

Context and schemes to tackle energy poverty in Europe



SPAIN BACKGROUND AND GOVERNANCE

BACKGROUND

Energy poverty got a higher attention in Spain from the late 2000's, with the joint impacts of the economic crisis and increasing electricity prices. This has been first addressed by the **social tariff for electricity** introduced in **2009** (Royal Decree Law 6/2009), transformed in a **social bonus** in **2017** by the Royal Decree 897/2017 that also complemented the provisions on consumer protection. Tackling energy poverty has also been explicitly mentioned as one of the objectives of the Law 8/2013 on **building renovation** and urban regeneration.

Following several reports about energy poverty in Spain, the Royal Decree Law 15/2018 (October 2018) required the government to prepare the National Strategy against Energy Poverty (ENPE). It was approved in April 2019, including official definitions:

"Energy poverty is the situation in which a household cannot meet its basic energy needs, as a result of insufficient income, and which, if applicable, may be aggravated by having an energy-inefficient dwelling. (...) A vulnerable consumer is a consumer of electricity or thermal energy who is in a situation of energy poverty and who may benefit from support measures established by the administrations."

The ENPE adopted as **official indicators** the four main indicators of EPOV (European Energy Poverty Observatory) (see next page). Based on these four indicators, between 3.5 (7.4%) and 8.1 (17.3%) million people were in energy poverty in 2017. The ENPE set the **target** to reduce each indicator by at least 25% by 2025, with the further ambition of a 50% reduction (both vs. 2017 levels).

The <u>National Strategy against Energy Poverty</u> (ENPE, 2019-2024) and its monitoring

MITERD (Ministry of Ecological Transition and Demographic Challenge) has led an interministerial group to prepare the ENPE with a **consultation process** including the different administrative bodies (State, Regions, provinces and municipalities), experts and entities from the social services and civil society (e.g., NGOs, universities). The ENPE is part of the broader <u>National Strategy against Poverty and Social Exclusion 2019-2023</u> of March 2019.

The ENPE specified **19 measures** structured around **four main axes**, forming an **integrated approach** that covers short- and medium- to long-term:

- 1) **to improve the knowledge** about energy poverty (e.g., annual monitoring);
- 2) **to improve the short-term response** (e.g. improving the effectiveness of the social bonuses);
- 3) to create a structural change to reduce energy poverty on medium- and long-term (e.g., measures for energy efficiency and RES for self consumption);
- 4) **consumer protection and social awareness measures** (e.g., measures to identify households in energy poverty).

IDAE (Institute for the Diversification and Saving of Energy), public body assigned to MITERD, is responsible for monitoring and updating the indicators for measuring energy poverty.

IDAE publishes an **annual monitoring report** updating the data for the four main official indicators (using data from the National Statistics Institute, INE), analysing the trends and comparing with the EU Member States.

The Royal Decree Law 15/2018 also introduced a <u>social bonus for thermal energy</u>, complementing the existing <u>social bonus for electricity</u>. The ENPE planned to study how to improve them (e.g., by merging the two bonuses and making their payment automatic). The **building renovation programmes** have increasingly included social criteria. The current programme (<u>PREE</u>) offers a higher grant rate for renovations of condominiums for vulnerable households eligible to the social bonus. It can also be used for actions by <u>energy communities</u>. The <u>2020 update of the Long Term Renovation Strategy</u> examined two scenarios for renovations targeting energy poor households, considering different action packages and balance between number of households supported and level of energy savings achieved.

STAKEHOLDERS AND SCHEMES

<u>MITERD</u> is the central policy maker, setting the strategy (ENPE) and main policies (social bonuses, renovation programmes), in coordination with <u>MINECO</u> (Ministry of Economy) and <u>MITMA</u> (Ministry of Transports, Mobility and Urban Agenda, that leads the Long Term Renovation Strategy). <u>IDAE</u> coordinates the national programmes for building renovation and for RES for self-consumption, and monitors the energy poverty indicators.

The **Regions (Autonomous Communities)** play a major role in the fields of access to energy (e.g., implementing the social bonus for thermal energy), energy efficiency (e.g., implementing PREE) or energy communities.

