

## A NATIONAL PERSPECTIVE ON SPAIN'S BUILDING SECTOR

ACTION PLAN FOR A NEW HOUSING SECTOR

## **Executive Summary**

The Spanish Working Group for Rehabilitation "GTR" believes that 10 million primary residences built in Spain before 2001 can and should be transformed into high efficiency, low-carbon/ low consumption residences by 2050. This intervention would stimulate activity in the critically impacted buildings sector and can be funded through a combination of energy savings and increased Government fiscal inflows created by the activity itself. To achieve this, GTR proposes a roadmap and an action plan whose implementation will generate the order of 150,000 high quality, stable direct and indirect jobs between 2012 and 2050 through the investment of up to 10 billion euros a year in the deep rehabilitation of between 250,000 and 450,000 of Spain's primary residences annually. Such investments can be financed through a combination of family savings, financial institutions, renovation contractors, ESCOs, energy supply companies and the State with each financing source receiving its appropriate investment returns from energy savings and emissions, improvements in the performance, comfort and quality of the building, social benefits, improved health and quality of life and productivity upgrades for commercial buildings.

This, GTR's second report, is the result of more than two years of continuous work by a now expanded group of industry and technical experts (the GTR). The 2012 paper contains new work conducted over the last 12 months as well as a summary of 2011 activity together with input from the now extended analysis and dialogue with key Spanish industry players and government which GTR has been able to maintain.

The 2012 GTR report reinforces and provides a more detailed and critical assessment of the main conclusions of its prior published work: that the rehabilitation and upgrade of Spain's housing stock is a feasible and economically viable task provided that there is a supportive regulatory, operational and financial framework. Also that energy efficiency is the key pillar around which the rehabilitation sector can orient its resources as this creates savings, improves the quality of life in homes, and creates jobs in a sector badly affected by the crisis.

This report uses the same methodology and structure as GTR began in 2011, with two significant improvements:

- 1. GTR's 2012 economic model introduces over eighty new parameters, and significantly deepens the technical and cost analysis in the detailed hotspot intervention menus and their creation as well as better adapting itself to the more specific segmented housing characteristics and considering more external scenarios;
- 2. GTR has focused on the direct incorporation of the new legislative guidelines from the European Union's new Energy Efficiency Directive, as well as new national and international processes and developments in the field.

In 2012, GTR is also able to more confidently detail the key components of a new legislative, operational and financing framework for a New Housing Sector ("NHS") to save up to 390,000 million euros in energy efficiency<sup>1</sup> and GHG emission reductions in Spain, by 2050, and deliver an 82% reduction in the CO2 emissions of Spanish homes through deep renovation. These three components of the NHS framework have to be developed jointly, as the sector will not deliver the benefits that the GTR Action Plan perceives without an unprecedented level of coordination between the regulatory, financial and technical sides. The deep renovation of existing buildings requires by its very nature a significant level of coordination between different levels of government and the new and growing stakeholders in the NHS. This requires strong and clear political

<sup>1</sup> The projected cumulative energy savings and emission reductions are valued at 2012-2050 European market prices

leadership such that the full opportunity is understood and firmly and unequivocally supported very much in line with the European legislative framework running up to and including the Energy Efficiency Directive adopted in November 2012.

Spain has the ability, creativity and just needs the extra push of industry players to establish the foundations of a lasting, valuable and sustainable new economic sector. By 2050, Spain can aspire to having 10 million energy efficient and fully rehabilitated low carbon homes – an upgrade of 64% of the most inefficient Spanish homes built before 2001 – reducing heating/cooling consumption by 82% and the commercial energy demand for domestic hot water by 60%. To achieve this, the right organizational framework will emerge as a result of the effective provision of a new legislative platform and new technical standards for renovation supported by public investment through a combination of initial upfront assistance, tax benefits, low cost and long-dated ICO financing and through the provision of value to household CO2 emissions reductions through a white certificate programme.

This report provides an action plan that will generate a new, efficient and productive sector, creating jobs, saving energy and emissions and contributing decisively in meeting national CO2 reduction targets linked to European commitments for energy and emissions reduction with horizons of 2020 and 2050. The GTR believes that the activity and the jobs created in the NHS, and their importance for Spain's transition to a sustainable economy significantly offsets the difficulties and the work needed to create the new managerial framework which is needed by the NHS for its application and development. In fact, GTR estimates the opportunity cost for Spain by maintaining the high levels of unemployment and inactivity associated with the current inefficient energy model is approximately double the annual investment required to generate the new retrofit jobs described in the proposed Action Plan.

During a financial crisis, it is hard to identify where to obtain the needed funds to match the scale and ambition of the investments contemplated in this Plan for the transformation of Spanish properties, especially given the tremendous pressure on family and government budgets presently. However, the issue of relative priorities is important as an investment in improving the energy efficiency of Spain's existing buildings will not only enable the fulfillment of the country's commitments to improve energy efficiency, reducing dependence on foreign energy and reducing emissions of greenhouse gases, but it has a direct positive impact on jobs and at the macro-economic level acts as an important stimulus for economic activity, increasing tax revenues and reducing costs of unemployment. GTR shows that it is more expensive in the long run to try and avoid these investments and through this evasion Spain risks delaying its recovery, poor protection form energy shocks, energy poverty increase and further damage to the buildings sector.

Finally, Spain has a unique opportunity to be a pioneer among its European peers through the establishment of a new framework for energy and emissions savings in the buildings sector and creating thousands of local jobs nationwide. The GTR remains fully convinced that Spain has the capacity and skills to deliver a clear opportunity and targets through a NHS which is well articulated to its industry and to the Spanish people. The deep renovation of Spain's building stock will be an essential tool ensuring a better quality of life for Spain's households and will allow them to better face a future characterized by continued increases in energy costs and further restrictions on the emissions of greenhouse gases.

This report has been prepared by:

Albert Cuchí *Universitat Politècnica de Catalunya. Barcelona Tech* Peter Sweatman *CEO of Climate Strategy & Partners* 



Sponsored by:





