

Title of the measure:	POR19 – Efficiency in Residential Buildings
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General description

The Energy Certification System includes mandatory shares of efficient classes for new buildings and large rehabilitation works. Additionally, specific regulations may be developed, aimed at encouraging improvements in the energy classes of existing buildings

The objective of this measure is to certify 475 thousand homes in new or rehabilitated buildings by 2015, i.e., to achieve a 10% share for energy class B or higher.

Certified Homes	Year Average	Accrued Values
	2007- 2015	2015
New Homes	34,000	272,000
Remodelling	25,000	203,000
Total	59,000	475,000

Estimates indicate that approximately 50 thousand new homes are built every year; these will obviously constitute the main basis for Energy Certification. Additionally, large and medium remodelling works should be considered, whose amounts are expected to exceed 25% of the value of the buildings in question, bringing them under the scope of Energy Certification.

The current residential estate, consisting of approximately 5.5 million homes, according to INE estimates, includes over 2 million homes needing repairs of some sort. Within this universe, approximately 740 thousand homes need large and medium repairs; estimates indicate that approximately 25 thousand repairs may be carried out annually.

Impact evaluation

Energy Certification may result in average energy savings of 30% to 40%, resulting from intervention in least five areas: renewable energies, insulation, heat bridges, glass surfaces and shading.

Energy savings are evident when energy consumption is analysed for a 4-people family, following urban consumption standards, consuming 4.4 thousand kWh per year. By implementing energy saving measures, this family may achieve savings of approximately 30%, corresponding to 16.5% savings from solar equipment, 6.6% from insulation, 0.7% from heat bridges, 5.7% from glass surfaces and 0.4% from shading.

On the other hand, if impact is analysed exclusively considering the thermal component and not considering use of biomass, it is concluded that the Certification may induce very significant energy savings, by reducing consumption for heating purposes by more than two thirds. This result strengthens compatibility of this plan with the PNAC, establishing a more ambitious 50% target.

The certification is estimated to contribute with over 94 ktoe in energy savings, based on the aforementioned assumptions.

Interaction of measures

POR 10 - Regulation on HVAC systems in Buildings (RSECE), 2006 and POR9 - Building code RCCTE 2006

Historical data

References

European Directive nº 2002/91/CE of 16 December

Decree Law nº 78/2006 of 4 April

Decree Law nº 79/2006 of 4 April

Decree Law nº 80/2006 of 4 April

Ordinance nº 461/2007 of 5 June

<http://dre.pt/pdf1sdip/2008/05/09700/0282402865.pdf>