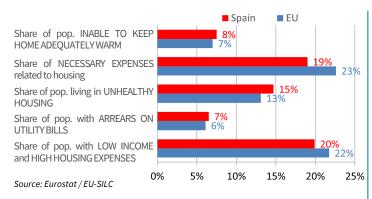
The **municipalities** and their social services are key field actors to identify and advise energy poor households, and develop programmes complementary to the national and regional programmes (e.g., providing low-cost actions). They often work in partnership with **NGOs** that are very active in the field of energy poverty. The **research community** is also dynamic.

STATISTICS



- Population: **46.9 million** (2019)
- National median equivalised income: **€15 015/year** (in current prices, 2019)
- Number of people living below the poverty line: **9.7 million** (20.7%) (2019)
- Climate: 6 winter and 4 summer zones (from Mediterranean to mountainous)
- Average annual expenses for « electricity, gas and other fuels » per inhabitant related to the dwelling): €530 /year (in current prices, 2019)

COMPARISON WITH THE EUROPEAN AVERAGE IN 2019

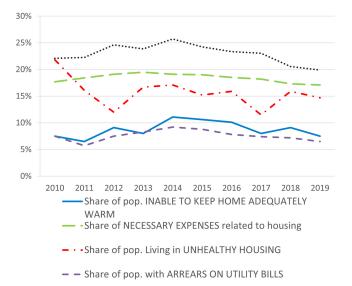


Although the at risk of poverty rate in Spain is one of the highest within the EU, the country's performance on energy poverty indicators is quite similar to the EU-average, with mixed results. Dwelling-related indicators (inability to keep home adequately warm, unhealthy housing) are not as good as the EU average.

Energy prices are among the highest within the EU (20% above the EU average for electricity and gas prices for households as of 2019), but due to a mild climate, the unit consumption of space and water heating per dwelling and the total energy consumption per m² are among the lowest within the EU.

Energy needs vary greatly among regions according to the 6 climate zones: for ex. heating degree days range from <1000 (Balearic Islands, exclaves of Ceuta and Melilla) to almost 2500 (region of Castile and Leon) (Insight-E project).

TRENDS OVER 2010-2019



Source: Eurostat / EU-SILC

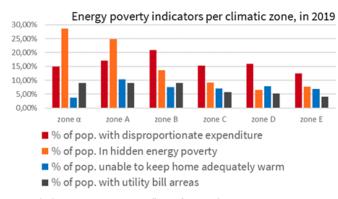
Most indicators (except unhealthy housing) have worsened until 2014 as a result of the economic crisis from 2009 (cf. increase in the number of unemployed from 1.8 million in 2006 to 6.1 million in 2013). The economic recovery from 2014 helped reversing the trends until 2019.

According to the <u>ENPE</u>, the highest rate of energy poverty is in the private-rented sector and in rural areas. The ENPE also analysed that single persons, low-income households and households with unemployed members or members aged 65 have higher risks to be in energy poverty.

As a result of poor housing insulation in zones of milder climate, energy poverty can also be found even in zones where energy needs could be assumed to be lower at first sight.

79% of the dwellings are owner occupied, 12% are privately rented and 9% are social housing. 72% are apartments and 28% individual houses. Overall, 46% of the dwellings are part of condominiums (co-ownership), where decisions for renovations are more difficult to achieve.

NATIONAL DATA



zone α = highest Heating Degree Days (lowest for zone E) Source: based on data from (MITERD, 2020) The four main indicators monitored in the Spanish annual reports are:

- 1. **Disproportionate expenditure**: % of households whose rate [energy expenditure / income] is more than double the national average;
- 2. **Hidden energy poverty**: % of households whose absolute energy expenditure is less than half the national average;
- 3.% of households unable to keep home adequately warm:
- 4.% of households with arrears of utility bills.

These indicators are analysed according to several variables (climatic zone, number of persons per household, income class, etc.). The results confirm the complexity of energy poverty: the differences observed for one variable show different trends between the four indicators, as each indicator represents a distinct dimension of energy poverty.

