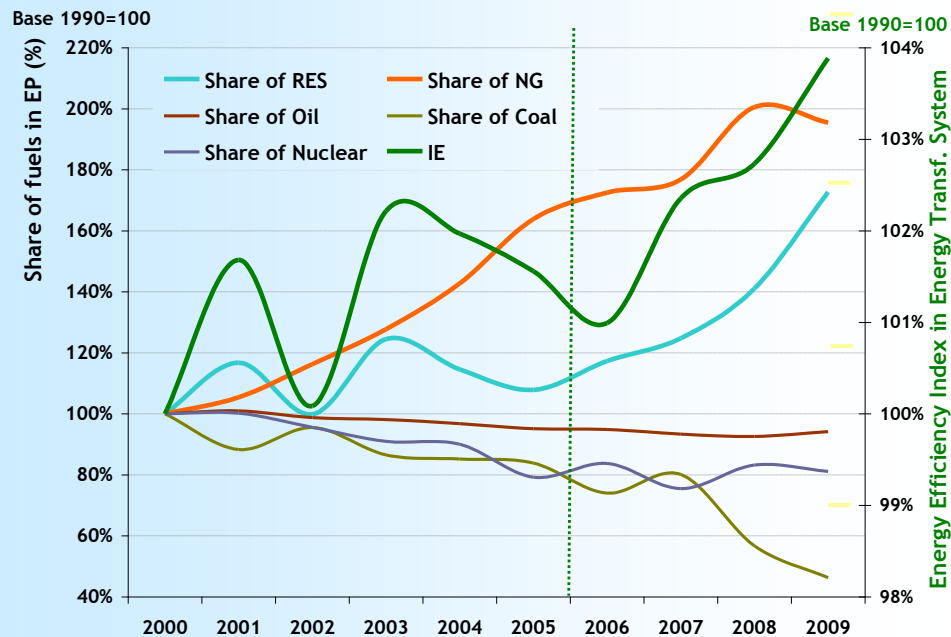


# Benefits from RES and NG in the Primary Energy Intensity in Spain



Source: MITyC/IDAE

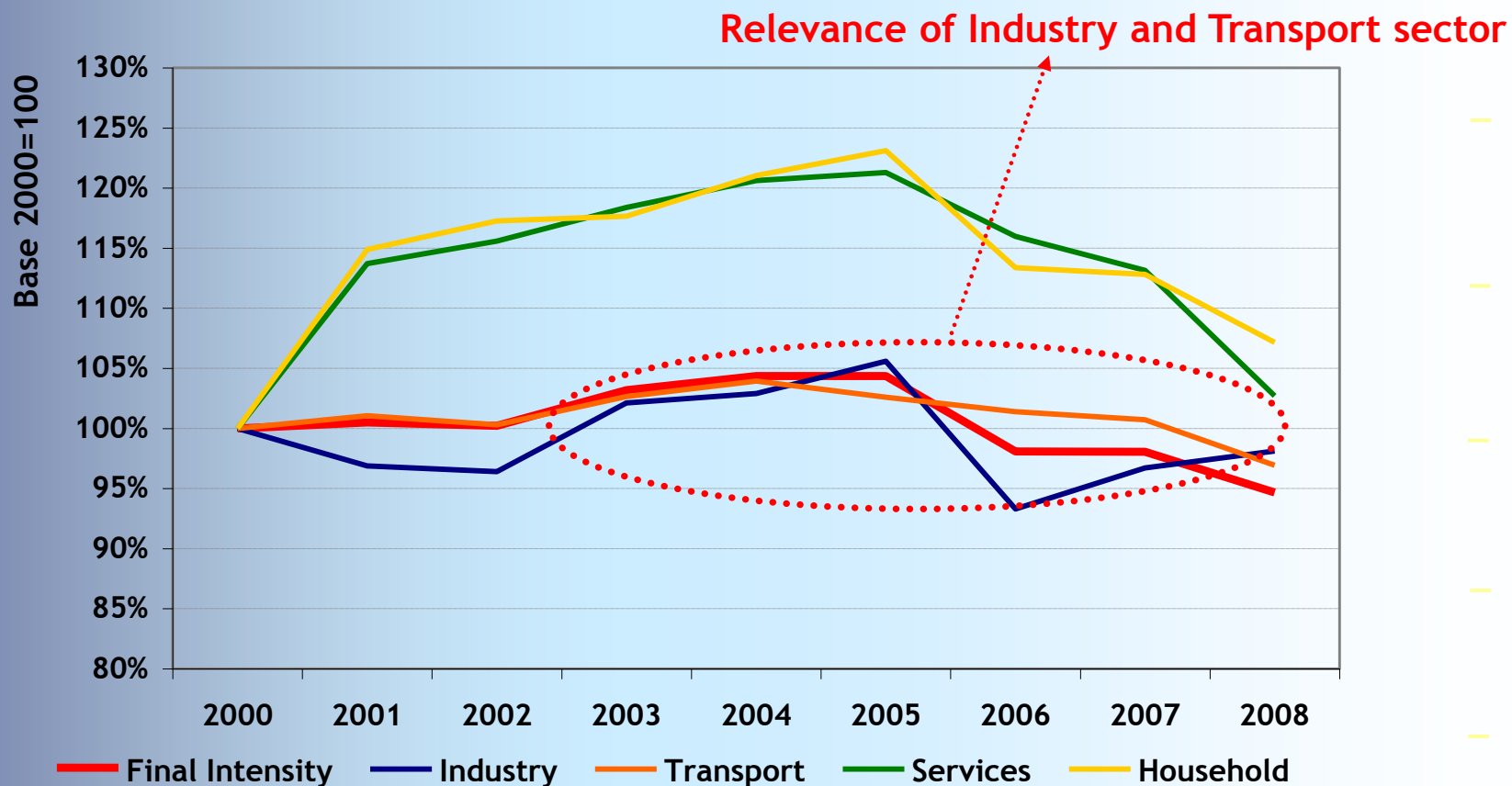
Improvement in PEI > FEI ↘ Benefits in the overall energy primary intensity and in the Transformation System derived from the penetration of RES and NG



