



EXECUTIVE SUMMARY

PROPOSED SCENARIOS FOR THE ENERGY RENOVATION OF HOUSING 2030-2050

Energy renovation as a vector for
economic recovery and job creation

1. INTRODUCTION

Spain is experiencing a situation of social emergency characterised by a high level of unemployment, temporary work and poverty. The unemployment rate is 16% and this figure rises to 40% for young people under the age of 25. Moreover, almost half the unemployed have been without work for more than a year. Spain is not only the European Union country with the highest youth unemployment; it is also the country with the highest percentage of temporary jobs. Around 25% of salaried employees have a temporary contract, in contrast to other Member States such as France (15.3%), Germany (10.7%) and Greece (10.1%).

Unemployment and the creation of insecure jobs are the principal source of an increase in inequality and social exclusion. This means that approximately a quarter of the Spanish population is facing a Risk of Poverty and/or Social Exclusion, an indicator that is predicted to have worsened with the Covid-19 pandemic.

In the current situation, it is essential that any plan designed to address the recovery and the transformation of the Spanish economy makes the maximising of job creation one of its priorities. This is even more the case when there is a justified concern that our production fabric is unable to continue reabsorbing workers involved in temporary workforce restructuring plans (in Spanish, *ERTE - Expediente de Regulación Temporal de Empleo*). Of the more than 3.5 million employees who were subject

to an ERTE at the worst moments of the pandemic, more than 500,000 people have still not resumed their activity, the majority of them from the services sector (tourism, hotel and catering trade, retail, etc.).

The Spanish Government has now set up its own Green New Deal, the "Plan for Recovery, Transformation and Resilience of the Spanish Economy", to mobilise almost 72 billion euros between 2021-2023, with a green investment of 40%. And it has allocated more than 6.8 billion to one of its principal leverage policies: the retrofitting of buildings.

In the recently approved Law on Climate Change and Energy Transition, the Government set itself a deadline of 22 November 2021 to draw up a Plan for Rehabilitation of Housing and Urban Renewal. A window of opportunity to bring to the fore the objectives of renovation of housing established in the Integrated National Energy and Climate Plan (PNIEC) and reorient construction activity as a source of green jobs.

During the pandemic, construction was the second best performing economic sector, after agriculture, and its principal value for the future resides in its huge capacity to pull other industrial sectors along with it.

The 2008 economic and financial crisis and the bursting of the real estate bubble

destroyed more than a million and a half jobs in construction that could now be recovered and integrated in the building retrofitting value chain. For this reason, the Trade Union Institute for Employment, Environment and Health (*Instituto Sindical de Trabajo, Ambiente*

y Salud - ISTAS) has put forward two scenarios for the energy renovation of the residential sector that would mean increasing the current commitments, which were actually established in a context prior to the health crisis and the European recovery funds.



2. SCENARIOS FOR THE ENERGY RENOVATION OF HOUSING 2030-2050 IN SPAIN

Scenario 1 for the recovery for the residential sector proposes a route for achieving an objective of in-depth retrofitting of the thermal envelope of 2.3 million dwellings by 2030 and 12 million by 2050, with an intermediate target by 2040 of 7.5 million. The average annual renovation is some 401,622 dwellings for the whole period 2021-2050 and reaches a maximum cruising speed of 521,333 per year for the period 2032-2043, equivalent to an annual renovation rate of 2.04% if we take into account a housing stock of 25.5 million dwellings; and 2.9% per year if we consider the 18 million principal dwellings.

With Scenario 1 the 2030 target would be increased by a million dwellings with in-depth renovation and the 2050 target would be brought forward by ten years. Reaching the 2050 target means carrying out in-depth retrofitting of the housing stock built prior to 1980 and 6% of dwellings in poor condition built between 1980 and 1990. The proposed route would also lead to a renovation rate of 2% in line with the strategic objectives of the Renovation Wave. The proposal is for a cruising speed of around 520,000 dwellings over a period of 12 years to generate a stable retrofitting market that generates a business fabric and the quality employment that comes with it.

Scenario 2 proposes a route for achieving an objective of in-depth rehabilitation of the thermal envelope of 2.8 million dwellings by 2030 and 15.5 million by 2050, with an intermediate target by 2040 of 9.5 million. The average annual rehabilitation is some 518,000 dwellings for the whole period 2021-2050 and reaches a maximum cruising speed of 700,000 dwellings for the period 2035-2044, equivalent to an annual renovation rate of 2.75% if we take into account a housing stock of 25.5 million dwellings; and 3.9% per year if we consider the 18 million principal dwellings.

