



GTR'S 2012 REPORT

A NATIONAL PERSPECTIVE ON
SPAIN'S BUILDING SECTOR

ACTION PLAN FOR A NEW HOUSING SECTOR

Press Release

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To drastically reduce the energy consumption of old buildings is not only economically advantageous for the buildings' occupants; it also has immediate returns for the country's economy.

This is one of the main conclusions of the 2012 report "A National Perspective of Spain's Building Sector – Action plan for a New Housing Sector" of the Rehabilitation Working Group "GTR" (*Grupo de Trabajo sobre Rehabilitación*), which was coordinated by Green Building Council Spain and the Conama Foundation. This report was presented on November 28th at the National Congress of the Environment (CONAMA 2012).

The report concludes that the deep retrofit of 10 million homes by 2050 –reducing heating expenses by 80% and covering hot water needs by 60%- can generate 130,000 new jobs in its first phase by 2020.

A total investment of 5,000-10,000 million euros a year of public and private funds during complex times is required. However, this amount (considerably less than the amount approved Strategic Plan for Infrastructure and Transport "PEIT" (*Plan de Estratégico de Infraestructuras y Transportes*) for the period 2005-2020), is Compensated by energy savings and avoided emissions of CO2.

How soon can the investment be recovered?

The authors of this new report, Albert Cuchí -professor at the Universitat Politècnica de Catalunya. Barcelona Tech and Head of Training at Green Building Council- and Peter Sweatman – CEO of Climate Strategy & Partners- indicate that the average investment by owners to retrofit a home in Spain would be the equivalent to what they will stop paying in energy bills for 20 years (with immediate improved comfort).

In turn, the country's economy would have instant returns. According to Peter Sweatman: "The country would increase its VAT revenues, would stop paying unemployment benefits to many workers, more tax revenue would be collected through income tax...". Sweatman denotes that Spain cannot afford to miss on the current EU support for the improvement of energy efficiency.

This document provides much greater precision and quality to its estimates than its 2011 predecessor due to the incorporation of 80 new parameters. The authors comment that "It is inexplicable that Spain is taking so long to foster energy renovation. In addition, the authors expect new normative changes for 2013.

This second report outlines in detail the Action Plan needed to carry out the complete energy renovation of the housing sector, including economic mechanisms necessary to ensure -in one way or another-expected returns. These are:

Financing lines tailored for the financing term and risk of the renovation.

The report acknowledges that due to the crisis, financial conditions in Spain have worsened dramatically. Nevertheless, it is viable to obtain new ICO financing lines for the deep retrofit of Spanish homes with a fix cost

of 5 % at 20 years. These new lines ought to have the financing support of the EU of attain targets of energy efficiency and reduction of GHG emissions.

Formulas to subsidize or fill a gap of 25% of the cost of deep renovation through a direct subsidy or tax relief.

Both forms of assistance will be reduced during the initial 10 years of the New Housing Sector (NHS), with the evolution of energy prices and scale economies obtained within the renovation sector.

“Technology Curve” of -1% (pa) Nominal Cost Reductions for Deep Renovations:

This report assumes that the price of retrofitting a housing unit will reduce at an annual rate of -1% until 2050 in nominal terms, with a long-term Spanish inflation rate expectation of 2% and therefore -3% real cost savings. Furthermore, these real cost reductions can be delivered through economies of scale, city-block size projects, competition on margins, improved contractual procedures and lower transaction costs. We do not assume reductions in labour costs nor in the cost of raw materials, but in the efficiency of use of both.

A Knock-on Effect capacity of the investment in energy efficiency in other investments related to household improvements with a proportion of 2 (energy efficiency) to 1 (other improvements).

It is proven that intervention in energy efficiency –or with other purposes- at the scale proposed for each dwelling, generates a Knock-on effect on further investments in improving the quality of housing, also having an impact on the value of the home.

An average value of CO2 equivalent to 15% of the cost of energy saved.

Energy reforms of homes will have a major impact on the levels of emissions of Spain. The report considers a contribution of "CO2 value" of the order of 50 to 120 euros for each energy renovation per home and per year during its amortization period (ie between 20 and 30 years). The authors acknowledge that this extra value will not come in sufficient quantity to the current price of CO2 (between 6 and 8 euros / ton), but consider that this price will change significantly in the next 20 years.

The report also admits that domestic GHG reductions in Spain are always going to be more expensive to obtain than buying credits in a European system whose price has been depressed by the crisis and by excess rights, and it is entering a second phase experiencing an oversupply. A domestic system of white certificates for energy efficiency linked to compliance with the new energy efficiency directive appears to be a very promising solution to these issues.

The GTR report which has been sponsored by **URSA**, **Fundación la Casa Que Ahorra** and the **European Climate Foundation** believes that the energy rehabilitation of housing generates about 18 new jobs for every million euros invested, a figure calculated from 15 studies on the impacts of the renovation of buildings in Europe and other countries. Albert Cuchía affirms that: “What has not been done before in this country seriously is to consider a deep energy renovation of housing”. Cuchí further adds: “In Spain a home can consume 75 kWh/m2 per year in heating, yet the German Passivhaus efficiency standard lowers that amount to 15 kWh/m2 per year”. Moreover, Chuchí is certain that it is feasible to reduce energy consumption of homes in Spain by 80%”. It is very important to promote integral energy renovations, because starting with small simple reforms (such as changing boilers), would then deter the further improvement in efficiency and it would be much harder to recover investments.

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