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# **SPANISH ENERGY REGULATOR'S ANNUAL REPORT TO THE EUROPEAN COMMISSION**

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## TABLE OF CONTENTS

<b>1</b>	<b>Foreword</b> .....	<b>3</b>
<b>2</b>	<b>Main developments in the gas and electricity markets</b> .....	<b>5</b>
2.1	Main developments in electricity markets in 2010 .....	5
2.2	Main developments in gas markets in 2010 .....	8
2.3	Horizontal issues .....	13
<b>3</b>	<b>Regulation and Performance of the Electricity market</b> .....	<b>22</b>
3.1	Regulatory Issues [Article 23(1) except “h”] .....	22
3.1.1	Management and Allocation of interconnection capacity and mechanisms to deal with congestion .....	22
3.1.2	The regulation of the tasks of transmission and distribution companies .....	28
3.1.3	Effective unbundling .....	33
3.2	Competition Issues [Article 23(8) and 23(1)(h)] .....	37
3.2.1	Description of the wholesale market .....	37
3.2.2	Description of the retail market .....	48
3.2.3	Measures to avoid abuses of dominance .....	61
<b>4</b>	<b>Regulation and Performance of the Natural Gas market</b> .....	<b>66</b>
4.1	Regulatory Issues [Article 25(1)] .....	66
4.1.1	Management and allocation of interconnection capacity and mechanisms to deal with congestion .....	66
4.1.2	The regulation of the tasks of transmission and distribution companies .....	70
4.1.3	Effective Unbundling .....	71
4.2	Competition Issues [Article 25(1)(h)] .....	76
4.2.1	Description of the wholesale market .....	76
4.2.2	Description of the retail market .....	85
4.2.3	Measures to avoid abuses of dominance .....	95
<b>5</b>	<b>Security of Supply</b> .....	<b>100</b>
5.1	Electricity [Article 4 and 2005/89/EC Article 7] .....	100
5.1.1	Evolution of electricity demand .....	100
5.1.2	Current generation fuel mix and expected developments .....	101
5.1.3	Role of regulatory or other authorities regarding authorization criteria and incentives to build capacity .....	103
5.1.4	Progress on major infrastructure projects and interconnections .....	104
5.2	Gas [Article 5 and 2004/67/EC Article 5] .....	105



5.2.1	Evolution of gas demand .....	105
5.2.2	Procurement of gas supplies. Origin and mix of gas imports .....	107
5.2.3	Import capacity .....	108
5.2.4	Gas infrastructure investments in 2010 .....	111
5.2.5	Forthcoming investments for the next three years.....	113
5.2.6	Underground storage.....	115
5.2.7	Competitive impact of measures taken pursuant to Articles 3 and 4 of Directive 2004/67/EC on gas market players .....	118
5.2.8	Long term gas supply contracts.....	119
<b>6</b>	<b>Public Service Issues [Articles 3(9) electricity and 3(6) gas] .....</b>	<b>120</b>
6.1	Electricity .....	120
6.2	Gas.....	124

## 1 FOREWORD

The year 2010 has witnessed intense activity in the context of European energy regulation and, at national level, in the preparation of the new framework set forth by the Third Package. The internal gas and electricity markets are being shaped by several initiatives such as the 2020 sustainability targets, the Energy Infrastructure Package, the work on smart grids, the entry into force of the Third Package and the first months of ACER activity. In the new scene, energy regulation is no longer a national issue but an EU-wide one.

In this context, it is fair to look back and acknowledge the key role played by the European Commission and ERGEG in the promotion of regional and EU-wide market integration. CNE is proud to keep contributing to this process in several ways:

- Hosting the gas regulatory Forum (Madrid Forum) at CNE premises.
- Chairing the ERGEG Regional Initiatives Group which has coordinated until 2010 the activities of the seven regions of the Electricity Regional Initiative and the three regions of the Gas Regional Initiative.
- Leading the South-West region of the ERGEG Electricity Regional Initiative and the South region of the ERGEG Gas Regional Initiative.
- Monitoring and pushing towards further integration in MIBEL.

Mixed developments have happened throughout the past year: energy consumption in Spain registered in the year 2010 similar records to the year 2009 (slight increase in electricity and decrease in gas). Customers have faced substantial increases in end-user electricity prices due to increasing access tariffs. Furthermore, the accumulated tariff deficit will have to be paid in the years to come. On the other hand, energy infrastructure will soon contribute to more competition as regards wholesale energy supply: interconnection capacity is being increased significantly, thus offering more opportunities for cross-border gas and electricity trade.

The Sustainable Economy Law (2/2011) recently passed has partially transposed the Third Package legal requirements concerning NRAs. A key change is the fact that CNE decisions can only be appealed to the Court; the possibility of appealing to the Minister of

Industry, Tourism and Trade has been abolished. The full transposition of the pending points of the Third Package, including the powers and duties of NRAs, should follow in the next months.

Recently, a new Board has been appointed to lead the CNE and to face the challenging and stimulating tasks that lay ahead. This is the first report of this kind that I have the honour to introduce. In the coming editions, I hope to keep reporting on achievements in the right way towards an effective Internal Energy Market.

## 2 MAIN DEVELOPMENTS IN THE GAS AND ELECTRICITY MARKETS

### 2.1 *Main developments in electricity markets in 2010*

#### i) **Wholesale market**

The concentration of the wholesale market has not changed significantly. The three biggest operators cover around 60% of the energy share. Consequently, and given that no new measures have been put in place, the market power of dominant operators remains in a similar level to last year.

The degree of integration across borders has not changed significantly since last year's report. Spanish and Portuguese day-ahead and intraday electricity markets are fully integrated in the MIBEL. In the context of the Regional Initiatives, integration of day-ahead market with France (and therefore the CWE<sup>1</sup> region) is being pursued. The SW<sup>2</sup> region is implementing the electricity target model as set forth by the European Energy Work Plan with the aim to have an internal (European) energy market. However, due to the scarce cross-border capacity, the electricity exchanges with France (and consequently, the chances for price convergence) are rather limited.

As for the electricity trade in the Iberian PX, it has decreased 13% (measured in terms of energy) on a year and bilateral contracts have increased. The day-ahead average price in OMEL (Spanish side) during 2010 was 37.01 €/MWh. The final weighted average market price, including capacity payments, technical restrictions and balancing was 45.13 €/MWh (about 1% higher than previous year average).

#### ii) **Retail market**

The degree of concentration of the retail market has not changed significantly, but the share of each supplier (especially measured in terms of number of customers) has suffered changes: Iberdrola's share has increased significantly to the detriment of Endesa.

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<sup>1</sup> Central-West Europe, thus comprising France, Belgium, The Netherlands, Luxembourg and Germany.

<sup>2</sup> South-West Europe, thus comprising Portugal, Spain and France.

In the period July 2009 – July 2010, around 1.9 million customers have switched from last resort supply to the liberalised market.

The “Supplier Switching Office (OCSUM)” was set up with the aim of monitoring and facilitating supplier switching procedures. Existing regulation establishes the following deadlines to be met by distribution companies (DSOs):

- The DSO must answer the switching request (this is usually presented by the retailer in the name of the customer) within a period of 5 working days for low voltage customers. For medium and high voltage customers the period to be considered is 15 days.
- In the case of a simple switch, the DSO must activate it in less than a fortnight. (Low and high voltage customers). This period could be increased if the customer asks for a real metering at the settlement bill date.

Existing regulation establishes the deadlines of the switching period but it does not fully establish how the related communications should take place. (The most relevant regulation for Electricity in this matter is gathered in Law 54/1997, Royal Decree 1955/200, Royal Decree 1435/2002, Royal Decree 1011/2009, Royal Decree 485/2009 and also in the Order ITC/1659/2009). To date, the communication system mostly results from an agreement between retailers and DSOs.

CNE has launched a new web price comparison tool for gas and electricity offers<sup>3</sup>. Retail prices have increased significantly compared to the previous year, especially in the small customers segment.

### **iii) Public Service Obligations and Consumer Protection**

The retail market is becoming more and more active but this has been accompanied by a growing number of consumer complaints due to alleged bad practices by the suppliers which reveal the helplessness of consumers. CNE has opened an investigation dossier

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<sup>3</sup> <http://www.comparador.cne.es/comparador/index.cfm?js=1&e=N>

which will inform further actions potentially including the initiation of infringement proceedings.

In Spain, the Autonomous Communities have the responsibility of customer complaint handling and dispute settlement.

#### **iv) Infrastructure**

In the FR-ES interconnection, the project of the new line (Santa Llogaia-Baixas) has now all the administrative authorisations needed for it to begin. Work will start at the end of 2011, with power-up by the end of 2013 and entry into service by 2014. This project will duplicate the commercial cross-border capacity, which is allocated through explicit auctions.

In the PT-ES interconnection, cross-border capacity has slightly increased in the beginning of 2011 after the entry into service of new infrastructures, thus rearranging and upgrading links between substations alongside river Duero's axis. Several projects are ongoing with the aim to reach 3.000 MW in 2015. Capacity is implicitly allocated on a day-ahead and intraday basis. In 2010, this interconnection was congested only 22% of the time, even lower than 2009 values (25.3%).

While the level of interconnection capacity will be significant in the Spanish-Portuguese border, the Iberian-French one, below 3%, will remain far under the target agreed by the European Council at the Barcelona summit of March 2002 (at least 10% of the production capacity installed).

#### **v) Security of Supply**

No threats are detected as regards system adequacy as demand rose slightly from 2009 values (yet still below 2007 data), rainfall has kept over the historic average throughout the year and installed generation capacity (around 100 GW) largely exceeds peak demand (44.12 GW). Nevertheless, availability indexes are partially handicapped by the high share of renewable energy sources (roughly 50% of capacity).



## **vi) Regulation/Unbundling**

In 2010, Royal Decree-Law 6/2010, of 9th April, came into force modifying the unbundling requirements contained in article 14 of the Electric Power Act and applying the legal and functional unbundling measures which were already imposed on production and supply activities to energy recharge services.

During 2010, vertically-integrated companies have implemented their compliance programmes and submitted required reports on the unbundling measures they have adopted to the CNE and to the Ministry.

As for the unbundling of the transmission system operator, during 2010, Endesa, Gas Natural Fenosa and Hidrocantábrico sold their remaining transmission assets to REE, completing the process required by Law 17/2007 which established REE as the sole transmission agent.

The CNE published on 22nd July 2010 a report on the implications of the third package advising the Ministry on the need to transpose Directive 2009/72/EC including some requirements on unbundling<sup>4</sup>.

Further unbundling measures are foreseen in the regulatory proposals pending for 2011.

## **2.2 Main developments in gas markets in 2010**

### **i) Wholesale market**

Natural gas consumption in 2010 in Spain reached 400.9 TWh, 0,4 % lower than in 2009. The number of gas customers in 2010 surpassed 7 millions, with 123.575 new customers. Conventional demand for natural gas rose by 10% in 2010 and has returned to pre-recession levels. However, there have been a decrease of 15,7% in the use of gas in electricity generation mainly due to the increase of production with renewable energies.

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<sup>4</sup> [http://www.cne.es/cne/doc/publicaciones/cne94\\_10.pdf](http://www.cne.es/cne/doc/publicaciones/cne94_10.pdf)

The imports basket of the Spanish gas system roughly keeps the structure of the previous years, resulting in a very high diversification of sources (up to 14 different countries). Algeria stood out once again with a share of 32,25%, then Nigeria (20,12%), Qatar (15,71%), Norway (9,20%), Trinidad and Tobago (8,46%) and Egypt (7,56%).

Most of this gas was imported in the shape of LNG (75,5%) while the remaining 24,5% arrived via pipeline. Such a high proportion of LNG make Spain be the third main LNG destination in the world and the first one in Europe.

Since there is no organised gas hub at present to provide a price reference for gas in Spain, CNE has developed an index for natural gas border prices. In the year 2010, natural gas border prices has increased a 22,1%, from 15,96 up to 19,48 €/MWh.

