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# Status of Energy Performance Contracting

# SPAIN

Spain still faces significant barriers to implement active energy performance contracting (EPC). As for the demand response (DR) products trade, the market is inactive. Access to the market is possible, but there is no defined way to aggregate consumer loads - though there is access for distributed generation for both wholesale and ancillary services. The market is essentially closed for DR products because there are no regulatory measures or entities in place to mediate the interaction between markets and users. However, work is underway to open the regulation of energy markets.

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# POLICIES, DIRECTIVES AND REGULATIONS RELATED TO ACTIVE BUILDINGS AND DEMAND RESPONSE:

The primary legislation addressing the Spanish energy services (ESCO) market was the 'Sustainable Economy Law', Royal Decree Law 6/2010, which included a section dedicated to the promotion of the ESCO market, while also outlining measures consistent with the European Energy Services Directive, ESD, 2006/32/EC.

With the approval of the 2008-2012 Spanish Energy Saving and Efficiency Action Plan, governmental support measures for energy efficiency include energy service companies as potential beneficiaries, with the aim of encouraging the procurement of energy efficiency services.

The national Royal Decree 56/2016 of 12 February partially transposes the Energy Efficiency Directive (2012/27/EU), mainly in relation to energy audits, accreditation systems for ESCOs, energy auditors and the promotion of energy efficiency in production processes and the use of heating and cooling.

The new Directive 944/2019[1], partially in place, and the new Regulation 943/2019, fully applicable from 1 January 2020, enable active customers, energy communities, aggregators and independent aggregators to play a decisive role in the electricity market. With this new regulation, the principles of a new configuration of the electricity market are established, which will provide incentives for flexibility services and appropriate price signals for the energy transition. Specifically, the active customer, demand response and storage become key elements in the new regulatory framework.

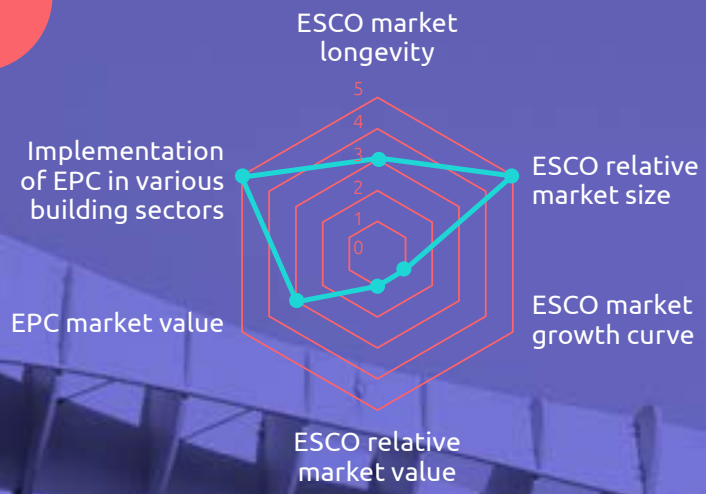
Regarding demand-side flexibility on the level of individual buildings, there is no policy planned in the near future. As for the integration of energy and non-energy services the situation is more advanced, as demonstrated by the Royal Decree 107/2007 of 20 July, which approved the RITE, the Regulation of Thermal Installations in Buildings. This regulation establishes the conditions that must be fulfilled by heating, air conditioning and hot water installations designed to meet the demand for thermal wellbeing and hygiene, in order to achieve the efficient use of energy. The adoption of Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency makes it necessary to transpose the amendments introduced by this directive into the legal system, particularly with regard to the introduction of new definitions and the modification of existing ones, such as technical installation.

[1] New Directive 944/2019 on common rules for the internal electricity market

# EPC/ESCO ASSESSMENT LEVELS

In Spain there are 1,238 companies registered as ESCOs. In the last five years, total energy performance contracting (EPC) turnover in Spain grew from €0.85 billion in 2014 to €1.2 billion in 2018[2]. In 2016 the market stagnated, but it recovered in 2017 and 2018 with growth rates around 8% and 9% respectively. In 2018 the EPC market was estimated to be worth around €1 billion annually.

Offices, hospitality, commercial and residential buildings are the main sectors for EPC activity. Another future business opportunity is energy supply contracts associated with investment in energy efficiency for industry. Less than 20% of the ESCOs surveyed stated that their clients included companies in the industrial sector, a figure far removed from the European average[3].