Source: IDAE&MICYT



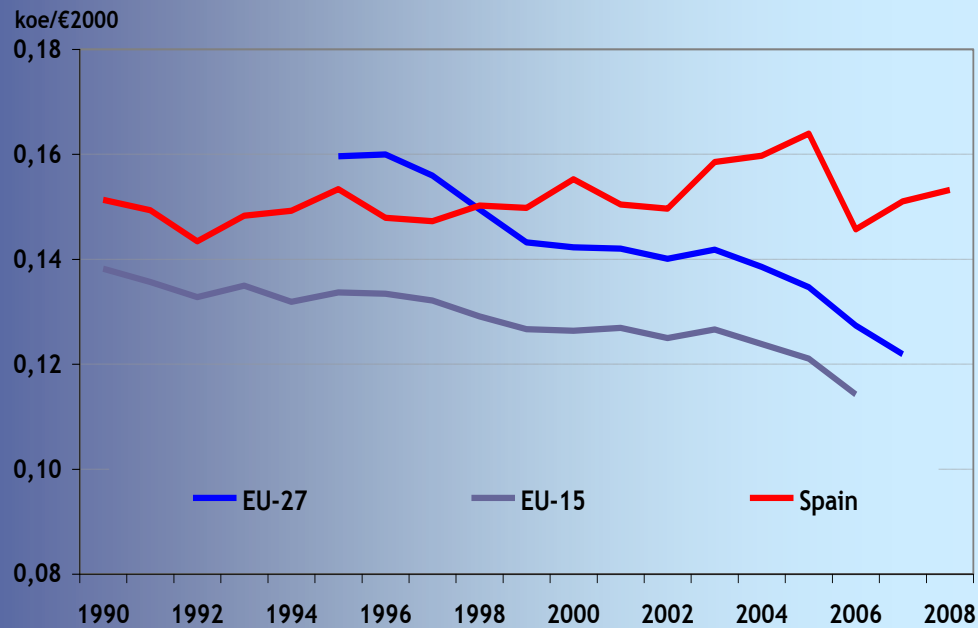
## Trends of Final and Sectoral Intensities in Spain