Most of the gas in the Spanish market is negotiated through bilateral OTC trading, by means of an electronic platform developed by ENAGAS (the so-called MS-ATR) with nearly 30 active traders, who can trade gas in eight different balancing points: the six existing LNG terminals; a virtual balancing point (AOC) and a virtual storage point.

The trend for negotiated energy in the Spanish OTC gas market has continued to grow in 2010, with up to 39.100 transactions registered on the MS-ATR. The volume of energy traded over the counter amounted to 1.004,7 TWh

In April 2010 the CNE published a road map to develop a gas exchange in Spain. The objective is to accelerate the creation of a gas hub in the Spanish Gas System in order to promote competitiveness, transparency, and reducing the lack of transparency of the current OTC market.

## **ii) Retail market**

The gas market in Spain is fully liberalized since 2003. The number of gas customers in 2010 surpassed 7 millions, with 123.575 new customers.

At the end of 2010 there were 20 supplying companies actives as retailers in the Spanish gas market. At this time, new entrants had already got more than 60% of market share in terms of energy, which reveals a fair level of competition in the Spanish gas market. There are five suppliers nominated as suppliers of last resort.

In 31 December 2010, the number of consumers supplied at a free price was 4.180.058 (58,2% of all consumers), while the number of consumers supplied at the regulated tariffs was 3.000.274 (41,8% of the consumers).

There has been an increase in the switching rate since 2006. The switching rate in gas in 2010 was quite remarkable: the number of customers that have change of supplying company was 834.115, more than double from 2009. The gas switching rate in 2010 was a 11,6% of customers.

The “Supplier Switching Office (OCSUM)” was set up with the aim of monitoring and facilitating supplier switching procedures. Existing regulation establishes the following deadlines to be met by distribution companies (DSOs):

- The DSO must answer the switching request (this is usually presented by the retailer in the name of the customer) within a period of 6 working days for customers connected up to 16 bars networks. For other customers maybe longer, depending on the interaction of the System Operator.
- If the annual consumption is lower than 100.000 kWh, the switching process is activated monthly using fixed dates (1-11-21) and therefore, the period of time cannot exceed 10 days. If the annual consumption is equal or higher than 100.000 kWh and no telemetering is available, the DSO must activate the switching during the last 5 working days of the month when the real metering of the bill has already taken place. If telemetering is available, the switch shall take no longer than 6 days after the request has been validated.

Existing regulation establishes the deadlines of the switching period but it does not fully establish how the related communications should take place. (The main switching procedure regulation for Gas is gathered in Law 34/1998 and in Royal Decree 1434/2002. Royal Decree 1434/2002 is modified successively by Royal Decree 942/2005, Royal Decree 1011/2009 and also by Royal Decree 104/2010). The communication system mostly results from an agreement between retailers and DSOs.

### **iii) Public Service Obligations and Consumer Protection**

As a measure to promote market transparency, CNE has launched a new web price comparison tool for gas and electricity offers. The tool was opened to the public at a press conference on 26 of April 2011. The tool is available at the following website [www.comparador.cne.es](http://www.comparador.cne.es).

The comparison tool includes 388 active offers of gas, electricity or dual supply from 18 different companies.

CNE just offers information services to consumers since the Spanish regulator has no competences to resolve consumers' disputes. The regulator may advise consumers and provides information on the functioning of the market, the options available, the consumers' rights and steps to be taken when issuing a complaint.

In Spain, the Autonomous Communities have the responsibility of customer complaint handling and dispute settlement.

### **iv) Infrastructure**

Six LNG terminals are operational in the Spanish gas system and a new LNG terminal in Gijón (Asturias) is foreseen for 2013. All LNG terminals are subject to regulated TPA, allowing the access to new capacity by new entrants.

Spain has several international gas pipeline connections to Algeria through Morocco, to Portugal through Tuy and Campo Maior, and to France through Larrau and Irún.

While LNG terminals represent around 61 bcm/year of entry capacity to the transmission network, the connection from Algeria through Morocco represents 12 bcm/year and the connection with France at Larrau, 3 bcm/year.

Since April 2011, the new direct connection with Algeria (Medgaz pipeline) added 8 bcm/year of import capacity.

There is available capacity in all regasification plants. Spanish and French Administrations and Regulatory Authorities are currently working in an Open Season procedure for developing new capacities in this interconnection, in two axes (Western and Eastern axes) as of 2013 and 2015, respectively.

## **v) Security of Supply**

The Spanish regulatory gas framework includes several provisions oriented to preserve security of gas supplies, as provided by European Directives 2004/67/EC and 2003/55/EC. According to these provisions, suppliers procuring more than 7% of gas imports to Spain must diversify their portfolio in case supplies to the Spanish market coming from a single country reach 50% of all supplies. In addition, all gas retailers must keep gas stocks of 12 days of firm sales in the previous year, as well as 8 additional days at the beginning of the winter.

Some capacity expansions in current infrastructure were accomplished and further new facilities were incorporated within the Spanish gas system in 2010, including both LNG terminals and new transmission pipelines. In 2010 LNG storage capacity was substantially increased

Forthcoming investments for the next three years, it is worth to mention a new LNG terminal in Gijón (Asturias), the international pipeline Medgaz that came into operation last April, the increase of the capacity of the Spain-France interconnections and three new underground storages.

## **vi) Regulation/Unbundling**

Royal Decree–Law 6/2009, modifying article 67 of the Hydrocarbons Act 34/1998, consolidated ENAGAS, the independent transmission system operator, as the sole owner of the main network of primary transmission of natural gas.

However, some remaining transmission assets that do not belong to ENAGAS but still to vertically-integrated companies require the adoption of new legislation. To that effect, the CNE published on 22<sup>nd</sup> July 2010 a report on the implications of the third package advising the Ministry on the need to transpose Directive 2009/73/EC with different proposals for ISO and ITO models.

In 2011, Law 12/2011 has modified the Hydrocarbons Act and has required Enagas to transfer the operation of the transmission system and the actual transport (with the ownership of the assets) into two different companies within the group.

During 2010, vertically-integrated companies have implemented their compliance programmes and submitted required reports on the unbundling measures they have adopted to the CNE and to the Ministry.

Further unbundling measures related to transport and distribution, necessary in order to transpose Directive 2009/73/EC into national law, have been proposed by the Government and are currently in the process of being adopted by Parliament.

### **2.3 Horizontal issues**

#### **i) Related to present legal framework.**

As for financing the energy deficits, Royal Decree Law 6/2010 concerning measures to stimulate economic recovery and employment, published on April 13, 2010, contains a specific chapter for the energy sector that introduces a number of amendments to the Electricity Sector Act 54/1997. The changes to the law set out a mechanism for financing any deficits that may arise during the settlement of regulated activities. The amounts necessary to finance the deficits are paid by the leading industry players, who acquire the right to recover those amounts plus interest (calculated at a market rate).

In this regard, on April 21, 2010 Royal Decree 437/2010 was published. In application of Royal Decree Law 6/2009, it regulates the securitization of the receivables accrued in respect of financing the deficit by the main industry companies. Specifically, for the securitization of all receivables (past and future, peninsular, island and extra-peninsular), the new legal provisions:

- sets a price for the transfer of the rights to the fund equal to the value of the receivable to be collected;

- establishes that the fund shall have a maximum of one year as from the assignment of the receivables to issue and place debt securities in an amount sufficient to cover the purchase of the rights assigned by the companies.

Subsequently, Royal Decree-Law 14/2010, published on December 24, 2010, increases the limits of the deficit foreseen for 2010 and 2011, to avoid an impact of the access rate on household expenses and the competitiveness of companies.

Concerning access tariffs, Royal Decree 1202/2010, published on September 25, 2010, set the access rate revision schedule. Access rates will be updated annually, unless the following extraordinary events (that could require the rates to be revised more frequently, though no more often than quarterly) occur:

- the existence of a tariff deficit;
- regulatory changes that affect the regulated costs used in calculating access tariffs;
- on an exceptional basis, when special circumstances occur that affect regulated costs or the parameters used in calculating them.

On the other hand, Royal Decree 198/2010 modified, among other issues, the legal regime for commercialization of electricity (standing for the activity of wholesale trading and/or end user supply). The new procedure is based on a “responsible communication system” in which the firm that wants to commercialize electricity shall communicate to the Ministry of Industry, Trade and Tourism that it has started, or stopped, and that it complies with the requirements of Spanish law. Once the form is delivered to the Ministry of Industry the firm can start trading, without waiting for acknowledgement of receipt.

Concerning the gas sector, Royal Decree 197/2010 modified the regime for commercialization of natural gas in similar terms.

As an exemption the Government retains a veto possibility for gas trading companies from outside European Union who do not have Third Party Access (TPA) reciprocity. In this

case, the Ministry of Industry shall authorize the beginning of the trading activity and this authorization can be issued under certain conditions.

According to these legal provisions, the Spanish regulator (CNE) is responsible for publishing and updating a list of suppliers monthly. Therefore, the CNE keeps an updated list (one list for gas and another one for electricity) of the active commercialization companies at the CNE website.

Also concerning the gas sector, Royal Decree 104/2010 sets rights and duties of the last resort suppliers, and establishes as well the obligation of any supplier to send CNE a customer service phone number and a web page address, to be included in the mentioned list.

Royal Decree 1221/2010 promotes consumption of indigenous coal as a means of enhancing energy independence and thus preserving security of supply. It introduces a new organized market phase, called “resolution of restrictions for security of supply”, ensuring priority dispatching for power plants that burn indigenous coal. The plants affected by the measure will be compensated for a maximum annual production amount at a fixed price corresponding to the unit cost of generation. That generation cost is defined as the cost of domestic coal, the financial cost incurred for storing that coal, variable operating costs, fixed costs and the cost of covering CO<sub>2</sub> charges in respect of the output produced. On September 29, 2010 the European Commission approved the compensation to be paid to producers that generate electricity using Spanish coal. The EC limited the amount of energy that could be generated under this scheme for the 2011-2014 period to 23.4 TWh per year.

On August 6, 2010 Royal Decree 1003/2010, governing the payment of incentives for the use of photovoltaic systems, was published. Due to the irregularities discovered during inspections of these installations, the government has established a procedure as a measure to improve the qualification process for the incentive scheme. According to the new legal provisions, CNE is in charge of checking whether certain systems identified by the General Directorate of Energy and Mines Policy (DGPEM) have installed all the



components required for electricity generation, upon threat of suspension of the incentive as a precautionary measure and return of payments received if found to not be in compliance.

On November 23, 2010 Royal Decree 1565/2010 which regulates and amends certain aspects related to energy generation under the special regime was published. The measure adapts the remuneration system for new photovoltaic plants and regulates a number of technical features of the special regime. The main provisions include the following:

- Compulsory participation in control centers is extended to groups of plants exceeding 10 MW (just 1 MW on off-mainland systems) and remote metering is mandatory for plants over 1 MW;
- Groups of solar PV plants exceeding 2 MW must comply with voltage-ride through capabilities in the same way wind farms already do, also on off-mainland systems.
- More stringent requirements are established for the control of reactive power: the maximum  $\cos\phi$  allowed deviation is  $\pm 0,02$ , incentives are only granted for those keeping it within a  $\pm 0.005$  range and facilities above 10 MW (5 MW on off-mainland systems) must be able to follow system operator's voltage control command;
- A ceiling of 25 years of useful life on the entitlement of photovoltaic plants to receive the incentive;
- For new on-roof systems, local (under the roof) consumption of at least 25% of PV power installed must be demonstrated, so as to promote actual distributed generation.
- A reduction of the remuneration of new photovoltaic plants applying to be registered as from following 'quarterly calls' equal to 45% for on-ground systems, 5% for on-roof systems of up to 20 kW and 25% for on-roof systems of more than 20 kW.
- A specific tariff system for experimental wind plants with a total capacity up to 160 MW, with remuneration determined on the basis of the system set out in Royal Decree 661/2007.
- A specific tariff system for innovative thermal solar plants (up to 80 MW).

