

Spain

Key issues

In 2013, Spain began an electricity market reform, with the main aim of eliminating the tariff deficit. The Parliament passed a new Electricity law in December 2013, which was followed by a range of new secondary regulations in 2014. The reform was criticized for having retrospective effects and limited consultation with stakeholders, therefore Spain should increase participation and transparency in the regulatory process to reduce perceived regulatory risks. The market reform should be completed, to reach further regulatory harmonization with the rest of Europe and reduce State intervention. Also, necessary steps should be taken to minimise impact of this reform on the renewable and cogeneration energy production to ensure that Spain is able to meet its 2020 renewable targets.

Spain should continue its efforts to complete the electricity and gas interconnections with neighbouring countries, particularly France. The creation of an Iberian Gas hub in line with the South Gas Regional Initiative and the Gas Target Model is a key challenge. Consumer satisfaction remains low. Whereas for electricity a large segment of the population is identified as vulnerable customers, for gas no vulnerable customer group has been identified.

General overview

Total gross energy consumption has continued to fall in recent years in line with economic output. In 2012 it totalled 127.3 Mtoe, 0.7% down from previous year and 10.2% down from 2008. Despite the overall decrease, consumption from renewable sources and solid fuel has grown and displaced other energy sources. In 2012, the renewables share in gross final energy consumption reached 14,3%⁴⁸⁵, remaining above the country's 2011/2012 interim trajectory. Thus, Spain is currently on track to achieve its national 2020 RES target of 20%.

Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)

⁴⁸⁵ Eurostat.

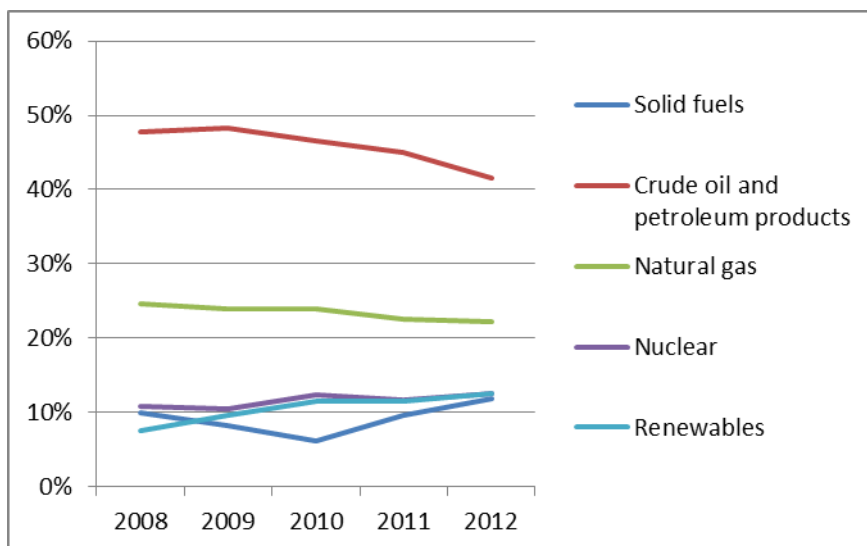
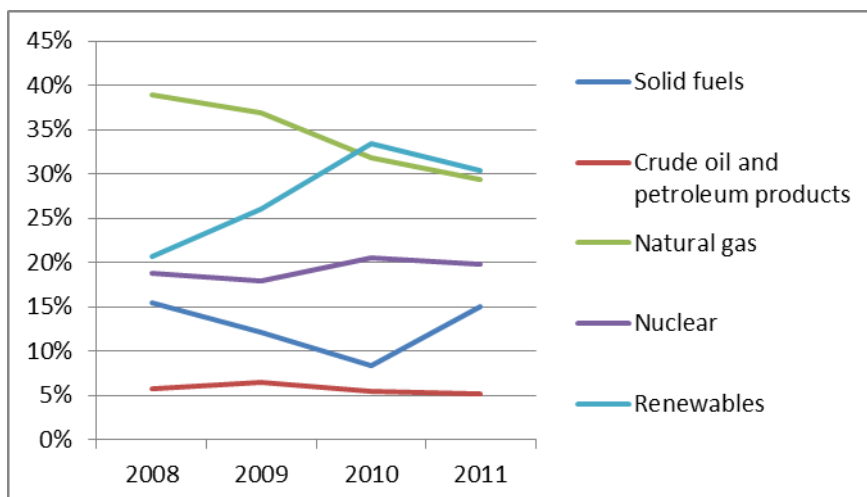


