



## Spain - Financial and market framework

When considering an energy efficiency retrofit within your national housing market, a wide plethora of consideration needs to be made. Below, we list key findings to facilitate your analysis of the retrofit investment. More details and backgrounds can be found on the website [www.rentalcal.eu](http://www.rentalcal.eu).

### The analysis of investment barriers, split incentives and policies in Spain show:

- The reduction of carbon emissions by 40% by the year 2020 and 80% by 2050, relative to 1990, is one of the main climate change objectives in Spain as derived from the EU regulation which is mandatory. The step-by-step national aim is to reduce carbon emissions follow the EU objectives for 2020, that is 20%, 20%, 20% for 2020. Not plan yet proposed nor approved for 2030 or 2050. However, the procedure is to follow the EU goals and new objectives will be approved soon according to them.
- Spain follows a four-pillar approach comprised of (i) a legal framework, (ii) subsidy programs, (iii) compulsory technical requirements and (iv) information, advice & support. At the same time, the regulation still maintain market-related barriers specifically on the freedom to install new technologies for generation out of the big companies. First step is normally adapting the technical requirements for the energy goals to be applied to new construction as well as to any retrofits or refurbishment to be done in houses.
- The Building Code is updating every three-four years adapting the technical requirements for energy efficiency goals. In 2013 was the previous change and a new Code is been preparing to include new energy goals, so as it is possible that the near-zero energy buildings will be addressed through stronger technical requirements for isolation and energy efficiency as compulsory rule.
- The split-incentive problem (user-investor dilemma) defined is solved by the rental Law in Spain.
- The market related energy efficiency investment barriers identified in Spain would be:
  - The current energy savings that arise from energy efficiency retrofits are not perceived and then not reflected in property value what reduces investment incentive
  - There is a limited understanding of the options and technologies available for energy efficiency retrofits as very tech issue and no clear alternatives are offered which make most landlord to apply similar solutions (high energy effective in any case)
  - The lack of information of the energy concepts included in the energy bill being paid reduces awareness and consequently the take-up of energy efficiency retrofits.
  - The Large up-front cost for retrofits and a limit in the perception of the cost-benefits (investment vs energy cost) reduces retrofit perceived affordability/increases profitability risk. This perception is increasing time to time in Spain.
  - Insufficient access to capital: credit constraints or insufficient equity capital available. This problem is especially strong since the Financial Crisis.
  - Limited ability/willingness to adapt to technological change, because landlords are too old and with low capacity to take loans as depending on pension. However, young household are more in favor of the process.
  - No incentive to consider retrofit investments at all, especially since 2014 in which any public incentive disappear in terms of loans and grants for individual landlords and households. The new plan (2017-2020) is devoted to firms, public institutions and owner association (household or individuals are excluded) so as no better situation is defined for the next three years.
  - Investor interest lies in the supply side initiatives – less risky than residential retrofit projects
- In addition, there are market structure features acting also as barrier:
  - The market is highly fragmented from landlords perspective and less professional management, what make the decision taken far from the profitability principles affecting the energy-efficient investment decisions.
  - The interplay of legal regulation and financial support from public bodies causes uncertainties regarding the future support of measures.
  - Energy regulation restrict the possibility to install solar system to produce energy to households (imposing extra-charges if the landlord do so) what signal negatively any initiative to diversify the energy sources and save non-green energy in favor of green one.
  - This is related to the limits on energy-efficient devices and materials industrial production, making the full energy-efficiency installation more expensive than it should be.