Source: IDAE/MITYC

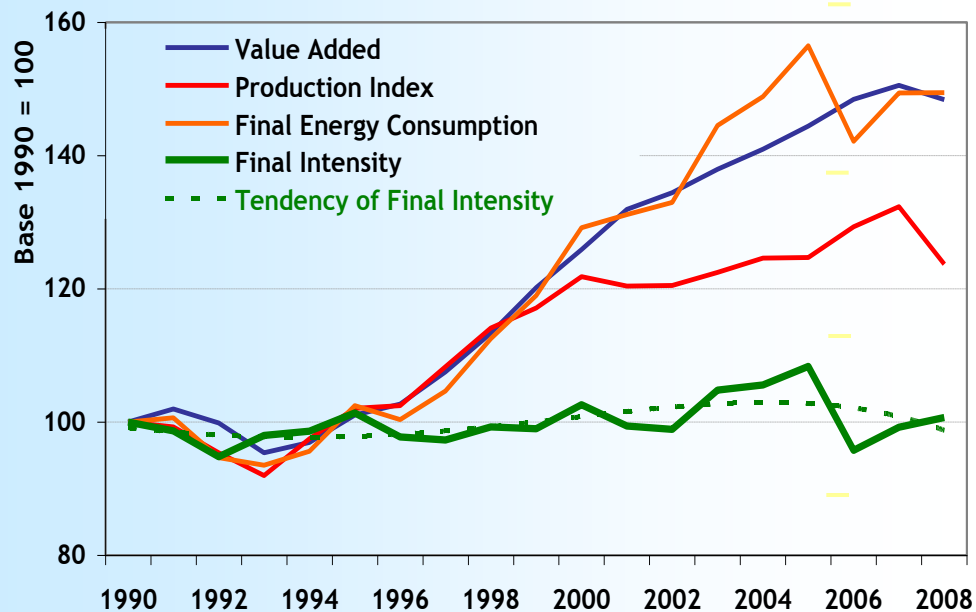


# Trends of Energy Intensity in the Industry Sector in Spain and EU



Source: EnR/IDAE

## Main Parameters in the Industry Sector

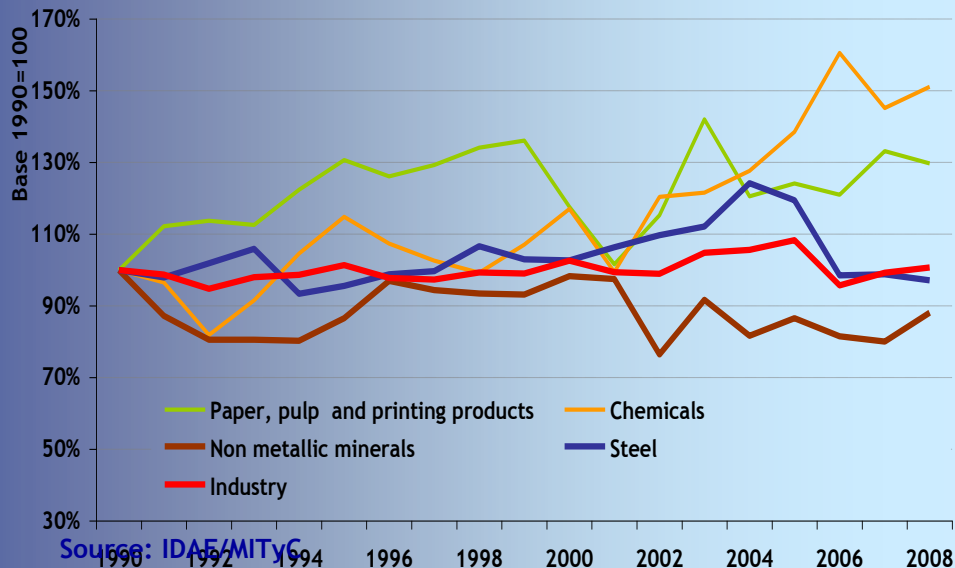