Figure 2: Gross electricity generation mix 2008 – 2011 (source: EU Energy in Figures – Pocketbook 2012 and 2013)



Regulatory framework

General

In December 2013, the Spanish Parliament passed a new electricity law. The law is part of an electricity market reform package which was announced in early 2013. It is mainly aimed at eliminating the tariff deficit by reducing regulated costs allocated to the system and increasing the revenue, e.g. from additional taxes. The new regulatory framework establishes that no new costs shall be introduced into the electric power system without an equivalent revenue increase or cost reduction.

The reform includes a new support scheme for existing and new renewable and CHP plants, changes in the remuneration of network activities and changes in final users' tariffs. The changes in tariffs include a new regulated price for small customers and a new injection charge for those users with micro-generation plants, created to reflect unavoidable supply costs. The new measures have been

objected to by energy producers (renewable and conventional), distribution system operators, consumer associations and political parties on different grounds. Most stakeholders complain that the reform unduly reduces their remuneration while increasing regulatory risks, and consumers criticise the increase in electricity charges.

Increased participation and transparency in the regulatory process could contribute to reduce opposition and regain the trust of stakeholders and consumers. Regulation in Spain could also benefit from greater harmonization with the rest of Europe in topics such as retail and renewable support.

A reform of the gas sector has also been announced. In particular, a new gas exchange is planned to start functioning by 1 January of 2015, in order to increase transparency for wholesale gas prices.

Spain could make use of the on-going reform to simplify the legislative framework applicable to the energy sector, to limit the number of legislative acts in force and to reduce the recourse to urgent measures, for the sake of legal certainty of the market players.

National Energy Regulator

In October 2013, the role of the National Energy Regulator was attributed to a new agency, the National Authority for Markets and Competition (Comisión Nacional de los Mercados y la Competencia, CNMC). The CNMC is the result of a merger of the previous antitrust authority with six regulatory agencies (responsible for telecom and audiovisual, electricity and natural gas markets, postal sector, airport and certain aspects of the railway sector).

The CNMC is a public law entity with its own legal personality and full public and private capacity.

The current annual budget of CNMC to carry out all of its tasks – not just energy – amounts to 52.8 million Euros and the number of staff is 519 people. It is important that CNMC retains adequate human and financial resources and that it can exercise its powers and tasks under the Third energy package effectively and independently, especially on tariff setting.

Unbundling

Currently, the entire electricity transmission network is owned and operated by *Red Eléctrica de España* (REE), a certified TSO. REE is independent of other companies in the sector. Enagas Transporte, S.A.U. was certified as an ownership unbundled TSO for its own network (more than 95% of gas transport pipelines) and as ISO for other companies' pipelines. The electricity and gas DSOs are legally and functionally unbundled.

Wholesale markets

Electricity

Electricity production in Spain fell in 2013 to 274 TWh – after a small recovery in the previous year – driven by the continued fall in electricity consumption and a reduction in electricity exports (which were 37.9% lower than in 2012). Production from gas fuelled CCGTs saw the biggest reduction, while production by renewable power plants increased.

In 2014, the Iberian day-ahead market, OMIE, was coupled with the Central and Northern European markets, as part of a Europe-wide market coupling process. OMIE has been the market operator for both Spain and Portugal since mid-2007. The coupling process will allow infrastructure between Spain and France to be used more efficiently, although the interconnection is already used at nearly full capacity.⁴⁸⁶ Conversely, congestion in the Spain-Portugal interconnection has continued decreasing in 2013,⁴⁸⁷ partly due to the increase in the interconnection capacity. The next step will be to focus on integrating the intraday market with the rest of Europe, which is especially relevant in terms of facilitating renewable energy integration.

Also in 2014, on March the 25th, the first joint auction of electricity interconnection capacity between Spain and Portugal took place, under a mechanism based on financial transmission rights (FTR) established in the MIBEL Council of Regulators (CR MIBEL). This auction constitutes the first European capacity allocation mechanism based on financial transmission rights (FTR).