On December 24, 2010, Royal Decree Law 14/2010 was published. The legislation contains urgent measures to correct the tariff deficit. Among the various initiatives, the measure sets a limit on the number of hours of operation eligible to receive the incentive for photovoltaic plants, keeping it within a technically feasible range. This limit consists of a number of caps varying by technology (fixed, mono- or dual-axis trackers) and sun radiation level (five different geographical regions). Production in excess of limitation gets non-incentivized day-ahead marginal price.

Royal Decree 1614/2010, published on December 8, 2010, amends certain aspects of the regulatory framework for generation by wind and solar thermoelectric plants (Concentrated Solar Power, CSP).

For wind plants, the most significant changes include:

- a temporary 35% reduction (from 2011 to 2012) in the reference bonus (prima de referencia) for roughly the 3 GW most recently installed;
- One-year delay in the foreseen deadline for updating new plants' bonuses.
- a ceiling on the number of yearly equivalent hours (2,589) eligible to receive the subsidized price, with the excess receiving the market price (nevertheless, this cap would only apply should the nation-wide yearly average exceed 2.350 equivalent hours — an unlikely event on recent history analysis);
- no future changes in the remuneration of plants in operation and preregistered plants;
- an additional 300 MW quota for plants that are not registered but whose “starting certificate” (acta de puesta en marcha) came prior to May 1, 2010 and additional 600 MW for plants in the Canary Islands;
- a specific tariff system for experimental plants with a total capacity up to 160 MW, with remuneration determined on the basis of the system set out in Royal Decree 661/2007.

Regarding solar thermoelectric plants, the following changes should be mentioned:

- during the first year of operation, pure Feed-in-Tariff option must be chosen (instead of the 'day-ahead price plus a bonus' option);
- Two-year delay in the foreseen deadline for updating new plants' bonuses;
- a sensible technical ceiling on the number of hours eligible to receive the subsidized price, based on the type of technology involved (parabolic trough, tower, Fresnel, Stirling,,); the excess hours will receive the market price;
- no future changes in the remuneration of plants in operation and preregistered plants;
- a specific tariff system for innovative plants (up to 80 MW).

In application of the provisions of Ministerial Order 1549/09, with a Resolution issued on May 7, 2010, the State Secretariat for Energy established the calendar of auctions of financial contracts for Spain-Portugal interconnection for 2010 and the characteristics of the financial contracts to be offered.

## **ii) New competences of the Spanish National Energy Commission (CNE).**

In 2010, new powers have been given to CNE, mainly to guarantee the transparency of the supply market.

As previously mentioned, CNE is entitled to publish, and update, in its web site the list of suppliers, and, under Royal Decree 104/2010 (dated 5<sup>th</sup> February), CNE has to collaborate with the [Supplier Switching Office](#) on making a draft of procedure to promote electronic contracting of gas supply, that has finally been approved on April, 20, 2011 by a Resolution of the General Directorate of Energy and Mines Policy.

There are some specific functions about electricity sector that have been given to CNE in 2010: According to the Royal Decree 134/2010, CNE has to supervise and inspect the correct use of the domestic coal foreseen by the system operator in order to resolve restrictions for supply guarantee; under Royal Decree 1003/2010, CNE has the power to provisionally suspend the payment of the incentives for photovoltaic plants in case of irregularity, and, finally, Royal Decree Law 14/2010 establishes that CNE has to apply

ceiling for photovoltaic plants on the number of hours eligible to receive the subsidized price.

However, Law 2/2011 regarding Sustainable Economy was the main legal step to be highlighted. The new Law partially transposed the Third Package legal requirements concerning NRA (Chapter IX of Directive 2009/72/EC and Chapter VIII of Directive 2009/73/EC) such as, among others, the need to be able to take decisions in relation to all relevant regulatory issues, to be fully independent from any other public or private interests, to contribute to the independence of the national regulatory authority from any political or economic interest through an appropriate rotation scheme, taking due account of the availability of human resources and of the size of the Board.

According to this new legal provision, the Spanish regulator is a public body with its own legal personality, patrimony and full capacity to act with full independence from the public administration and any commercial interests in the development of its activities. In this regards, both the persons responsible for its management and staff should act independently from any market interest and should not seek or take direct instructions from any government or other public or private entity when carrying out the regulatory tasks. However, that requirement is without prejudice to close cooperation with other Spanish NRAs (such as National Competition Commission) and energy regulators in the European and international frameworks.

As for the Board of CNE, it is composed by the Chairperson and six Commissioners who are elected for a single period of 6 years (non-renewable). They are chosen among acknowledged professionals in a preliminary meeting between the candidates and the Commission of Industry of the Parliament. Afterwards, they are appointed by Royal-Decree issued by the Government, following a proposal from the Ministry of Industry. During their mandates, they are not allowed to perform any other activities. Once the mandate expired, members of the Board may not perform any activity related to the energy sector for a period of two years, receiving an economic compensation in this respect.

The people in charge of the management of CNE and other staff, if invited by the President, may participate in the Board meetings without voting rights. Under no

circumstances, are members of Government and high officials of the public administration allowed to attend the abovementioned meetings.

The people in charge of the management of CNE will be appointed by the Board, following the President's proposal. The selection procedure will be based on principles of equality, merit and ability and following a public notice of vacancies.

The President, members of the Board, the people in charge of the management and staff who have previously work in the energy sector shall communicate this circumstance to the Board and, in case of the members of the Board, this information should be published.

CNE shall publish all these decisions referring to both external and internal scope, except the information of confidential nature and other preliminary aspects in the performance of its activities. The abovementioned decisions shall be appealed to the Court as they bring the administrative appeals process to an end. In this regard, Law 2/2011 has abolished the possibility of appealing to the Minister of Industry, Tourism and Trade the decisions by CNE.

### **iii) Related to 3rd Package**

#### **Transposition of the 3rd Package**

A draft bill transposing Directive 2009/72/EC has been proposed by the Ministry of Industry to the Spanish Parliament. The draft bill amends Law 54/1997 and it is focused on the strengthen of duties and powers of the regulatory authority with a view to promoting the competitive functioning of electricity market, fostering the development of internal energy market and competitive regional markets, eliminating restrictions on trade in electricity, helping to achieve, in the most cost-effective way, the development of secure, reliable and efficient non-discriminatory systems that are consumer oriented, facilitating access to the network for new generation capacity (in particular removing barriers that could prevent access for new market entrants and of electricity from renewable energy sources), and helping to ensure consumer protection.

Therefore, new powers would be assigned to CNE regarding the approval of methodologies concerning allocation of transmission and distribution cost, balancing services, access to interconnection infrastructures and capacity allocation and congestion management procedures.

As for consumer protection, CNE would reinforce its role in consumer complaints making proposals to improve the regulatory framework, the concept of “vulnerable customer” would be defined and single contact points would be established.

In addition, other legal provisions would refer to unbundling, record keeping, promotion of energy efficiency, designation and certification of transmission system operators and concerning third countries.

On the other hand, the draft bill would also coordinate the relation between CNE, CEER and ACER.

In parallel, a draft bill transposing Directive 2009/73/EC has been proposed by the Ministry of Industry to the Spanish Parliament. The draft bill amends Law 34/1998 of Hydrocarbons and it is focused on the strengthen of duties and powers of the regulatory authority with a view to promoting the competitive functioning of gas markets, fostering the development of internal energy market and competitive regional markets, eliminating restrictions on trade of natural gas, helping to achieve, in the most cost-effective way, the development of secure, reliable and efficient non-discriminatory systems that are consumer oriented, facilitating access to the network (in particular removing barriers that could prevent access for new market entrants), and helping to ensure consumer protection.

### **3 REGULATION AND PERFORMANCE OF THE ELECTRICITY MARKET**

#### **3.1 *Regulatory Issues [Article 23(1) except “h”]***

##### **3.1.1 Management and Allocation of interconnection capacity and mechanisms to deal with congestion**

In Spain, the main congestions appear in interconnections, especially in the French-Spanish border, while internal congestions are not structural and they are solved as network constrains when needed by means of specific markets (day-ahead and intraday security markets, managed by the System Operator).

Following, cross-border congestion management is analysed border by border:

- **French-Spanish interconnection**

While important increase in interconnection capacity is under way across the Pyrenees, the interconnection between Spain and France still suffers significant congestion. Commercial exchange increased with the rest of Europe in 2010. The commercial capacity for the daily market stood on average in 2010 at 800 MW for imports and 460 MW for exports. Low electricity prices due to low demand and cheap valley prices due to renewables made Spain in 2010 a clear exporter of electricity, also to France.

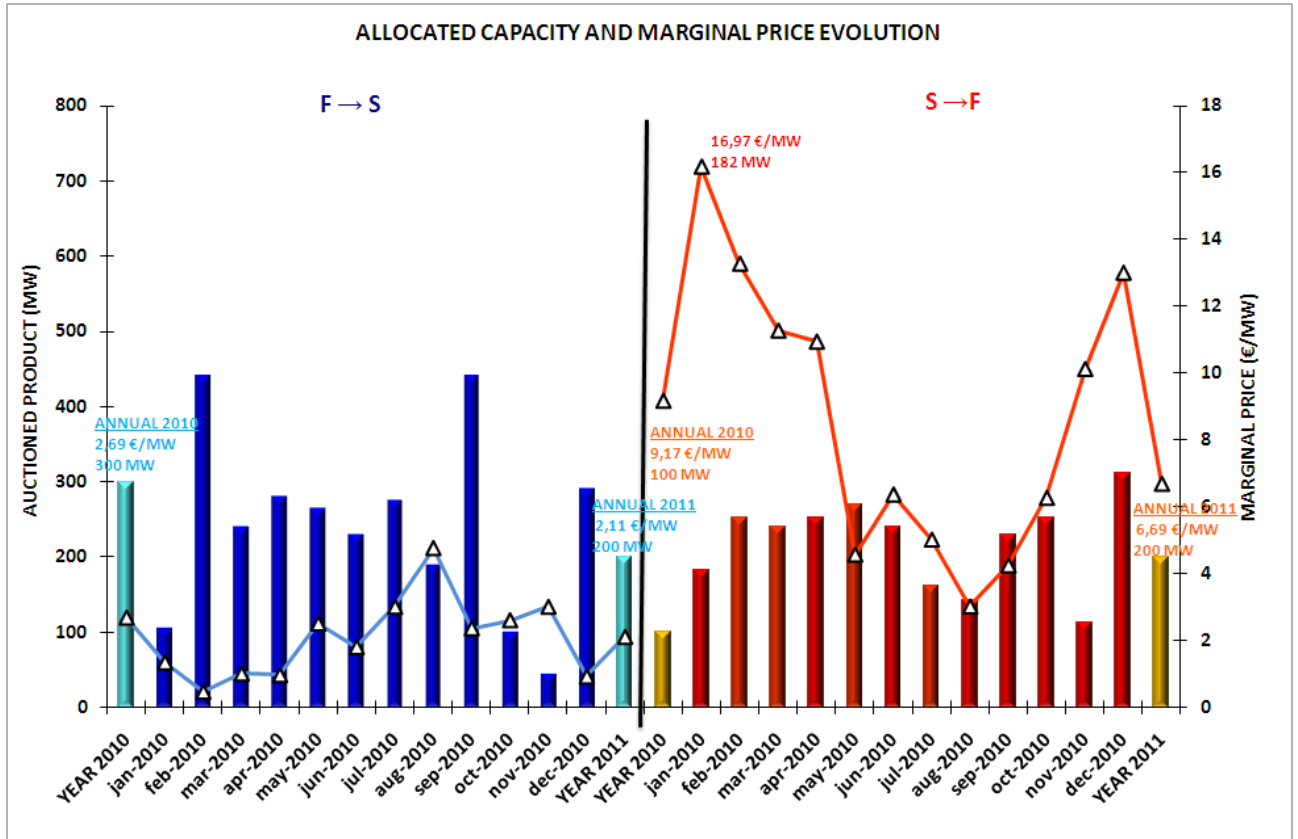


Figure 1. Allocated capacity and marginal price evolution in 2010 in the annual and monthly auctions interconnection Spain-France (Source: REE)