Source: INE/MITYC/IDAE

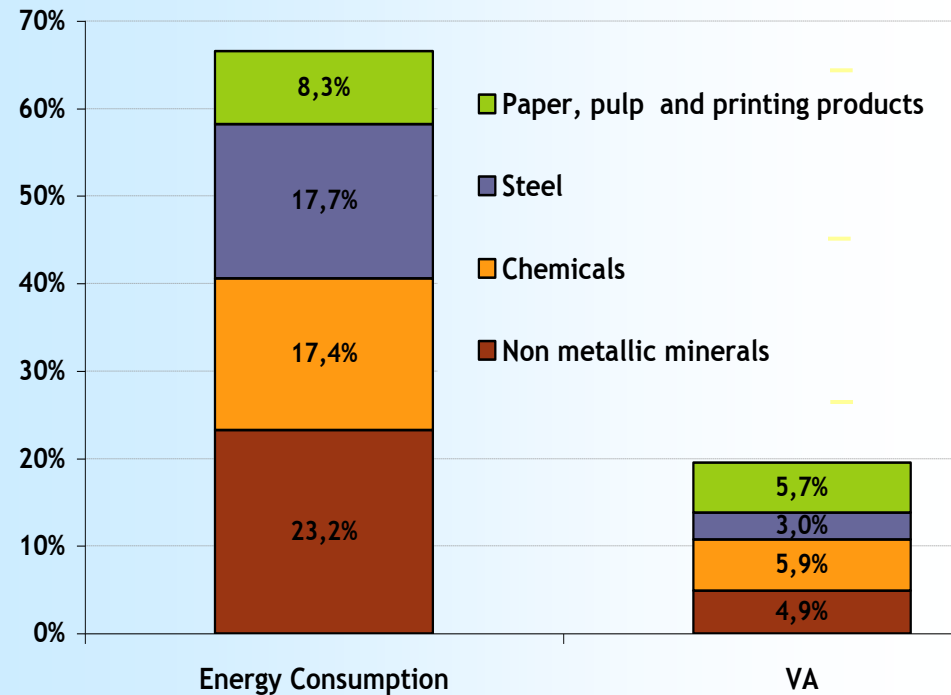


# Trends in the most relevant Industry sub Sectors

## Energy Intensities



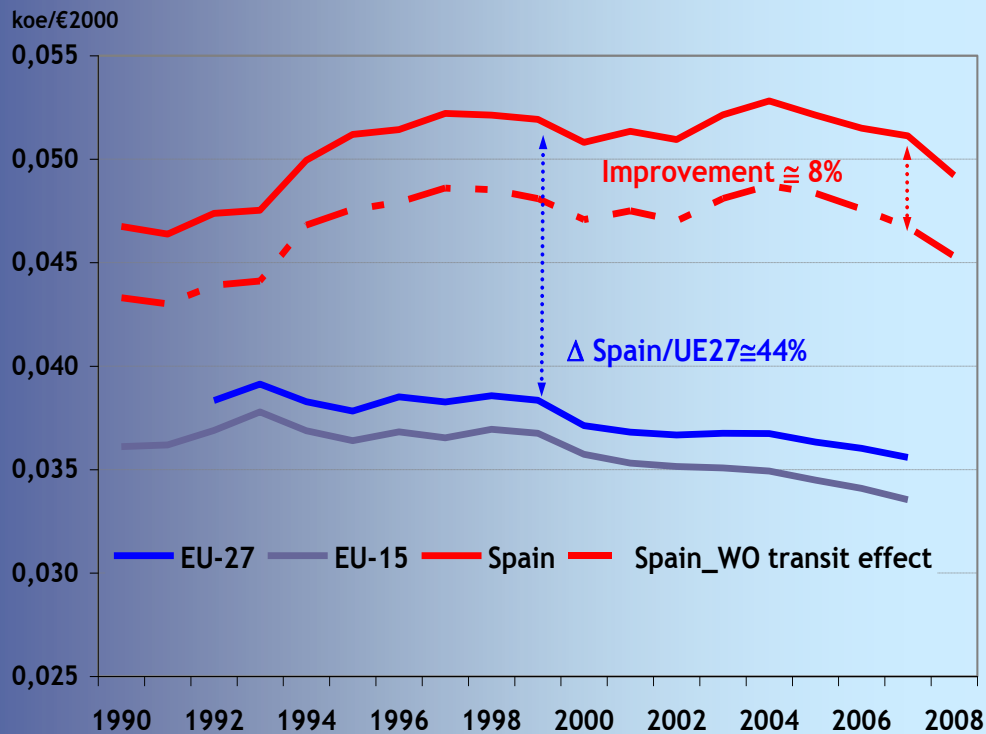
## Structure of Energy Consumption and Added Value (%)