### The analysis of “green-premiums” for energy efficiency in Spain show:

- There is no research about green premium at National level in Spain. The only evidence on it existing has been developed in this project framework for the Spanish team and tested for Alicante, Barcelona and Valencia province at the moment. The first by climatic areas.
- We have found evidence of a green premium of 3% in Alicante coastal areas (Mediterranean) and 4% in the interior (continental climatic area),
- Energy costs have dramatically increased in spite of the crisis by 5% in real terms (mainly electricity and gas) which overpass the estimated green premium which means that any incentive to reduce energy bill could has strong effect increasing prices

**The analysis of grants and other subsidies in Spain show:**

- Government Agency provide support for (i) Thermal isolation of building envelope (ii) Installations of bioclimatic devices in facades or roofs, (iii) Provision of common energy facilities or any renewable energy sources (iv) Any work or installations to reduce 30% of energy consumption (Art 10.4, Ley 8/2013, de 26 de junio, de rehabilitación, regeneración y renovación urbanas)
- Government Agency also provide, under the Royal Decree 233/2013 called Plan Estatal de Fomento del Alquiler de Viviendas, Rehabilitación edificatoria y regeneración y renovación urbanas, 2013-2016', grants for increase building quality and sustainability by improving; (i) Thermal envelop, (ii) heating, refrigeration or ACS installations with better efficiency; (iii)

Installing power genera-tors using renewable energy and (iv) improving energy efficiency of the current installations (arts 19 and beyond). In addition, the Program PAREER-CRECE, Action Plan 2014-2020 for Energy rehabilitation of existing buildings (REE,2014), and the PAREER II, Action Plan 2017-2020, the Government Agency promote repairs and refurbishments which aim is reduce energy consumption, improve energy efficiency, implement renewable energies and reduce the CO2 emissions, in existing buildings 4 types: Type 1; Improve energy efficiency in the thermal envelope. Type 2; Improve energy efficiency in thermal facilities and lighting. Type 3; Substitution of conventional energy by biomass system in thermal facilities. Type 4; Substitution of conventional energy by geothermal energy. Grants were devoted to private land-lords, co-owners communities, Housing companies and cooperatives, firms although the last PAREER II Plan eliminate the private landlords as objective of any support (at Feb 2018)

The plans have reduced funds relative to the potential needs.

The list of measures include cash-allowance (max 2000 euros by house and 5000 if the energy demand fall 50%), credit subsidy( (i) 60% for improvement building envelop, (ii) Improvements in energy efficiency in installations of 70%, (iii) substitution of conventional energy for biomass of 65% and (iv) substitution conventional energy for geothermic energy of 60%.), preferential interest rates ( Euribor +0%), loan Guarantees (20% of the loan quantity in a bank endorsement, insurance or deposit in the public CGD) and other minor interventions. The Maximum grant is determined by maximum eligible costs %:(i) 30% for improvement building envelop, (ii) Improvements in energy efficiency in installations, 20%, (iii) substitution of conventional energy for biomass, 25% and (iv) substitution conventional energy for geothermic energy, 30%.

**The analysis of financing conditions in Spain show:**

- In Spain, the financial conditions for retrofitting are fixed by the Public/governmental institution and managed by corporate banking institution as the public sector has no institution in the financial system (other than ICO with not enough Spain coverage). Interest rates and financial flow are determined by public system and agree with private institutions together with the conditions and procedure. Differences between private interest rates and those public offered are supported by public budget.
- Spanish banks and institutions offer loans at variable interest rate and fixed for those shorter maturity, with periods between 2-15 years. The calculation system is annuity and bullet loans and in the case of long term credits. Banks offer the mortgage guarantee figure limiting to 75% LTV and the PAREER I program prevent coverage until, maximum, 70% of LTV and 30% on cash-allowance. The plan slowed down early 2016 and has been recover with the new PAREER II in 2018.
- Examples of rates: a 5 year loan fixed rate (monthly) is at 2.86% (2016)
- The new PAREER II gives one month for proposals, limit the requirements to interventions higher than 30000 euros until 4 million €, exclude the private-individual landlords off the plan, establish 30% of maximum cash-allowance and reproduce same financial conditions (<http://www.idae.es/ayudas-y-financiacion/para-rehabilitacion-de-edificios-programa-pareer/>)

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