**INTERCHANGE CAPACITY WITH FRANCE AND MARKET MATCHED ENERGY + BILATERAL**  
 Years 2009-2010

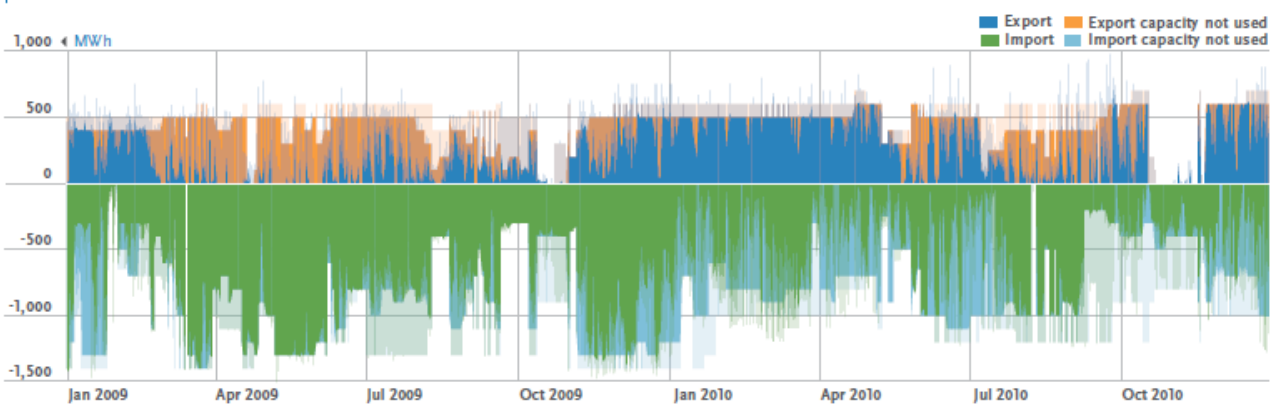


Figure 2. Exchange capacity and market matched energy between Spain and France in 2009-2010 (Source: OMEL)

The rules governing Spanish French cross-border electricity exchanges are the following:



- Order ITC/4112/2005, of 30 December, setting forth the regime applicable for international exchanges of electricity (updated by Order ITC/843/2007, of March 28<sup>th</sup>), being applied at present only explicit auctions mechanism described in Phase I in the Appendix I.
- Operational Procedure 4.0 Management of international interconnections. Resolution of 17 March 2004.
- Operational Procedure 4.1 Congestion Management in the France-Spain Interconnection (including so-called “IFE rules version 3”). Resolution of 28 May 2009 (of the State Secretariat for Energy).

In the context of the SW region of the ACER Electricity Regional Initiative, the following developments are foreseen for the French-Spanish interconnection:

- Long term capacity allocation: The IFE long term auctions will be transferred to CASC-EU first with physical treatment (as it is now, PTR+UIOSI<sup>5</sup>) but foreseeing the evolution towards FTRs<sup>6</sup>.
- Day-ahead capacity allocation: Price coupling between MIBEL and CWE has been in the agenda for years. The development of the single algorithm for EU-wide coupling by the PXs will make possible the progressive extension of price coupling from the CWE region to the neighbouring regions. This should be implemented between MIBEL and CWE by 2012.
- Intraday capacity allocation: In line with the target model, implicit continuous allocation will be implemented in the French-Spanish interconnection.

- **Portuguese-Spanish interconnection**

In this interconnection, cross-border all available capacity is implicitly allocated day-ahead and intraday by means of a market splitting mechanism. The degree of congestion in the Portuguese-Spanish interconnection has been getting lower and lower each year. While in 2007 the interconnection was congested around 80% of the time, in 2010 the market splitting was applied only around 20% of the time, similar to 2009 values. It is worth

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<sup>5</sup> Physical Transmission Rights with a Use-It-Or-Sell-It mechanism.

<sup>6</sup> Financial Transmission Rights.

mentioning that the export capacity in 2010 reached 1200 MW, i.e. 13% of the peak demand of Portugal.

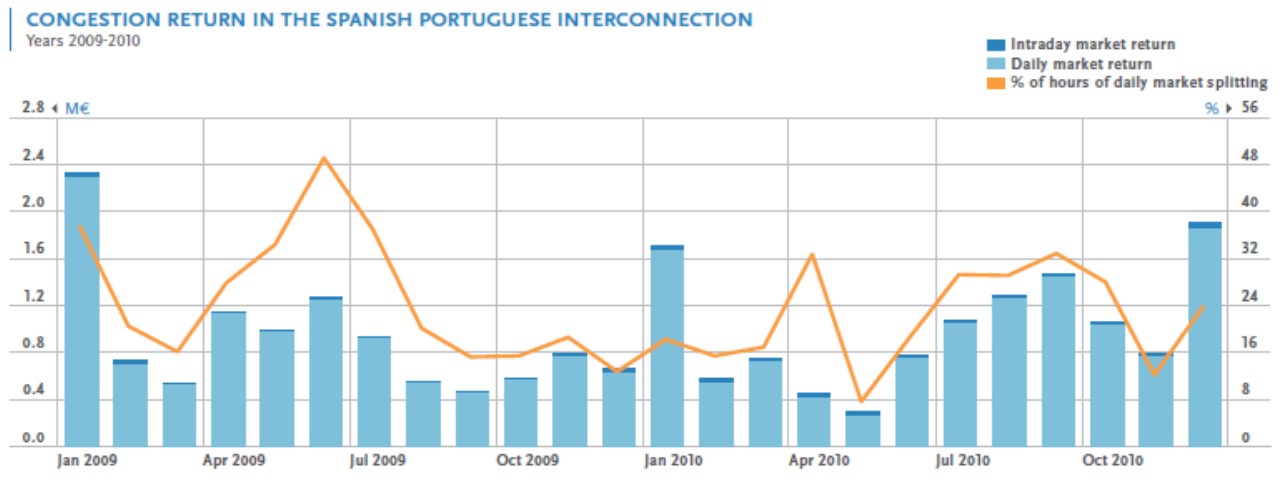


Figure 3. Congestion return and % of hours of daily market splitting in 2009-2010 between Spain and Portugal (Source: OMEL)

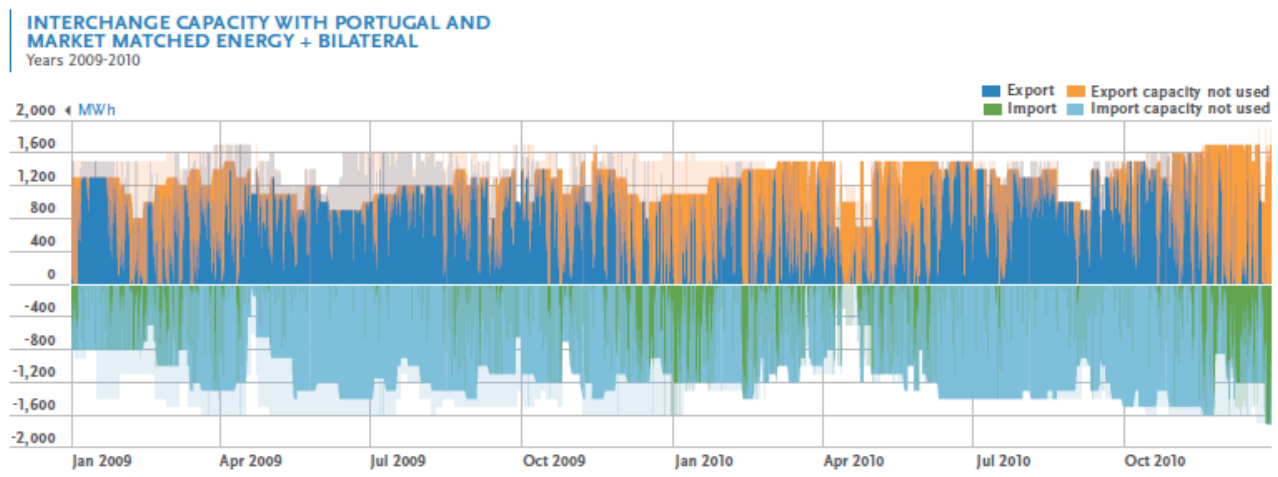


Figure 4. Exchange capacity and market matched energy between Portugal and Spain in 2009-2010 (Source: OMEL)

The rules governing Portuguese-Spanish cross-border electricity exchanges are the following:

- Order ITC/4112/2005, of 30 December, setting forth the regime applicable for international exchanges of electricity. Appendix III was established by Order ITC/843/2007, of March 28<sup>th</sup> and later on by Order ITC/1549/2009.

- Operational Procedure 4.0 Management of international interconnections. Resolution of 17 March 2004.
- Operational Procedure 4.2 Congestion Management in the Portugal-Spain Interconnection. Resolution of 26 June 2007 (of the Secretariat General for Energy).
- By Order ITC/1549/2009, a non-coordinated long term transmission capacity product has been introduced by updating Appendix III of Order ITC/4112/2005. This is a financial product (no influence on physical flows).

### Auctions regarding financial contracts based on the price differences of the Spanish and Portuguese Electrical Systems

Since June 13<sup>th</sup> 2009 in which the Order ITC/1549/2009 mentioned before is published, a long-term financial transmission capacity product is auctioned twice a year. It consists on auctions of financial hedging products with half year or annual time horizon. These products are contracts for differences -“forward hedge contract to export electrical energy from Spain to Portugal”-, valued in accordance with observed hourly day-ahead market spread between Portuguese and Spanish zones. The Spanish system acts as the primary issuer of the capacity but market players can bid to sell more capacity on top.

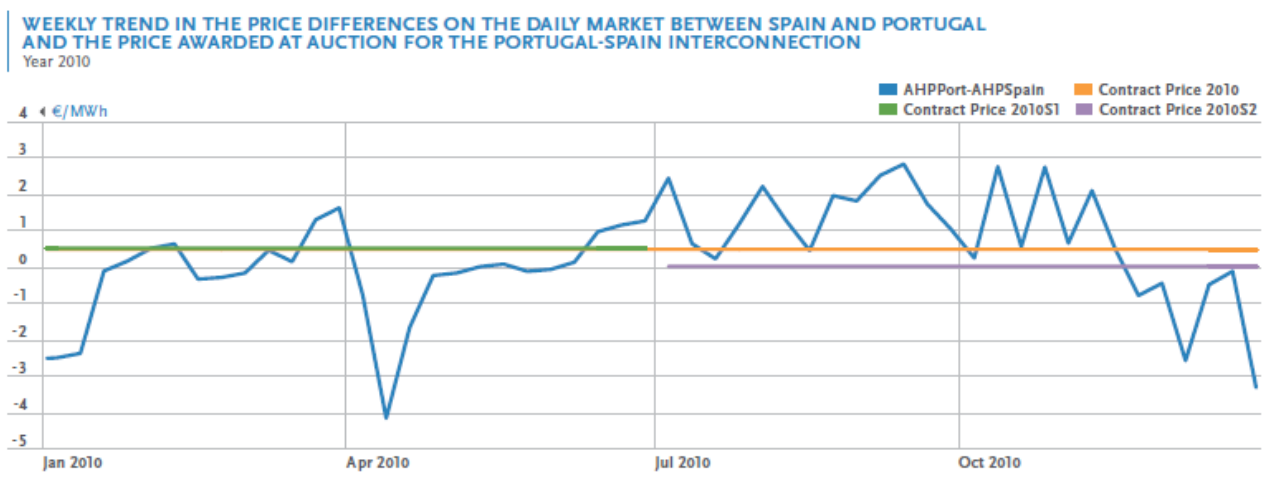


Figure 5. Average hourly price difference on Spanish daily market and Portuguese daily market (Source: OMEL)<sup>7</sup>

<sup>7</sup> AHP: average hourly price

Auction	Period	Successful bid price (€/contract)	Contracts tendered by SES <sup>8</sup> (MW)	Contracts awarded to SES (MW)	Total contracts awarded (MW)
1 <sup>st</sup>	2 <sup>nd</sup> Half-year 2009	2.01	100	100	100
2 <sup>nd</sup>	1 <sup>st</sup> Half-year 2010	0.49	200	200	200
	Year 2010	0.46	200	200	200
3 <sup>rd</sup>	2 <sup>nd</sup> Half-year 2010	0.00	200	179	214
4 <sup>th</sup>	1 <sup>st</sup> Half-year 2011	0.10	200	200	200
	Year 2011	0.34	200	200	201

Table 1. Results of the auctions forward contracts PT-ES (Source: OMEL)

The value of these contracts is rather modest (from January 2010 to June 2011 it has been below 0.50 €/MWh) as a consequence of the small price differential observed between both zones.