Source: IDAE/MITYC

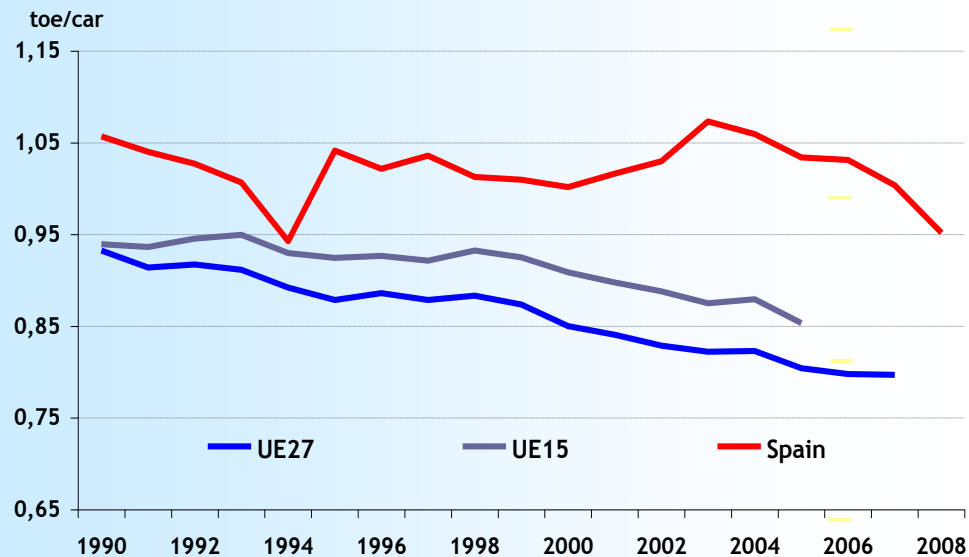


## Trends of Energy Intensity in the Transport Sector in Spain and EU



Source: EnR/IDAE

## Unit Consumption of Road Transport per equiv. car

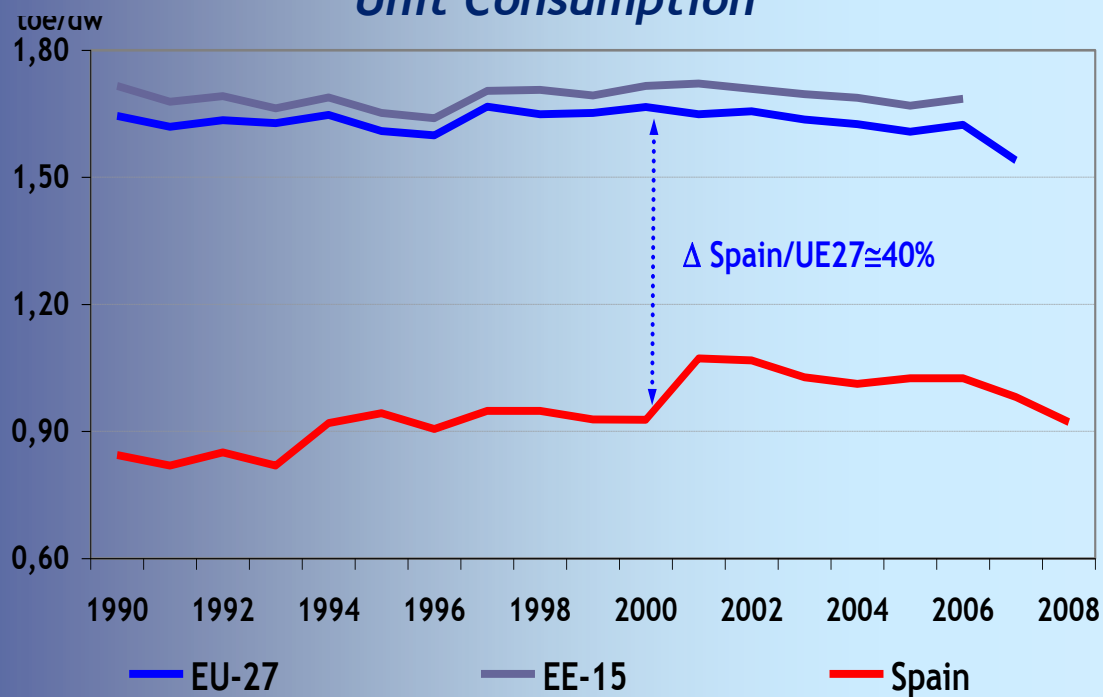