With Scenario 2 the 2030 target would be increased by 1.6 million dwellings with in-depth rehabilitation and the 2050 target would be brought forward by thirteen years. Reaching the 2050 target means carrying out a retrofitting of the envelope for the whole pre-1980 housing stock and dwellings built between 1980 and 1990. The proposed route would also lead to a renovation rate of 2.75%, more closely aligned with the rate in the Member States that are currently most active. In this case, the proposal is for a cruising speed of around 700,000 dwellings over a 10-year period.

3. ENVIRONMENTAL AND SOCIO-ECONOMIC BENEFITS DERIVING FROM THE SCENARIOS IN 2030

Investments and public aid

Thermal envelope actions in Scenario 1 would involve a total investment of €29.756 billion, a third of which would be state public investment, approximately €9.114 billion. For Scenario 2 the total investment for replacement of the envelope would be close to 37 billion euros, of which 12 billion would be state public aid.

Impact on GDP and fiscal return

In terms of GDP, the impact of the spending on dwelling renovation, considering the carry-over effect, in Scenario 1 would be between 0.2% in the first stages of development up to values of around 1% in the latter years. For Scenario 2, the predicted impact would be between 0.2% minimum and 1.3% maximum (in average terms).

In both scenarios, there would be a sizeable fiscal return. The aid received for the retrofitting of dwellings would be more than recovered as the sector stimulates the economy. The revenue for the State through Income Tax (IRPF) and Social Security brought about by the direct and indirect employment generated would exceed the aid given to the refurbishment sector.

Job creation

In total (including direct, indirect and induced jobs), Scenario 1 would create an average of 200,000 total annual jobs, with a minimum in 2021 of 41,000 jobs and a maximum of 400,000 by 2030.

The forecast for total employment created in Scenario 2 is an average of 256,000 jobs per year, with a minimum in 2021 of 47,000 jobs and a maximum of 460,000 by 2030.



Energy Saving and Greenhouse Gas Emissions prevented

Scenario 1 would suppose a total energy saving of 8,764 GWh by 2030, the equivalent of the energy used by 1.4 million homes. And for the same year it would prevent the emission of 2.6 million tonnes of carbon dioxide into the atmosphere.

Scenario 2 would represent a total energy saving of 10,872 GWh by 2030, equivalent to the energy used by 1.7 million homes. And it would prevent the emission of 3.3 million tonnes of CO₂ into the atmosphere by 2030.

Effect on the general state of health and health costs avoided

Implementing Scenario 1 would make it possible to prevent around 152,595 people considering that their health is bad or very bad; a further 183,114 people would not be diagnosed with cardiovascular problems; and the total saving on health and employment costs would reach €846.9 million by 2030. Meanwhile, Scenario 2 would prevent, respectively, some 189,299 people considering that their health is bad or very bad; some 227,159 people would not be diagnosed with cardiovascular problems; and a total saving of €1.050 billion by 2030.



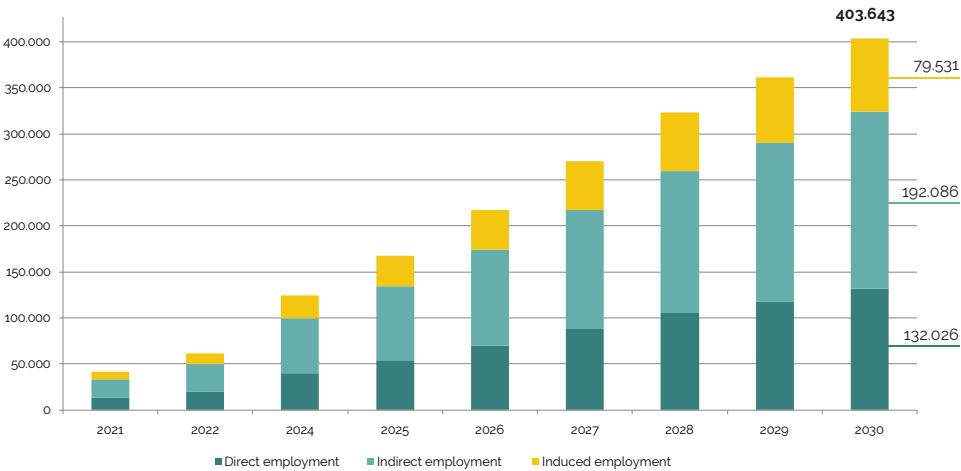
Economic savings on household energy bills

Scenario 1 would allow an annual economic saving on energy bills of €3,561 billion by 2030. And in Scenario 2, the annual economic saving on energy bills brought about by the renovation of the thermal envelope would reach €4,418 billion by 2030.

Energy Poverty

The implementation of Scenarios 1&2 proposed for 2030-2050 must include an objective for action in homes occupied by vulnerable groups that covers at least an average of 20% of the total volume of dwellings renovated every year.

Scenario 1. Estimation of total employment generated (direct, indirect, induced)



Scenario 2. Estimation of total employment generated (direct, indirect, induced)