In the context of MIBEL and the SW region of the ACER Electricity Regional Initiative, the following developments are foreseen for the Portuguese-Spanish interconnection:

- Long term capacity allocation: The MIBEL Regulatory Council (CR MIBEL, composed of National Regulatory Authorities and Financial Services Authorities of Spain and Portugal) elaborated a coordinated proposal of a joint mechanism for the long term management of the interconnection Spain-Portugal, submitted to the respective governments. Recently, the Ministry of Industry, Tourism and Commerce (MITyC) submitted a technical assessment of the coordinated proposal for a joint mechanism, in which it valued positively the CR MIBEL report, and requested the CNE to develop an implementation proposal of a joint mechanism for the long term management of the interconnection SP-PT, taking into account both the CR MIBEL report and the MITyC technical assessment.

<sup>8</sup> SES: Spanish Electrical System

In the same way, the Work Programme approved by the CR MIBEL Presidents' Committee for the second half of year 2011, includes the elaboration of the implementation proposal of such a mechanism.

In order to grant continuity to the hedge of those agents located at one side of the interconnection point aiming to mitigate the price risk in the other side of the interconnection point, the auction celebrated in June 2011 has kept the same design as the previous auctions, as long as the joint management of the long term treatment of the interconnection will be developed and implemented, possibly at the end of year 2011.

- Day-ahead capacity allocation: In line with the target model, implicit allocation (market splitting) already exists.
- Intraday capacity allocation: The region is analysing how to combine intraday implicit continuous allocation with implicit auctions in the Portuguese-Spanish interconnection.

No relevant changes happened this year on computation of transmission capacity.

### **3.1.2 The regulation of the tasks of transmission and distribution companies**

#### Network tariffs

The Government approves the access tariffs (previously, the NRA issues a non-binding report) and publishes them in the Spanish Official Gazette. These tariffs are unique throughout the entire Spanish territory.

Access tariffs include network charges, i.e. transmission revenue, distribution revenue (including the cost of the TPA management) in addition to other levies included in access tariffs as per Spanish Electric Power Act 54/1997 and Royal Decree 1164/2001, namely, subsidies to renewables and cogeneration.

From October 2010 onwards, Royal Decree 1202/2010, dated September 24th, applies which means that, as a general rule, access tariffs are to be reviewed on an annual basis.

Exceptions to this rule, meaning a revision of access tariffs every three months, apply in the following cases:

- a. Differences between the estimated and the actual deficit of access tariffs.
- b. Substantial changes in the regulation of costs included in access tariffs.
- c. Exceptional factors affecting either regulated costs or the parameters needed for the calculation of such costs.

In order to obtain a basis for the reports on the draft Royal Decrees and Ministerial Orders aimed at establishing access tariffs for the period ahead, the CNE requests from different agents in the electricity sector the information required for estimating not only the costs but also the revenues of the electricity system in each corresponding period.

In particular, the requested information is the cost of the transport and distribution facilities for each company, the facilities' characteristics, revenues and expense budgets from institutions whose remuneration is chargeable to the tariff, forecast demand in power plant bars and its coverage from the system's Operator.

In order to calculate the system's revenue, information is requested from companies on their forecast billing variables (number of customers, consumptions and capacity) broken down by tariffication group, for both the end of the year in progress and the following year, in which the new tariffs will be applied. These data are compared with information available by this regulated activity settlement Commission. Likewise, information is requested on forecast generation under the Special Regime (renewables energies and cogeneration), which is compared with the information gathered by the Commission from other sources.

In 2010, Order ITC/3519/2009, dated December 28<sup>th</sup>, established access tariffs for the first semester of 2010 while Order ITC/1732/2010, dated September 25<sup>th</sup>, determined access tariffs for the second semester of that year.

#### Distribution

Distribution costs are computed for each distribution company according to the Reference Network Model as established in article 8 of Royal Decree 222/2008. Remuneration scheme for distribution includes incentives that evaluate losses reduction and quality of service. For a more detailed explanation, please, refer to the National Report published in 2010.

Quality is gauged through two main indexes, TIEPI and NIEPI, which measure, respectively, the time and number of supply interruptions (in terms of equivalent power interrupted).

AUTONOMOUS REGION/ CITY	2005	2006	2007	2008	2009		
	Total	Total	Total	Total	scheduled	non-scheduled	Total
ANDALUCÍA	3,25	2,39	2,39	3,00	0,17	2,20	2,37
ARAGÓN	1,51	1,32	1,46	1,67	0,22	1,41	1,63
ASTURIAS	1,27	1,86	1,23	1,66	0,08	2,87	2,95
BALEARES	2,20	1,83	2,00	2,73	0,18	1,58	1,76
CANARIAS	9,25	1,38	1,12	1,71	0,19	2,01	2,20
CANTÁBRIA	1,56	1,60	1,35	1,16	0,08	1,44	1,52
CASTILLA-LEÓN	1,56	2,12	2,14	1,61	0,07	1,64	1,71
CASTILLA-LA MANCHA	1,99	2,61	2,38	2,36	0,04	1,48	1,52
CATALUÑA	1,57	1,79	1,67	1,37	0,20	2,32	2,52
EXTREMADURA	2,54	2,62	2,15	2,37	0,45	3,23	3,68
GALICIA	1,63	2,62	1,48	2,41	0,19	1,23	1,42
LA RIOJA	1,39	1,92	1,35	1,51	0,09	8,17	8,26
MADRID	1,07	1,26	0,91	1,26	0,22	2,47	2,69
MURCIA	2,21	3,56	3,56	3,23	0,00	0,62	0,62
NAVARRA	1,39	1,40	1,54	1,35	0,28	1,46	1,74
PAIS VASCO	1,54	1,89	1,56	1,28	0,12	1,63	1,75
C.VALENCIANA	2,15	2,40	2,94	2,82	0,20	1,43	1,63
CEUTA	3,34	9,14	5,95	7,73	0,21	3,68	3,89
MELILLA	7,33	4,20	5,35	8,60	0,13	2,16	2,29
<b>Nationwide</b>	<b>2,18</b>	<b>2,04</b>	<b>1,93</b>	<b>2,07</b>	<b>0,14</b>	<b>2,23</b>	<b>2,37</b>

Table 2. TIEPI (Interruption Time in terms of Equivalent Power Interrupted) in minutes, years 2005-2009, by region.

As for transmission service quality indices, their measured values and reference limits are determined by Royal Decree 1955/2000, namely: non-supplied energy (ENS), mean Interruption time (TIM, equal to ENS over average system power) and grid availability

index (ID). Last available data (for 2009) are: ENS, 437 MWh; TIM 0.91 minutes, and ID= 98.10%<sup>9</sup>.

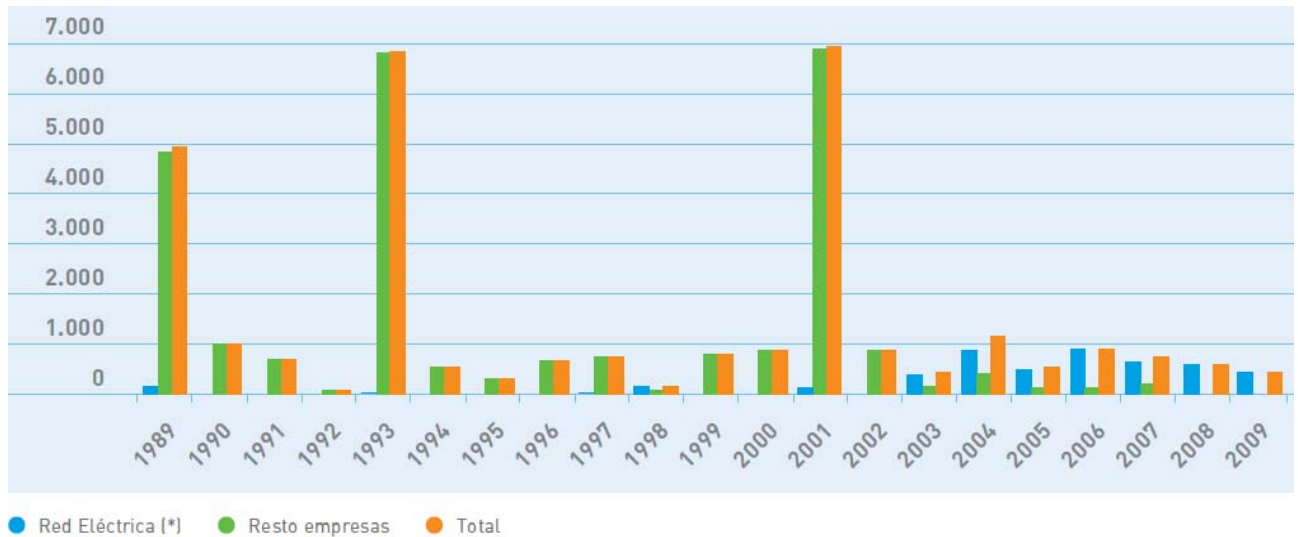


Figure 6. Energy Not Supplied (MWh). Years 1989-2009 – Source: REE

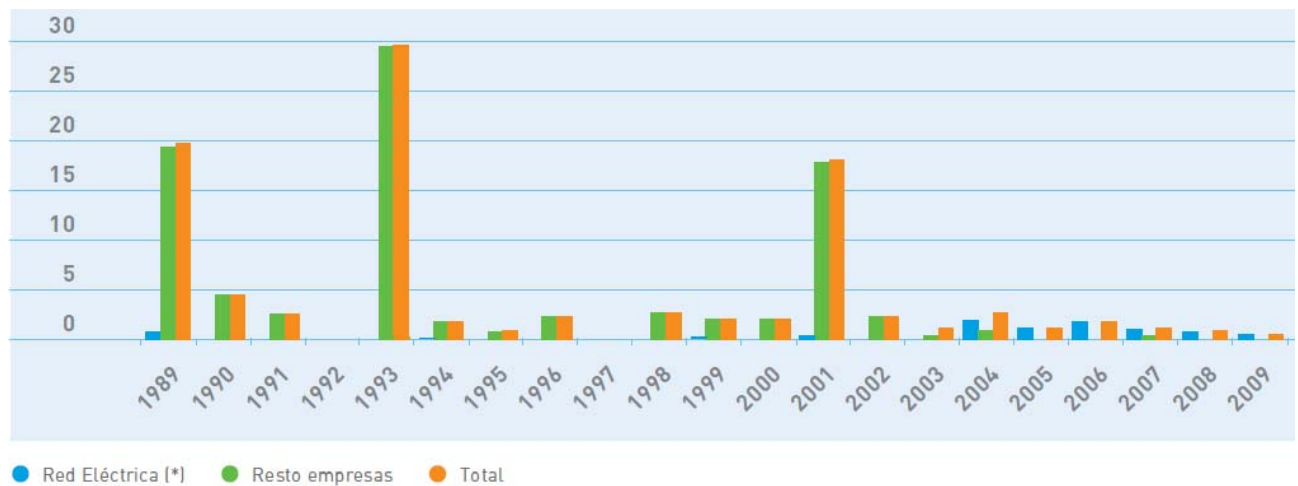


Figure 7. Mean Interruption Time (minutes). Years 1989-2009 – Source: REE

In 2010, the Order ITC/3519/2009, dated December 31<sup>st</sup>, established the access tariffs from 1<sup>st</sup> January to 30<sup>th</sup> June 2010, and the Order ITC/1732/2010, dated June 28<sup>th</sup>, established the access tariffs from 1<sup>st</sup> July to 31<sup>th</sup> December 2010.