Source: EnR/IDAE



# Trends of Energy Intensity in the Household Sector in Spain and EU

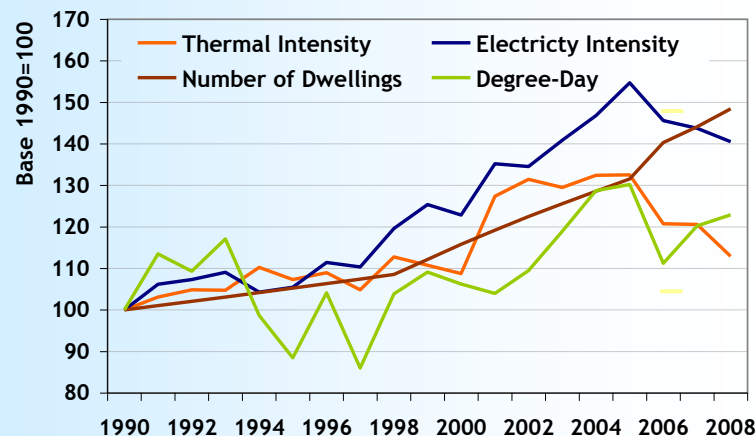
## Unit Consumption



Source: INE/IDAE/EnR

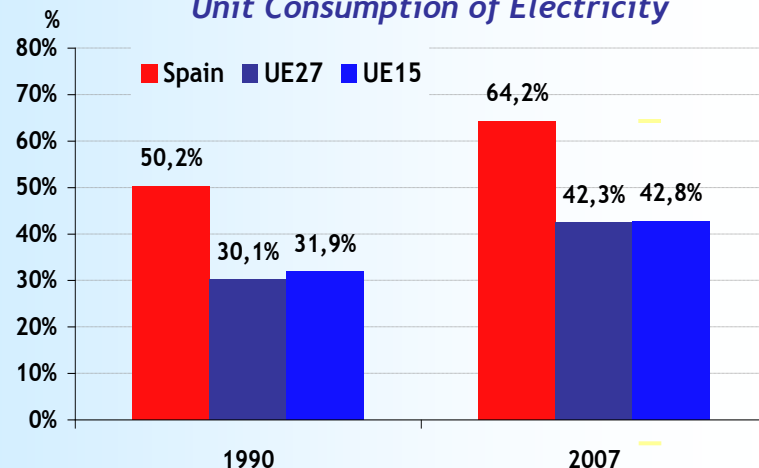
Note: Intensities with Climate Correction