Market concentration, which had been falling for a number of years with the increase in smaller renewable energy generating companies, has remained stable in recent years. The largest generation company in Spain in 2012 accounted for a 23.8% of the total energy sold and there were five other companies that generated more than 5%.

After a short-lived reduction in 2012, forward trading in the Spanish market recovered its growth trend. The trading volume in the period up to March 2014 (109.85 TWh) increased 42.2% compared to the same period in 2013. Furthermore, the OTC volumes cleared and settled by the Portuguese and Spanish clearing houses (i.e. OMIP clearing house (OMIClear) and by BME Clearing) measured 71.84 TWh, increasing significantly (+95.1%) in year 2013 compared to year 2012 (36.82 TWh). OTC physical trading consistently accounts for around 30% of the final energy delivered in the daily schedule.⁴⁸⁸ Trading in the Spanish part of the day-ahead OMIE market recovered in 2013, to 185 TWh, but is still 17% below the 2008 figure. Intraday trading volumes also dropped in 2013 to 36 TWh after a sustained increase during the previous years. Balancing energy has also been falling, even after accounting for the decrease in energy traded.

The average price in the day-ahead market was EUR 44.26/MWh in 2013, falling from 47.23 in 2012 and 49.93 in 2011.

Gas

Spain imports most of the gas it consumes, since its gas production is minimal (392,599 GWh of imports in 2012 against 393 GWh of domestic production). Natural gas consumption decreased by 8% in 2013 because of the reduction of the use of gas in power generation due to the favourable coal prices and the increase of generation by renewable sources. By contrast, industry and household demand for gas in 2013 remained constant, at 2012 level.

⁴⁸⁶ Since June 2013, the Government has lifted the ban on electricity imports imposed to companies tagged as dominant players.

⁴⁸⁷ CNMC, Informe de supervisión del mercado peninsular mayorista al contado de electricidad, July and August 2013.

⁴⁸⁸ Sources: Part of the OTC physical trades is reversed in the day-ahead market. Daily schedule refers to the PBF schedule. Source: based on data from REE and OMIE.

There are three main supplier countries: Algeria (42.4%), Nigeria (15.4%) and Qatar (11.6%), and up to eighteen companies injecting gas in the system (in 2012).⁴⁸⁹ In fact, Spain has one of the highest levels of gas supplier diversification in Europe. In 2012, most imports were still in the form of LNG (60.6% of the total). In 2012, Spain was the only major market in Europe which imported less gas through pipelines than through LNG terminals. However, LNG imports are decreasing (e.g. by 23% in the first quarter of 2013 compared to 2012), and in 2013 imports through pipelines surpassed LNG, due to a drop in demand, high LNG prices and the newly commissioned interconnection with Algeria. In the last few years, Spain has been re-exporting LNG.

Gas is traded bilaterally, mostly through OTC contracts. At present there are two different initiatives competing to become a Spanish gas hub. In March 2014 the two initiatives signed a MOU that may result in a merge of both projects. To date, trading can take place at eight balancing points (six LNG terminals as well as the virtual balancing point and the virtual storage point). 78.2% of trades occurred in the LNG terminals. In addition to OTC trading, the gas wholesale market is comprised of auctions at different horizons for regulated activities (for the Last Resort supply and working and cushion gas). These auctions are run by OMIE, the electricity market operator.

Due to the absence of an organised gas hub, there is no single liquid transparent gas reference price in Spain. CNMC has developed a gas import index price, reflecting the cost of long term contracts supplying the Spanish gas market. This index shows that gas import prices nearly doubled between July 2009 and December 2012 (to EUR 27.10/MWh) linked to oil price developments. During 2013 the import price is in slight decline (to EUR 26.39/MWh in December 2013).

It would appear appropriate for CNMC to review the entry-exit regime in Spain with the aim to enhance cross-border trade and allocate system costs on a non-discriminatory basis.

Retail markets

Electricity

Since 2003, all electricity consumers are eligible to choose their electricity supplier. However, most are still supplied under regulated tariffs. Customers with contracted capacity below 10 kW have the right to be supplied under the regulated regime (93.8% of all customers). At the end of 2013, 60% of those customers were supplied under the regulated mechanism while in 2011 this share was 76%.