## Balancing

<sup>9</sup> [http://www.ree.es/transporte/tiempo\\_interrupcion\\_medio.asp](http://www.ree.es/transporte/tiempo_interrupcion_medio.asp)  
[http://www.ree.es/transporte/disponibilidad\\_instalaciones.asp](http://www.ree.es/transporte/disponibilidad_instalaciones.asp)



In the year 2010, there have been no developments in the balancing market model. It is a market-based activity comprising secondary reserve (both power and energy), tertiary reserve (energy), load-generation deviations management and constraints management. The average economic impact of this so-called “system services” amounted in 2010 up to 8,3% of the domestic demand hourly final price (weighted average final price amounted 45,13 Eur/MWh, weighted average monthly day-ahead prices ranged from 30 to 56 Eur/MWh).

	2009		2010	
	Upwards	Downwards	Upwards	Downwards
<b>Technical constraints (energy)</b>	78,24	38,61	80,50	45,81
<b>Secondary reserve (power)</b>	12,01		14,72	
<b>Secondary reserve (energy)</b>	39,86	27,11	40,36	24,68
<b>Tertiary reserve (energy)</b>	49,27	22,59	50,41	17,88
<b>Deviations management (energy)</b>	44,77	24,89	51,01	20,70
<b>Technical constraints (real time) (energy)</b>	116,72	11,67	104,47	9,77

Table 3. ‘System services’ weighted average prices [Eur/MWh; Eur/MW for band of secondary reserve]; Years 2009-2010 – Source: REE

As for market concentration, tables below show evolution of market shares by company for the period 2008-2010 for secondary reserve (power band) and tertiary reserve and deviations management (both up- and downwards, respectively):

	2009	2010
<b>Endesa</b>	32,6%	30,1%
<b>Iberdrola</b>	27,6%	29,3%
<b>GasNatural Fenosa</b>	12,6%	11,4%
<b>EDP HidroCantábrico</b>	13,9%	16,2%
<b>E.On Viesgo</b>	7,1%	6,0%
<b>Others</b>	6,2%	7,0%

Table 4. Secondary reserve (power band) market shares; Years 2009-2010 – Source: CNE, OMEL

	2009			2010		
	Downwards	Upwards	Total	Downwards	Upwards	Total
<b>Endesa</b>	37,2%	25,9%	31,5%	25,6%	23,6%	24,6%

	2009			2010		
	Downwards	Upwards	Total	Downwards	Upwards	Total
<b>Iberdrola</b>	19,0%	33,7%	26,3%	26,8%	33,7%	30,2%
<b>GasNatural Fenosa</b>	17,8%	22,6%	20,3%	19,2%	24,8%	22,0%
<b>EDP</b>						
<b>HidroCantábrico</b>	9,3%	6,3%	7,8%	9,7%	5,9%	7,8%
<b>E.On Viesgo</b>	12,0%	7,2%	9,6%	13,1%	7,5%	10,3%
<b>Others</b>	4,7%	4,3%	4,5%	5,6%	4,5%	5,1%

Table 5. Tertiary reserve plus deviation management market shares; Years 2009-2010 – Source: CNE, OMEL

A roadmap for balancing integration within MIBEL has been envisaged, consisting of three stages:

1. Exchange of energy for system support (concluded).
2. Exchange of balancing energy between TSOs, used only when the receiving operator has already used all the bids for upwards/downwards regulation of its own system (well-advanced; final implementation still pending).
3. Bids for upwards/downwards regulation are offered from one TSO to the other TSO and are incorporated in the merit order list of the receiving system. Multi-TSO solution including the French system using the BALIT platform.

Throughout 2010, only stage 1 was applicable. This roadmap has been adapted in 2010 so as to include in the third stage the integration of MIBEL balancing bids with the French balancing market, therefore widening the scope to the whole SW region.

### 3.1.3 Effective unbundling

The Spanish regulatory framework already meets the main unbundling requirements established by Directive 2009/72/EC as regards transmission and distribution. Nevertheless, on 22<sup>nd</sup> July 2010 the CNE published a report on the implications of the third package including some minor changes on unbundling. Moreover, further unbundling measures are foreseen in the regulatory proposals pending for 2011.

The Spanish Electric Power Act 54/97 amended by Law 17/2007 regulates the current unbundling regulatory framework and the penalties for breaches of legal, functional and accounting unbundling requirements.

General requirements.

Legal and functional unbundling for regulated activities (including DSO)

In 2010, Royal Decree-Law 6/2010, of 9<sup>th</sup> April, came into force modifying the unbundling requirements contained in article 14 of the Electric Power Act and applying the legal and functional unbundling measures which were already imposed on production and supply activities to energy recharge services.

Under existing Spanish Law, the legal company that performs regulated activities such as system operation, transmission and distribution cannot participate in production, supply or recharge of electricity (nor can it own any kind of share capital in companies performing such activities).

However, they are permitted to form part of a group that undertakes other activities - including: power generation, energy recharge services and selling of electricity - provided that a separate company performs the regulated activities (legal unbundling).

In addition, functional unbundling is required. This includes management separation and measures relating to effective decision-making rights, in accordance with the 2003 and 2009 Directives.

During 2010, vertically-integrated companies have implemented their compliance programs (code of conduct for unbundling activities) and submitted required reports on the unbundling measures they have adopted to the CNE and to the Ministry. CNE has been monitoring these unbundling measures since 2008. Among the measures adopted and explained in the aforementioned reports, the following are worthy of note:

- Measures related to the reorganization of the legal companies that form part of the vertically integrated undertaking including the transfer of assets, personnel and share holdings in order to comply with unbundling requirements.

- The modification of the job functions of certain workers, and of the persons in charge of the management of the regulated activities.
- Reference to measures still being carried out as well as planned for the next years;
- Revision of the remuneration and contracts of persons in charge of the management of regulated activities;
- Obligation for persons in charge of the management of the regulated firms to sign a formal declaration declaring that they do not own shares or other participations in undertakings which carry on production or supply activities;
- With respect to commercially sensitive information:
  - o revision of procedures of access to that information,
  - o introduction of confidentiality clauses in contracts with third parties,
  - o designation of persons in charge of the custody of information,
  - o incorporation of disciplinary measures for any breach of the code on separation of activities.

### Unbundling and transparency of accounts

As regards unbundling and transparency of accounts, the Spanish Electric Power Act regulates the unbundling of accounts in the following terms:

- Companies whose corporate aim is to perform regulated activities shall keep separate accounts, differentiating between the revenues and costs strictly attributed to each of the activities in order to prevent discrimination, subsidies between different activities and distortion to competition.
- Retailers designated as last resort suppliers shall keep the accounts for last resort supply activities separate from all other activities in their internal accounting.
- Companies engaged in unregulated electricity activities shall keep separate accounts for generation activity, retail activity and any other non-electricity related activities performed within the national territory and all those other activities performed abroad.
- Generators operating under the special regime shall keep separate accounts in their internal accounting procedures for electricity activities and non-electricity activities.

### Transmission System Operator unbundling requirements

The current legislative framework set forth in the Electric Power Act 54/1997 as amended by Law 17/2007, represents the consolidation of the TSO model in the Spanish System.

Law 17/2007 declared that REE, the transmission system operator, would be the sole transmission company in Spain and that this company will own the whole network. Accordingly, during 2010, Endesa, Gas Natural Fenosa and Hidrocantábrico sold their remaining transmission assets to REE, completing the process required by Law 17/2007.

By Law, REE SAU is the subsidiary for regulated activities within the REE Group, the holding company being Red Eléctrica Corporación S.A. REE SAU cannot own any shares in companies involved in the generation of electricity or in supply. REE SAU is exclusively dedicated to system operation, management of the transmission grid and transmission. This subsidiary holds all the assets necessary to carry out the activities and assumes all related contracts. On top of the general legal and functional unbundling requirements between regulated and unregulated activities within the group, there are further functional unbundling and accounting separation requirements between SO activities, management of the transmission grid and other activities (transport).

Furthermore, in order to guarantee the independence of the system operator, the Law limits share capital ownership in REE. These equity limits are applicable to the holding company that owns 100% of the regulated activities subsidiary.

Thus, a single person or society cannot, directly or indirectly, own more than 5% share capital or use more than 3% of voting rights. For electricity companies, the limit goes down to 1% of voting rights. There is also an aggregate limit of 40% share capital for the electricity companies. The State, via SEPI, must hold at least 10% share capital.

At the date of preparation of this report, the significant shareholders of REC (RED ELECTRICA CORPORACION, S.A.) are those shown in the following table, according to public information of the CNMV:

<b>RED ELECTRICA CORPORACION, S.A. Significant shareholders</b>	<b>% Direct shareholding</b>	<b>% Indirect Shareholding</b>
Sociedad Estatal de Participaciones Industriales (SEPI)	20.00	
TALOS CAPITAL LIMITED	3.087	
BLACKROCK INC		3.011
FIDELITY INTERNATIONAL LIMITED		1.004
HSBC HOLDINGS, PLC		3.239
MFS INVESTMENT MANAGEMENT		3.077
THE CHILDREN'S INVESTMENT FUND MANAGEMENT (UK) LLP		3.087

*Table 6. Relevant Stakeholders in RED ELECTRICA CORPORACION S.A.*

### **3.2 Competition Issues [Article 23(8) and 23(1)(h)]**

#### **3.2.1 Description of the wholesale market**

##### Structure of the Generation Market - Capacity

The following graph and table show the shares by technology of installed generation capacity in the Spanish mainland system in 2010; the total values reached 97.447 MW.

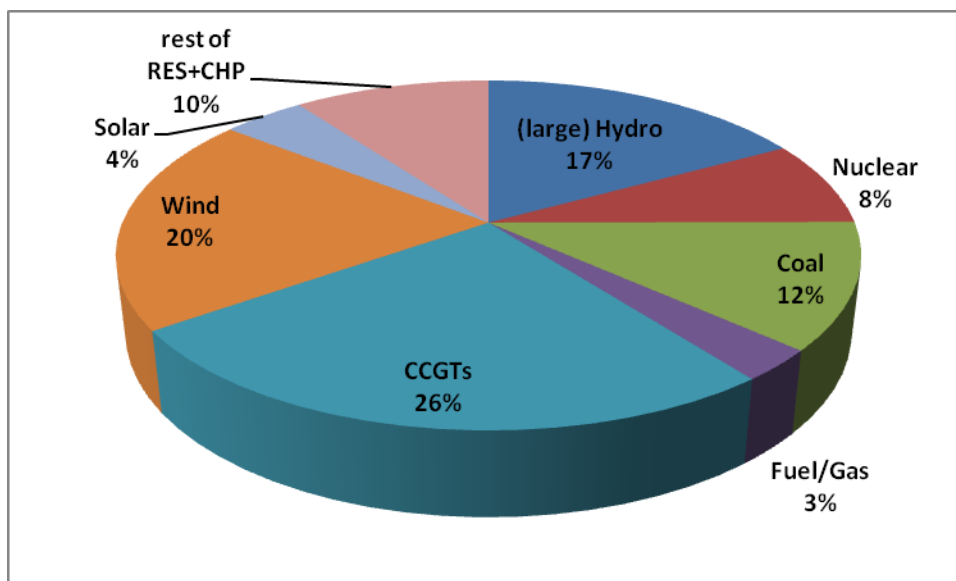


Figure 8. Installed generation capacity in the Spanish mainland system at the end of 2010 (Source: REE)

Technology\Generation capacity (MW)	2009	2010
CCGT (Combined Cycle)	22.243	<b>25.220</b>
Fuel+Gas (conventional)	3.927	<b>2.860</b>
Coal	11.359	<b>11.380</b>
Nuclear	7.716	<b>7.716</b>
Hydraulic	16.657	<b>16.657</b>
Wind power	18.119	<b>19.813</b>
Other Special Regime	13.194	<b>13.801</b>
<b>TOTAL</b>	<b>93.215</b>	<b>97.447</b>

Table 7. Installed generation capacity structure in the Spanish mainland electricity system (Source: REE)

On 31<sup>st</sup> December 2010, the generation capacity shares of the different companies in the “ordinary regime” (conventional generation) of Spanish mainland electricity system were as shown on the following table:

	Available generation capacity	HHI
<b>IBERDROLA</b>	31,60%	2331
<b>ENDESA</b>	27,52%	
<b>GAS NATURAL FENOSA</b>	22,10%	

	Available generation capacity	HHI
<b>E.ON</b>	6,56%	
<b>EDP-HIDROCANTÁBRICO</b>	6,04%	
<b>OTHERS</b>	6,18%	

Table 8. Companies' market shares of available generation capacity in the ordinary regime (year 2010, Source: CNE)

As shown in the above table, the number of companies with more than 5% of the Spanish electricity system's installed power is 5, being Endesa, Iberdrola, Gas Natural Fenosa, E.ON and EDP-HidroCantábrico.