## Main Parameters in the Household Sector



Source: INE/IDAE/MICYT

## Unit Consumption of Electricity

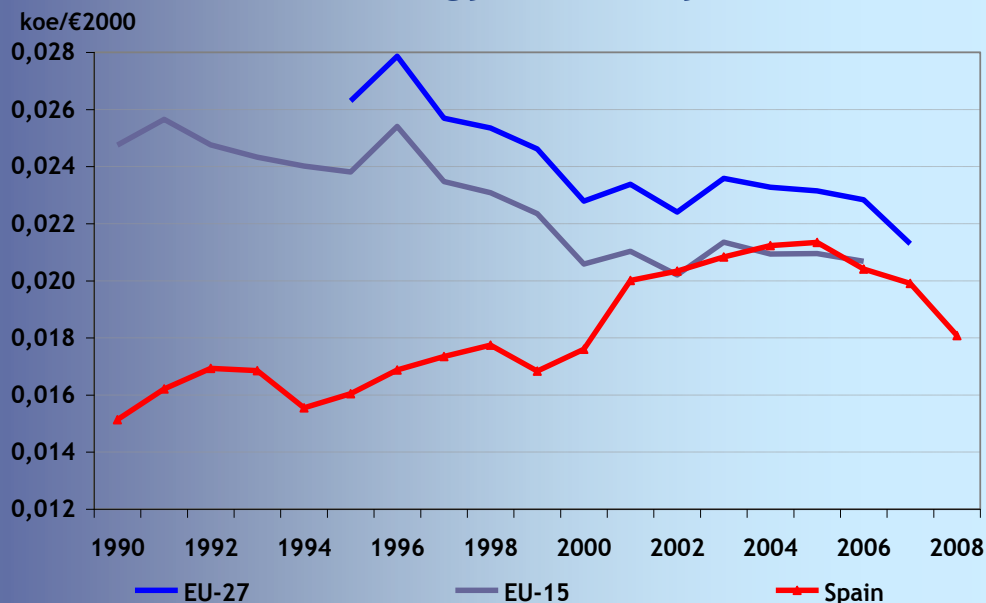


Source: EnR/IDAE



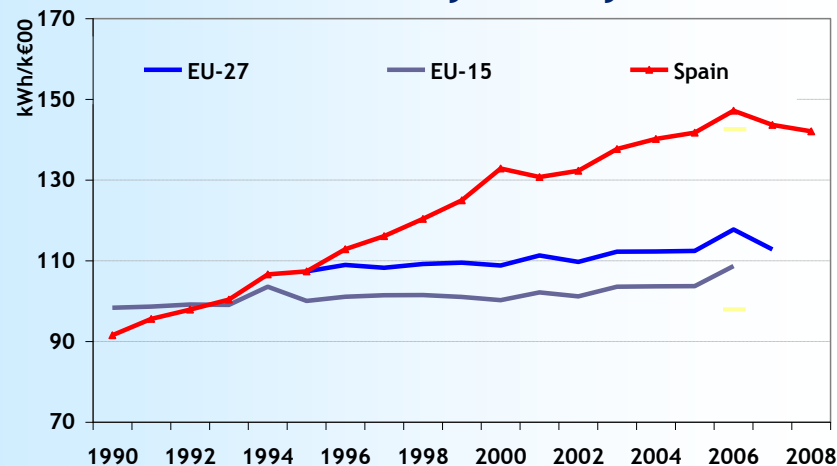
# Trends of Energy Intensity in the Services Sector in Spain and EU

## Final Energy Intensity



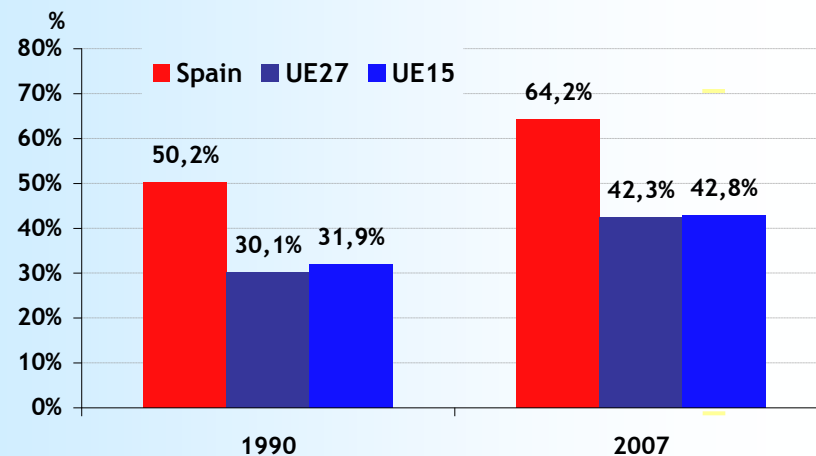
Source: EnR/IDAE;

## Electricity Intensity



Source: EnR/IDAE;

## % of Electricity Consumption



Source: EnR/IDAE



## *Conclusions:*

- Decreasing tendency in the global intensity indicators and convergence with the EU average
- Favorable effects of the integration of RES in the primary energy intensity
- Large influence of the transport and industry sectors on the final energy intensities.
- Increasing contribution of the Household and Services Sectors in the Final (and Primary) intensities
- Necessity of integration of RES and EE policies
- Positive expectations on the future development of intensities as a result of the confluence of the national and UE policies/guidelines on EE and Climate Change and of the crisis effects



## *More Information:*

<http://www.idae.es>

<http://www.idae.es/index.php/mod.pags/mem.detalle/idpag.481/relcategoria.1368/relmenu.162>

<http://www.odyssee-indicators.org/>

<http://www.mure2.com/>