Competition in retail supply continues to rise, with a significant and steady increase in the switching rate (from 5.2% in 2009 to 12.1% in 2012). However, most competitors focus on the commercial and industrial segments. The largest retailer at the end of 2012 was Endesa with a 37% market share of the whole free market.

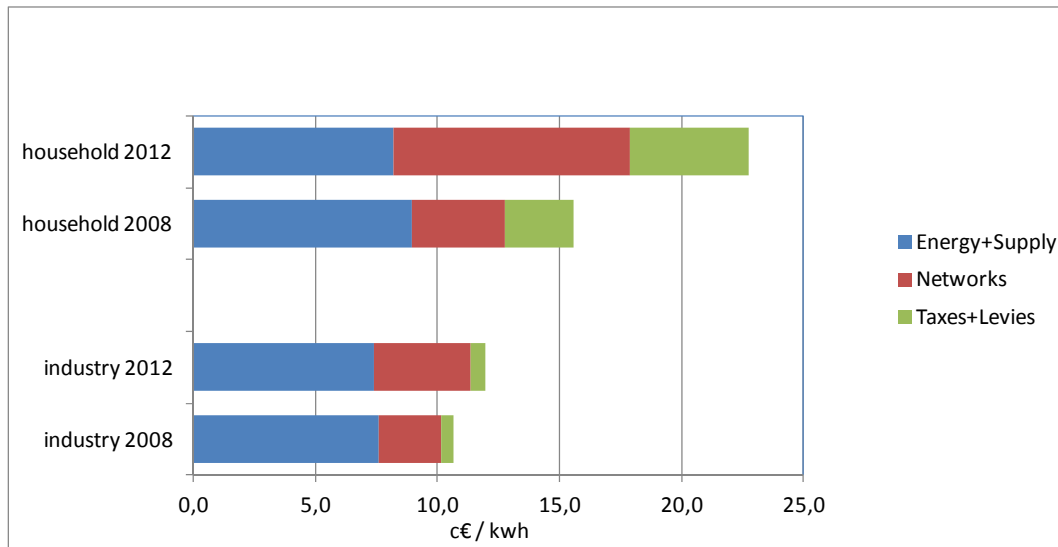
Despite the competitive market conditions, final customers' prices have increased considerably in previous years. From 2008 to 2012, final electricity prices have increased by an average 9.9% per year for domestic customers and 3% for industrial customers.⁴⁹⁰ The increase for domestic customers is due to an increase in network costs and taxes (26% and 14.8% annual increase respectively). In 2012

⁴⁸⁹ Including all companies which produce natural gas domestically as well as abroad.

⁴⁹⁰ Eurostat.

network costs accounted for 54.0% of the price without taxes and 42.5% after taxes. For industrial electricity prices, the share of network costs was 19.0% of the final price.

Figure 3: Electricity price change by component 2008 – 2012 (source: Eurostat, energy statistics)



In July 2013, the Government rebalanced the two components in the electricity tariffs, a capacity component, per kW contracted, and an energy component, per kWh of energy consumed. The change aimed to make tariffs more cost-reflective and increased the average supply cost for customers with lower than average load factors, such as holiday homes.

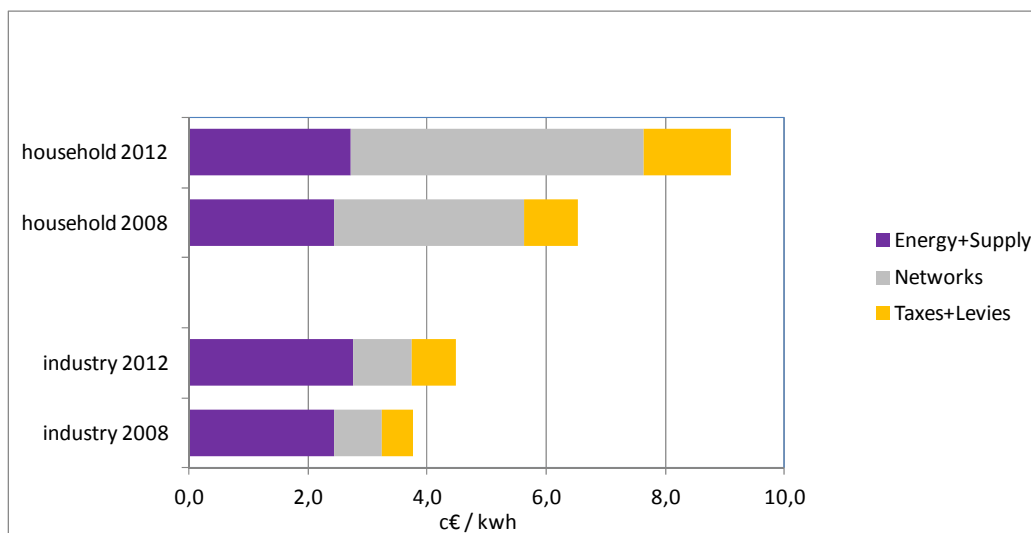
Since 1 April 2014, the Spanish Government has put in place a new mechanism that links the retail market electricity price to the wholesale market price. This new mechanism seeks to remove the regulation of the commodity prices in electricity bills for householders in Spain established in 2009 and in place until now. Whilst this is expected to bring positive changes with regard to competition, it should be accompanied with intensive information campaigns addressed to consumers at large.

Gas

The market concentration level of the Spanish natural gas retail sector shows moderate concentration with a HHI of 2,250 in 2012. The three largest companies still cover almost 70% of the share of natural gas supply, but there are stronger signs of new entrants' activity.

The total number of gas consumers in December 2012 was 7.4 million, with gas demand of 362 TWh. By December 2012, 69.07% of customers were supplied at a free price, while 30.93% remained under the regulated last resort tariffs. Only small customers, consisting mostly of households are eligible for this tariff that the Government sets with reference to periodic gas auctions.

Figure 4: Natural gas price change by component 2008 – 2012 (source: EC, EPCR metadata)



Customers' switching rate, 19.32% in 2012, stabilised around the 2011 value after the previous year's increases. 80% of the switching rate occurred within the free market and less than 20% was due to a move from the last resort supplier to the free market.

Consumers

Spanish consumers rate the performance of their retail electricity market second lowest of all EU countries (58.5 points compared to 72.0) and the assessment has further decreased (by 1.4 points⁴⁹¹) since 2012. The market also ranks 4th lowest in the ranking of 31 domestic services markets. The scores on trust in providers and overall consumer satisfaction are second and third lowest in the EU respectively while the incidence of problems is second highest. The retail gas market is ranked third lowest in the EU (69.4 points compared to 74.1), with the 3rd lowest score for trust and highest incidence of consumer complaints to third parties. Both markets score below the EU average on all indicators, with the exception of switching in the electricity market (which is slightly above the EU average).⁴⁹²

New measures have been introduced, including the Ministry taking over responsibility for information and complaint handling,⁴⁹³ although the CNMC remains in charge of other protective functions, such as operating web-based gas and electricity price comparison tools. Suppliers need to inform clients about their rights and establish a procedure in the case of complaints. Free customer information services must be made available. Additionally, a new law adopted on 27 March 2014 has introduced new measures in switching for gas and electricity, setting up clear procedures when desisting from a switching request and procedures in case of non-requested switches.

Spain maintains public service obligations through Last Resort Suppliers. Customers whose retailers fail are supplied under the last resort tariffs until they sign a new contract. The concept of vulnerable customers has only been defined so far for electricity customers. Vulnerable customers should fulfil

⁴⁹¹ However the difference is not statistically significant

⁴⁹² 10th Consumer Markets Scoreboard,

http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm

⁴⁹³ Law 3/2013, of creation of the National Markets and Competition Commission.

at least one of the following criteria: a large family or a family where all members are unemployed; be low voltage consumers (less than 1 kV) with contracted demand lower than or equal to 3 kW; or a pensioner older than 60 years with a minimum level pension. Vulnerable customers' electricity tariffs are reduced by means of a "social bonus", which sets their tariffs at the July 2009 level. As of December 2012, 2,544,170 customers were defined as vulnerable.