#### Structure of the Generation Market - Energy

In 2010, total demand of power generation (including mainland and extra-peninsular demand) increased 3,1% up to 275.252 GWh, which was covered as follows:

Balance of Spanish electric energy system	energy 2009 (GWh)	energy 2010 (GWh)
Hydroelectric	23.236	38.001
Nuclear	52.765	61.944
Coal	37.812	25.851
Fuel+Gas (conventional)	10.156	9.624
Gas (combined cycle)	83.895	68.828
Special Regime	79.226	91.488
International Exchanges	-8.398	-8.490
Consumption in generation	-8.115	-7.555
Consumption in pumping	-3.703	-4.439
<b>Total demand</b>	<b>266.874</b>	<b>275.252</b>

Table 9. Balance of Spanish electric system, GWh (year 2010, Source: REE)

During the year 2010, 11<sup>th</sup> January (from 19.00 to 20.00) was the day on which the highest peninsular hourly demand was recorded, with a value of 44.12 GW. The maximum daily energy value occurred the same day and amounted to 886 GWh.



As for 2010, there were five groups of a significant size competing in the market: Endesa, Iberdrola, Gas Natural Fenosa, Hidrocantábrico (EDP) and Viesgo (E.ON), whose market shares in energy are shown below:

	Energy Share	HHI
<b>IBERDROLA</b>	24,3%	(1262-1757)
<b>ENDESA</b>	19,6%	
<b>GAS NATURAL FENOSA</b>	15,0%	
<b>EDP-HIDROCANTÁBRICO</b>	5,3%	
<b>E.ON</b>	3,5%	
<b>OTHERS (Ordinary Regime)</b>	4,5%	
<b>OTHERS (Special Regime)</b>	25,9%	

*Table 10. Market Shares in electricity generation (year 2010, Source: CNE)*

The table shows a range of HHI value because there is limited information regarding the individual shares for all companies included in the Special Regime. The HHI figure is closer to 1262 rather than to 1757, since there is a large number of companies with a low percentage of generation under Special Regime. There are four companies with market shares in excess of 5%. The share of the main five companies includes ordinary and special regime. The rest of ordinary regime generation makes up 4,5 % and the rest of special regime generation, 25,9% (which, in fact, is splitted among many companies)..

#### Trading venues: PXs and bilateral contracts

The production (spot) market in Spain is made up of an organised part and a non-organised part. The organized market is structured around a series of sessions held on the day prior to and on the day of delivery, in which the final generation price's different components and the programming of the generator groups are established. The non-organised part consists of physical bilateral contracts, the economic terms and conditions of which are agreed between the signing parties and are not known by the CNE but whose execution has to be notified to the Market Operator, meaning that the negotiated quantities

are known. During 2010 bilateral contracts represented 36.1% of energy in the daily programme (PBF).

An energy volume of 228713 GWh, corresponding to a trading volume of 8670 million €, down 13% and 23% respectively on the previous year, has been negotiated in the organised day-ahead and intraday markets in the Spanish side. These declines are caused by low prices and an increase in the share of bilateral contracts. The final weighted average market price was 45.13 €/MWh (about 1% higher than previous year average). The daily market price has represented in Spain 85.02% of the final price, the capacity payments a further 6.65%, and the solution to technical restrictions, the secondary regulation and other technical operation processes account for 8.37%.

#### Representative spot market price:

Almost 64% of the energy in the daily programme (PBF) is traded in the spot market, therefore being quite a representative market. In 2010, the price followed a trend similar to other European PXs, but remaining within the lower range of prices recorded in Europe.

In the context of the ACER Electricity Regional Initiative, the SW region is pursuing day-ahead price coupling (with a common algorithm) between MIBEL and the Central-West region. The TSOs, PXs and regulators of the SW region are working on the necessary arrangements (namely, switching the GCT of the day-ahead market to 12:00 CET) to implement price coupling as soon as possible (by late 2012). This development will be a key milestone in the process towards greater market integration by means of a European price coupling.

From the beginning of the liberalisation process, in January 1998, until 2005, almost all wholesale electricity transactions took place in the day-ahead market. Since then, forward contracts have steadily increased, partially in relation to the Royal Decree 3/2006, CESUR auctions and obligations imposed to distribution companies to acquire part of their energy through these mechanisms. Moreover, between 2007 and 2009, ENDESA and IBERDROLA were obliged, by law, to release part of their capacity through auction mechanisms (Virtual Power Plants, VPPs).

In the following figure, the monthly evolution of wholesale energy supply, broken down into day-ahead transactions, physical bilateral contracts, and CESUR and VPP auctions, can be observed.

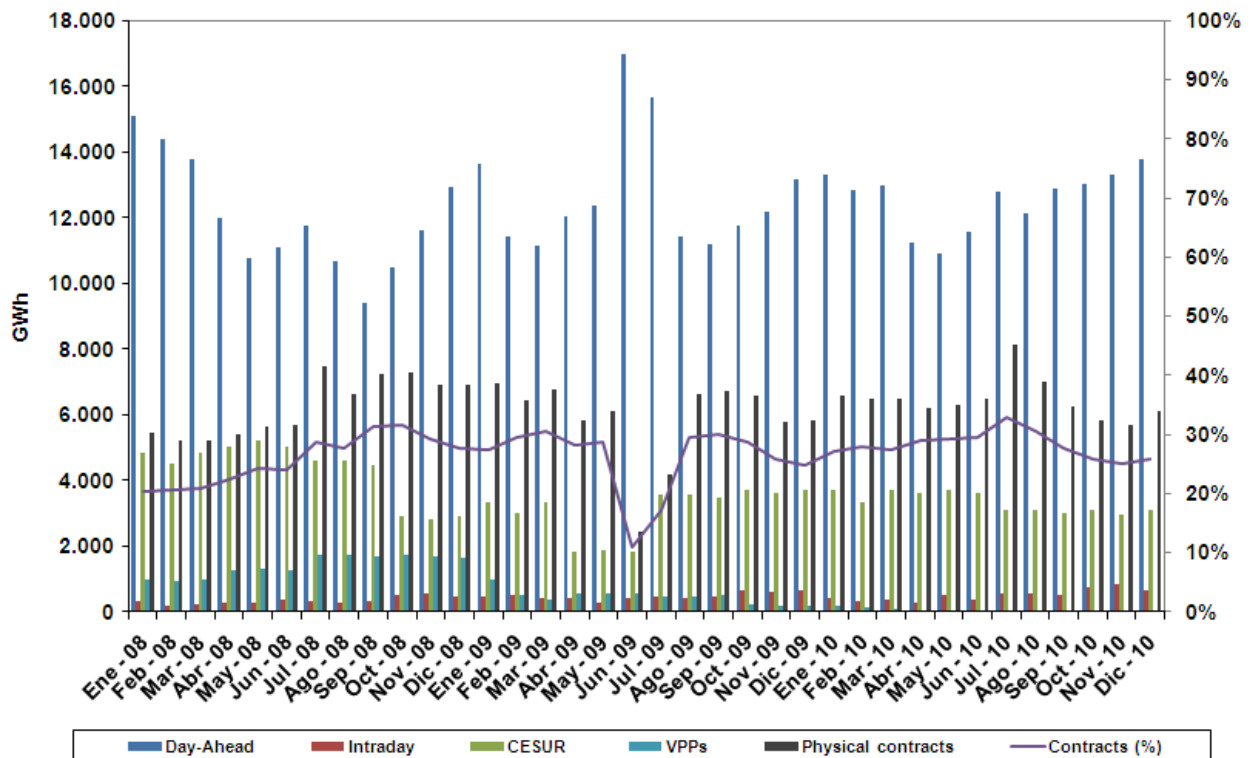


Figure 9. Monthly evolution of wholesale energy supply Source: CNE

As regards integration with neighbouring Member States, the single Iberian wholesale market aggregates Spain and Portugal. Therefore, the market is in practice extending beyond national boundaries. Balancing markets integration within MIBEL has started in 2008 as it was mentioned before. MIBEL is a governmental initiative.

When there is congestion in the PT-ES interconnection, the MIBEL is splitted into two price areas. Convergence in prices was quite high in 2010. Around 80% of the hours in 2010, prices in the Spanish area have been equal to those of the Portuguese area.

In the following figure, the price differential between Spanish, Portuguese and French spot prices can be observed. Except for the summer, prices in Spain were significantly lower than in France.

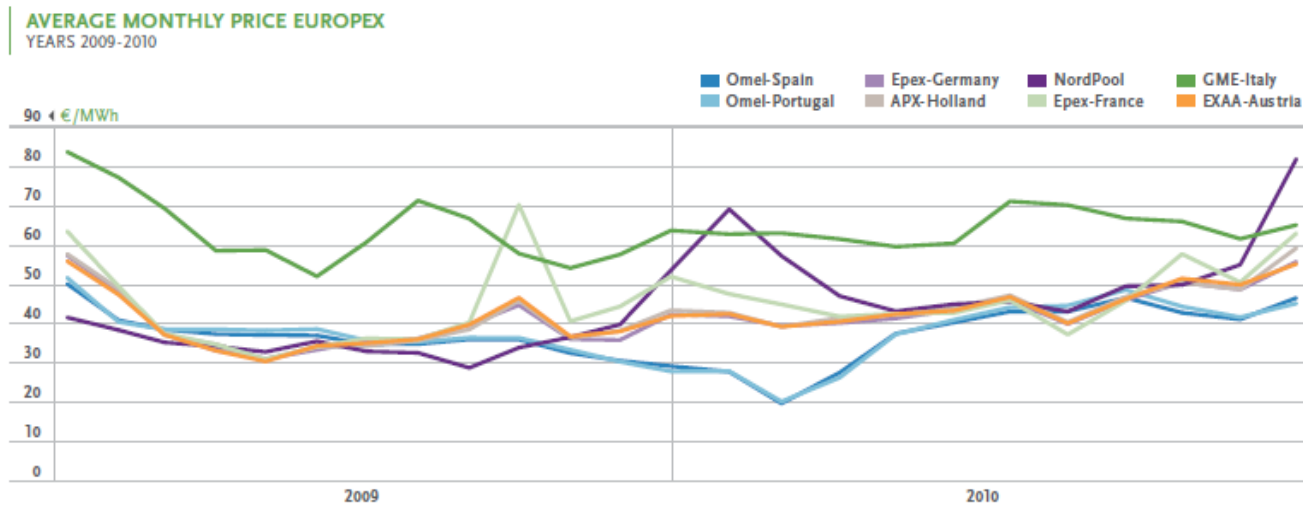


Figure 10. PXs day-ahead prices (monthly average) in Portugal, Spain and France (i.a.) 2009-2010. €/MWh.  
(Source: OMEL)

The reasons for the price differential with France are: different generation mix, different demand patterns and, above all, the limited interconnection capacity between France and Spain.

A key contribution of Regional Initiatives to integration is the enhancement of auction rules in the Spanish-French interconnection (new version of IFE rules released in 2009) and the works towards market coupling between MIBEL and CWE, which are being undertaken by PXs (OMEL and EPEX Spot). There are, as well, ongoing plans to improve intraday capacity allocation and balancing integration in the whole SW region.

In this context, the SW region has participated in the elaboration of the European Energy Work Plan 2011-2014 as requested by the EC. This Work Plan, coordinated by ACER, will facilitate the implementation of the target model as set forth in the draft Framework Guideline on Capacity Allocation and Congestion Management.