NATIONAL POLICIES

POLICIES FOR ENERGY ACCESS, BUILDING RENOVATION AND ENERGY EFFICIENCY

	SCHEME	TARGET (RESULTS)	Other information
Energy access	Social bonus for electricity (since 2009) (direct aid for electricity bills).	25% (or 40%) discount on electricity bills for (very) vulnerable consumers (mainly based on income criteria and household size) up to a consumption threshold (2 to 4 MWh/year depending on household size). 1.3 million households benefited from it in 2019. Unemployed have been eligible to the 25% discount as part of the COVID measures.	Funded by the electricity suppliers that also receive and process the applications.
	Social bonus for thermal energy (since 2018) (direct aid for expenses related to space heating, domestic hot water and cooking).	Single annual payment (between €25 and €124 in 2019, depending on the income, household size and climate zone) to households eligible to the social bonus for electricity. 1.3 million households received it in 2020 (+16% vs. 2019), for a budget of €88 million.	Funded by the State budget. Managed and paid by the Regions.
Renovation and energy efficiency	Programme for Energy Renovation of Buildings (PREE) (since 2020; revision of previous programmes in place since 2013).	Grants with base rate of 15% to 35% (depending on the type of action and dwelling) for works improving efficiency by at least 1 energy class (20% energy savings), with bonus rates of 5 to 20% for higher energy efficiency ambition, 10 to 20% in case of combined actions on building envelope and heating system, and 15% for households eligible to social bonus. Initial budget when launched in 2020: 300 million euros (supplemented with 102 million euros in 2021).	Coordinated by IDAE and implemented by the Regions Eligible actions: insulation, systems for space and water heating (including RES), lighting.
	Programme to promote the improvement of energy efficiency and sustainability in housing (2018-2021).	Grant rate of 40% or 75% for low-income households (less than €22,500/year) up to €12.000 (or €18 to 24,000 for persons with disabilities), for renovation works achieving at least 20 to 35% energy savings (depending on the climate zone). Programme implemented by the Regions.	Part of the Housing Plan (Ministry of Transports, Mobility and Urban Agenda).

Some Regions have established funds to help households at risk of social exclusion to pay their utility bills.

As part of the <u>measures to face the COVID crisis</u>, it was forbidden to disconnect vulnerable households (as defined in <u>Royal Decree 897/2017</u>). One of the measures envisaged earlier in the ENPE was to prohibit disconnections of vulnerable consumers in case of extreme weather situations.

The <u>Housing Plan 2018-2021</u> also includes programmes specific to urban and rural regeneration, young adults or pensioners, that can contribute to tackle energy poverty.

COMPLEMENTARY INITIATIVES

TYPE OF INITIATIVE	DETAILS/ EXAMPLE(S)	
Disconnection Protection in Catalonia (<u>Law 24/2015</u>)	Utilities (electricity, gas and water) are obliged to check first with social services if the consumer with arrears is vulnerable. If so, they cannot disconnect the household.	
Programmes led by municipalities to tackle energy poverty	Programmes for tailored energy advice, low-cost actions or building renovations (often part of social programmes, sometimes related to urban or rural regeneration).	
Guide for Social Services professionals	<u>Barcelona's programme</u> to provide support for social workers to detect and help households at risk of energy poverty.	
NGOs active in the field of energy poverty	Association of Environmental Sciences; Alliance against energy poverty; Ecodes; Ecoserveis; Energia Justa; Alliance for renovations with no one left behind.	

ZOOM ON the <u>Programme for</u> Energy Renovation of Buildings

PREE includes a bonus rate related to social criteria: it applies for households eligible to the social bonus for electricity, or projects in areas of urban or rural regeneration, or for social housing. This bonus rate is of 15% for actions on the building envelope and 10% for replacing of heating systems with systems using RES.

In addition, IDAE has developed a <u>collaboration protocol with financial institutions</u> to ensure that project holders can access loan offers to help financing the investment. Project holders can thus find on a <u>page</u> maintained by IDAE the list of financial institutions providing loans, with links to these loan offers. Project holders can be individuals, associations of co-owners, Energy Services Companies or energy communities.

PREE is financed from the National Energy Efficiency Fund that is funded by the State, EU funding and energy suppliers through the energy efficiency obligation scheme.

GOOD PRACTICES

Barcelona's Energy Advisory Points (PAE) (since 2017)

Service developed by Barcelona's City Council.



Objective: to guarantee the rights to

energy, detect and help households having arrears of utility bills.

Approach: 11 Energy Advisory Points spread in the city and community workshops to provide vulnerable households with information and support (e.g., tariff optimization, low-cost energy saving actions); detecting households at risk of energy poverty; managing contacts with utility suppliers and social services; training for unemployed to become advisors (20 positions of advisors renewed every 12 months; the other 40 advisors are permanent, mostly from the municipal social services).