Infrastructure

The Spanish authorities should ensure a proper and timely adoption of the measures stemming from the TEN-E Regulation, including the establishment of the one-stop-shop for Projects of Common Interest (PCIs) (due by 16 November 2013), and other measures foreseen for 2014 and 2015, including the publication of the manual on the permit granting process for project promoters, and the adoption of legislative and non-legislative measures streamlining the environmental assessment procedures.

Electricity

The reduction in electricity demand has delayed the need for new infrastructure and led to adjustments in the remuneration of networks. Conventional generation capacity has been reduced by 1,600 MW since 2010 due to the closure of some old coal, fuel-oil and diesel plants. However, renewable capacity commissioned in 2013 has decreased, following Government measures to freeze subsidy costs, although at lower rates than in previous years. In mainland Spain, 540 MW of new capacity was installed in 2013 against 2,860 in 2012.

Reinforcements to the transmission network have added 747 km of new line to the grid (1.9% of the total network length), down from 860 km in 2012. Despite these reinforcements, there has been an increase in transmission constraints in recent years, potentially due to intermittent generation.

In the context of the TEN-E Regulation, Spain has 5 Projects of Common Interest (PCI) that will help to increase interconnection level with Portugal and France and will contribute to integrate RES into the grid. However, the 10% Barcelona target will not be reached by 2020 with the selected PCIs.

Gas

Spain has six LNG terminals and a seventh regasification plant in Gijon was completed in 2012. The new plant is not in operation at the current time as the stagnated level of demand does not justify it. Spain has interconnection pipeline connections with Morocco, Portugal, France and a direct connection with Algeria. The transmission capacity with France was upgraded in 2013 providing reverse flow interconnection at Larrau which reinforced the North-South interconnections. There are four underground storage facilities covering 9.1% of the demand. An underground storage project expected to enter into operation in 2013 has been delayed after gas injection works led to intense local earthquakes. The project would have increased the underground storage capacity to around 14% of the demand. Forthcoming planned investments in gas infrastructure were revised and delayed (excluding international commitments) because of lower than expected demand.

In the context of the TEN-E Regulation, Spain has one PCI that will help increase interconnection level with France.

Security of Supply

Electricity

Spain has a comfortable generation capacity margin, due to earlier strong investments in CCGT and renewable plants and the reduction in electricity demand. No significant new capacity will be required in the coming years.

The steady increase in interconnection capacity with Portugal and France is helping Spain to manage the integration of high volumes of renewable energy. In August 2012, the Balearic Islands electricity system was connected to the Mainland system, enhancing the security of supply in the islands. However, new investments in transmission may still be required to provide better integration for those areas facing frequent congestions.

Gas

Spain has managed its dependency on imported gas by increasing the capacity of LNG terminals and diversifying its gas suppliers. In addition, it requires shippers to maintain a certain volume of stored natural gas at the beginning of the winter season.

Key indicators

Electricity		Gas	
Number of companies representing at least 95% of net power generation	>15	Number of entities bringing natural gas into the country	18
Number of main power-generation companies	5	Number of main gas entities	4
Market share of the largest power-generation company	23.8%	Market share of the largest entity bringing natural gas	48%
Number of electricity retailers	225	Number of retailers selling natural gas to final customers	14
Number of main electricity retailers	4	Number of main natural gas retailers	6
Switching rates (entire electricity retail market)	12.07%	Switching rates for gas (entire retail market)	19.32%
Regulated prices for households – electricity	Yes	Regulated prices for households – gas	Yes
Regulated prices for non-households – electricity	Yes	Regulated prices for non-households – gas	No
HHI in power-generation market	1,329	HHI in gas supply market	2,399
HHI in electricity retail market	2,240	HHI in gas retail market	2,264
Electricity market value ⁴⁹⁴ (bn€)	27.199	Gas market value ¹⁰ (bn€)	7.414
Installed generation capacity (MW, 2011)	102,804	HHI for gas imports	2,710
Peak demand (MW)	43,527	HHI for retail market (household/industry/electricity)	2,250

⁴⁹⁴ Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.

		generation)	
Numbers of smart meters installed	7,910,569	HHI for households (excluding industry and electricity generation)	3,800