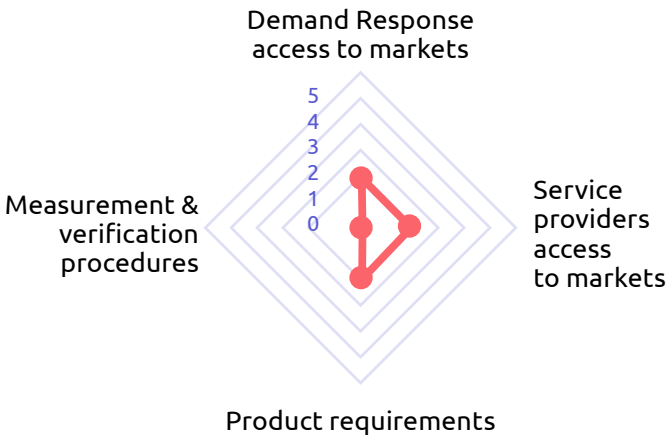



**1238** companies registered as ESCOs

TOTAL MARKET IN 2018
**€1 billion**

**9%** annual growth rate in 2018

# DEMAND RESPONSE FLEXIBILITY AND EXPLOITATION




Spain has some of the least developed regulatory regimes regarding DR and asset aggregation in the EU, and thus significant barriers still exist. There is no possibility for aggregated demand-side resources to take part in Spanish electricity markets. Aggregation is still not legal and currently there is only one scheme allowing explicit demand response, which is the Interruptible Load programme.



[2] According to data from the Observatorio Sectorial DBK de INFORMA
[3] Country Report on the Energy Efficiency Services Market and Quality (2018), QualitEE project

# BARRIERS FOR ACTIVE EPC IN THE EU

» **Administrative and financial barriers[4]:**
The public procurement process is lengthy and inefficient. Additionally, administrative accounting systems are not set up to efficiently realise energy cost savings. There are no suitable, uniform financing schemes for the development of ESCOs and ESCO projects. Before the economic crisis, most ESCOs dealt with national commercial banks for financing. However, now this source of financing has virtually disappeared because of the credit risk and subsidy uncertainty. Currently, many ESCOs are financing projects with their own money, which is unsustainable and often impossible for small or young companies. High transaction costs decrease EPC desirability for both the client and the ESCO. In particular, ESCOs cannot justify the administrative costs to carry out small projects.

» **Lack of knowledge and trust:**
Both towards the EPC business model and its providers (i.e. ESCOs), and a lack of familiarity with EPC projects among the final users. These issues are perceived by providers as key barriers to developing the potential of the tertiary sector (retail, hospitality, health, education, other).

» **Lack of standard and enforced measurement and verification (M&V) protocols.**

» **Lack of a neutral third-party institution that certifies the accountability of a particular ESCO.**

» **Duration of contracts:**
While EPC providers need long-term contracts to implement many energy saving measures[5], they also view this as a major roadblock, as prospective clients may perceive the level of risk involved in a project as too high due to the contract's long duration.

Regarding the DR services offered by (clusters of) buildings:

**LEGAL BARRIERS:**
Lack of flexibility in regulations to enable innovation and demand participation in the market.

**MARKET BARRIERS:**
Limited access to flexibility markets: balancing markets and the DR market are closed to Distributed Energy Resources (DER). Market concentration with high entrance costs; absence of clear support schemes for fostering DER penetration in the markets; no market entity (known as 'independent aggregator') responsible for aggregation.

**TECHNICAL BARRIERS:**
Lack of interoperability of hardware (to allow future aggregation of DER); cybersecurity issues; reliability issues (lack of operational procedures); DER data access to third parties not possible.

**SOCIAL BARRIERS:**
Lack of knowledge for changing the end-user behaviour in order to provide flexibility services; opacity of energy market and lack of confidence; demand anaesthesia – reactive consumer.

**POLICY BARRIER:**
Absence of a policy framework fostering demand-side flexibility on the level of individual buildings (energy communities) in the near future.

[4] Gallastegui, Maria Carmen & Escapa, Marta & Ansuategi, Alberto. (2015). Green Energy, Efficiency and Climate Change: An Economic Perspective. Green Energy and Technology. 164. 3-16. 10.1007/978-3-319-03632-8_1.
[5] Regarding the duration of contracts, final users do not feel comfortable signing a long contract with a company that they do not know very well.

**Read the full report for more detailed analysis and results:**
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