Results: budget of €2.25 million/year. Over 2017-2020, support to 100,000 persons (38,000 households), preventing or solving 85,000 disconnections (electricity, water or natural gas). Negociations with utility suppliers to cancel the debts of vulnerable households.

Renovem els barris (deep renovation; 2013-2018)

Project of the municipality of Santa Coloma de Gramenet (in Barcelona's province).



Objective: deep renovation of private multifamily buildings in an area with vulnerable households

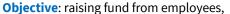
and old buildings in need of renovation, with flexible financing options.

Approach: project fully led by the municipality that declared a "Conservation and Rehabilitation Area", paid the technical studies, agreed with the owners' associations about the works, managed the grant applications, required owners to cover renovation costs by offering them three financing options, selected the building companies with a joint tender and supervised the works. Two of the financing options were made for low-income households (5-year loan with 0% interest rate, or debt recorded in the Land Registry and recovered when the dwelling is sold or inherited).

Results: renovation of 32 buildings including 360 dwellings that were built over 1968-1974 (before the first thermal regulation). Selected in the <u>Bank of Good practices</u> (covering all fields of local action) of the Federation of Catalonia's municipalities.

Naturgy's Solidarity fund for energy retrofit (since 2018)

National programme of the Naturgy Foundation, in partnership with NGOs.



customers, suppliers and society in general, (Naturgy adds 1 euro for each euro donated) for low-cost renovations for vulnerable households.

Approach: <u>study</u> listing 77 low-cost retrofit actions; partner NGOs identify households most in need, who then benefit from low-cost actions that do not require permits and often done by labour insertion companies.

Results: 1,745 dwellings since October 2018, with an average investment of €2,000 per dwelling (up to €5,000). Most frequent actions: LED (29%), repair or replacement of heating system (23%), electric or gas installations (16%) and joinery and glazing (15%).

Not a home without energy (mix of actions; since 2013)

National programme of <u>ECODES</u>, in partnership with municipal social services and other NGOs, and support from companies and foundations.



Objective: detect and help energy poor households.

Approach: advice points, on-site visits or online portal and tool (Enersoc) for tailored advice (energy tariffs, behaviours and low-cost energy saving actions, access to aids); training workshop for social workers; volunteers' programmes.

Results: > 10,000 households helped since 2013 in 50 Spanish provinces, with bill savings of €150/year on average per household (equivalent to 26% of the electricity bill).

SROI (Social Return On Investment) <u>evaluated in 2017</u> to be €3 to €1 invested, from reduction in GHG emissions, comfort, well-being and health improvement, bill savings, savings in municipal emergency aids for bill arrears, employment effects.

<u>CAFacció</u> (local communities against energy poverty; 2016-2018)

Coordinated by ACAF (Association of Self Funded Communities) and the NGO Ecoserveis, and funded by the Catalonia Region (Department of Labor, Social Affairs and Families).



Objective: improve energy efficiency for people at risk of social exclusion while minimizing the dependence on aid from the Administration and social entities.

Approach: developing self-financed communities, with the support of an energy advisor and social workers, to provide a social network of mutual aid (especially for immigrants), financial education and micro-credit to solve daily needs in a self-sufficient way, favouring experience sharing within the community and putting savings in common for further actions.

Results: communities created in 6 Catalan municipalities, 570 participants whose 148 people who benefited from an intervention (budget of less than €75 per households, and deeper actions up to €600 in 6 dwellings).

Gipuzkoa Energy Poverty Observatory (since 2017)

Created by the Department of Environment and Waterworks of the Gipuzkoa province, after two studies done with SiiS (Centre of Documentation and Studies of the Eguía Careaga Foundation), and as part of Gipuzkoa's strategy against energy poverty.



Objective: offer relevant and updated information on energy poverty and measures to tackle it in the Gipuzkoa province.

Approach: defining and updating indicators; supporting local institutions and agents with informative resources to plan actions; raising awareness and knowledge of citizen about energy poverty.

Results: online information about a set of indicators on energy poverty, energy efficiency of dwellings, households' energy expenses and equipment, and energy prices.

Information sources (see also the documentation annex)

- MITERD (Ministry of Ecological Transition)
- IDAE (Institute for Energy Diversification and Saving)
- National Strategy against Energy Poverty 2019-2023
- <u>ECODES map</u> of national, regional and local schemes
- Alliance against Energy Poverty; Just Energy network
- Spain's <u>Long Term Renovation Strategy</u> (2020 update)