### Forward trading of electricity

#### The dominant OTC market

The Spanish OTC market (Over The Counter) is a non organized bilateral market, in which the traders, usually by means of a broker, trade forward contracts with cash settlement.

Hence, according to Article 2.3 of the Securities Market Law, they are to be considered as financial instruments. In the Spanish market, the supervision of the financial contracts traded in the OTC market is under the scope of the MiFID<sup>10</sup> (Directive 2004/39/EC) and the Securities Market Law<sup>11</sup>, and thus it relates to the supervisory field of the Spanish Financial Services Authority (*Comisión Nacional del Mercado de Valores, CNMV*). As a consequence, it is necessary to focus the supervision of this market with a coordination perspective between CNMV and CNE. In this sense, the Directive 2009/72/EC<sup>12</sup> indicates in its 39<sup>th</sup> consideration the necessary cooperation between energy market regulators and financial market regulators in order to enable each other to have an overview over the markets concerned<sup>13</sup>.

Currently, the CNE has limited information over OTC power transactions (volumes and transaction prices, through the information voluntarily submitted by the main brokers). On March 5, 2011, the Law of Sustainable Economy, of March 4, 2011, was published in the Spanish Official Gazette. The 5<sup>th</sup> final disposition of this Law modifies the Securities Market Law, enabling the information exchange<sup>14</sup> between CNMV and the entities composing the MIBEL Regulatory Council<sup>15</sup>. The members of the MIBEL Regulatory Council have signed on May 17, 2011, a Multilateral Memorandum of Understanding (MoU) for the cooperation and efficient coordination in the MIBEL supervision, permitting their coordinated OTC supervision, facilitating among others the data collection.

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<sup>10</sup> Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments.

<sup>11</sup> Law 24/1998, according to redaction given by Law 47/2007, of December 19, 2007, and Law 5/2009, of June 29, 2009, of the Securities Market.

<sup>12</sup> Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity.

<sup>13</sup> Such cooperation is in line with the draft Regulation of the European Commission about Integrity and Transparency of Energy Markets (the so-called "REMIT"), currently under co-decision procedure.

<sup>14</sup> In particular, section 15 of that legal disposition adds a new paragraph ("II") to Article 90.4 (exemptions to the obligation of professional secrecy) as follows: "*II) The information that CNMV provides to the Spanish supervisory authorities in energy matters and to the supervisory authorities of the Iberian Electricity Market, and that are necessary for their supervisory functions of those markets. In this way, the co-operation agreements that CNMV have signed with other authorities will be taken into account. The information exchanged will only be published if CNMV specifically consents it.*"

<sup>15</sup> MIBEL stands for "*Mercado Ibérico de Electricidad*" (Iberian Electricity Market) and has recently inaugurated its website: <http://www.mibelcr.com/>. The MIBEL Regulatory Council is composed of CNE, CNMV, Entidad Reguladora de los Servicios Energéticos (ERSE, Portuguese National Regulatory Authority) and CMVM (Portuguese Financial Services Authority).

### The power futures market managed by OMIP

In the context of the MIBEL Board of Regulators, CNE supervised the futures market managed by OMIP<sup>16</sup>, in co-ordination with the other members of the MIBEL Board of Regulators. Such a market started on 3<sup>rd</sup> July, 2006. The rules of this market are registered on the Portuguese Financial Services Authority (Comissão do Mercado de Valores Mobiliários, CMVM).

The energy traded on the MIBEL Iberian electricity futures market managed by OMIP during year 2010 amounted to 25.8 TWh, of which 98% was traded in the continuous market and the remaining 2% in auctions. During year 2010, there were only compulsory call auctions for the Portuguese last resort supplier regarding peak futures with physical delivery related to the underlying spot price of the Spanish zone. They were celebrated from January 2010 until July 2010. Out of those auctions, these products have been scarcely traded in the continuous market.

Figure 10 shows the trading evolution (in terms of energy traded) in the MIBEL Iberian electricity futures market (OMIP auctions and OMIP continuous market), the volumes traded in the OTC market, and the part of such volumes registered in OMIP and cleared and settled by OMIClear<sup>17</sup> (OMIP clearing house, central counterparty and managing entity of the settlement system).

In OMIP auction trading, the volumes are negligible since year 2010. Since June 2009, as previously commented, the Spanish distribution companies did not purchase energy any longer and thus the compulsory purchases in OMIP call auctions were only done by the Portuguese last resort supplier. The energy traded in the continuous market during year 2010 was bigger than in the previous years, with a record volume of 3.4 TWh in December 2010. The growing trading volume in the non-organised financial OTC market is much greater than the volume of trading in the futures market managed by OMIP. As a result, around 258 TWh were traded in the OTC market in 2010, of which 11% of the total OTC

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<sup>16</sup> *Operador do Mercado Ibérico de Energia SGMR, S.A.* (Iberian Energy Market Operator, Portuguese side).

<sup>17</sup> *Sociedade de Compensação de Mercados de Energia, S.G.C.C.C.C., S.A.* (Energy Markets Clearing Company).

volume traded in 2010 was registered in OMIP in order to be cleared and settled by OMIClear. The OTC traded volume in year 2010 was very close to the Spanish mainland demand in 2010 (260 TWh).

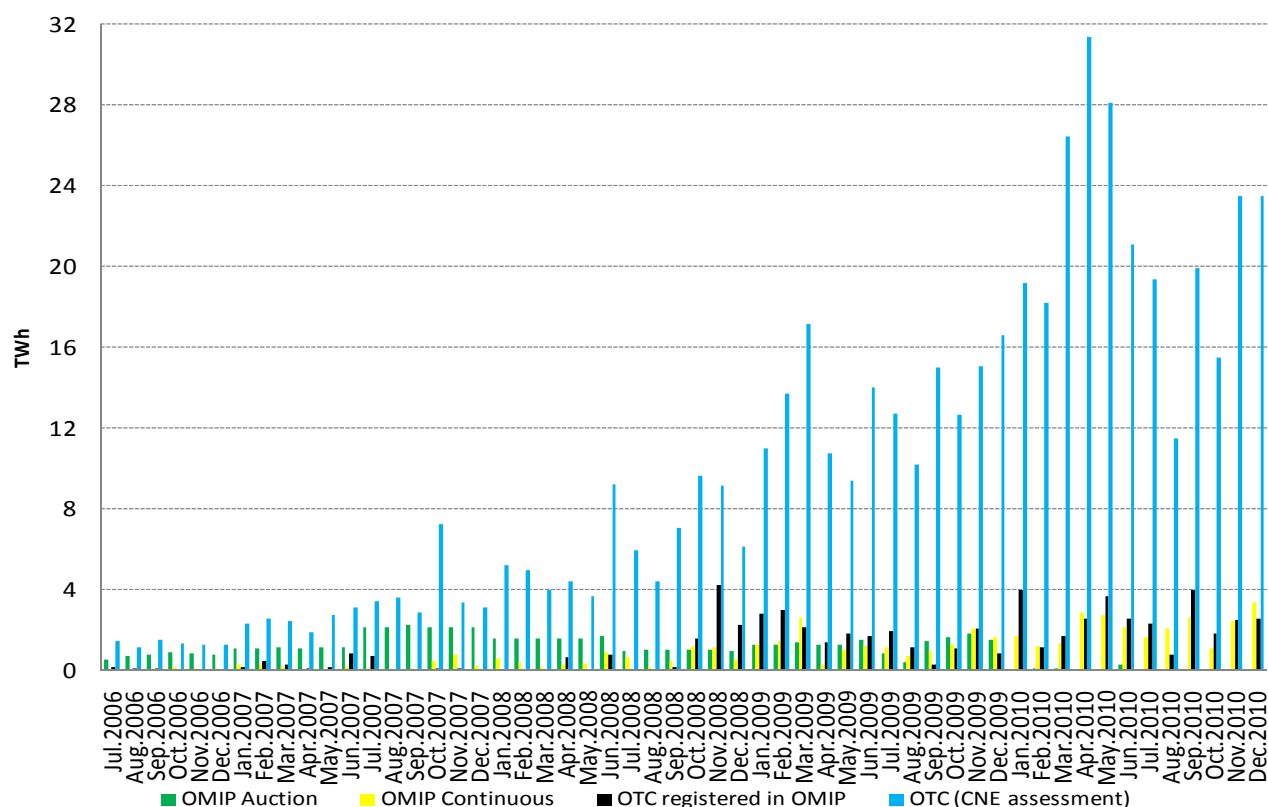


Figure 11. Evolution of traded volumes in OMIP auctions and continuous market, OTC, and the OTC part registered in OMIP and cleared by OMIClear (TW), years 2006-2010 (Source: OMIP-OMIClear and CNE preliminary assessment of OTC volumes)

### Supply of Last Resort Energy Contract Auctions (CESUR Auctions)

As previously commented, from 1 July 2009, the default supply is no longer a part of distribution and becomes entirely provided by last resort suppliers, in accordance with Royal Decree 485/2009 of 3 April, which regulates the implementation of the supply of last resort in the electrical energy sector.

The Order ITC/400/2007 of 26 February regulated bilateral trading of electrical energy with physical delivery by the companies responsible for default supply on the Spanish

mainland. Since June 2010, the Order ITC/1601/2010 regulates CESUR auctions whose resulting price is used as a reference for setting the last resort tariff.

Table 11 summarises the results of the CESUR auctions held from June 2009 until the end of 2010. Note that:

- Until the 8<sup>th</sup> CESUR auction, held in March 2009, the products auctioned were settled by physical delivery of the energy; however, the products auctioned since the 9<sup>th</sup> CESUR auction, held in June 2009, were cash settled.
- Since 9<sup>th</sup> CESUR auction, the last resort suppliers act as voluntary buyers (in the previous auctions, the Spanish distribution companies were compulsory buyers).
- From 9<sup>th</sup> to 12<sup>th</sup> CESUR auctions, the Spanish distribution companies are obliged to sell energy related to their previously purchased energy in OMIP auctions.

Auction date	9 <sup>th</sup> CESUR auction 25 June 2009				10 <sup>th</sup> CESUR auction 15 December 2009				11 <sup>th</sup> CESUR auction 23 June 2010		12 <sup>th</sup> CESUR auction 21 September 2010		13 <sup>th</sup> CESUR auction 14 December 2010	
	Q3-09 Base load	Q3-09 Peak	Q4-09 Base load	Q4-09 Peak	Q1-10 Base load	Q1-10 Peak	Q2-10 Base load	Q2-10 Peak	Q3-10 Base load	Q3-10 Peak	Q4-10 Base load	Q4-10 Peak	Q1-11 Base load	Q1-11 Peak
Participants	33				31				33		31		25	
Winners	29		30		25		27		30		30		22	
Rounds	13		11		17		17		14		14		12	
Target volume (MW)	4 800	670	5 000	670	4 800	540	4 800	600	4 000	536	4 000	392	4 000	306
Starting price (€/MWh)	55	67	58	70	54	62	54	62	59	68	59	68	59	68
Auction price (€/MWh)	42.00	47.60	45.67	51.31	39.43	43.70	40.49	44.52	44.50	50.48	46.94	53.00	49.07	53.99
Average spot price during delivery period (€/MWh)	35.05	38.55	32.87	36.72	25.38	29.99	34.97	39.20	44.07	49.01	43.33	48.22	45.22	48.66

Table 11. CESUR Auctions: results of CESUR auctions from June 2009 until the end of 2010 (Source: auction administrator and CNE)

The Royal Decree 302/2011<sup>18</sup>, of 4 March 2011, aims to establish a compulsory purchase mechanism for the last resort suppliers and compulsory sale mechanism for the special regimes facilities<sup>19</sup> of products with price differences settlement between CESUR prices and the spot prices. The maximum compulsory volume is obtained through the difference between the sum of the quantities requested by the last resort suppliers during the period in force of the last resort rate and the quantities matched in the corresponding CESUR

<sup>18</sup> “Real Decreto 302/2011, de 4 de marzo, por el que se regula la venta de productos a liquidar por diferencia de precios por determinadas instalaciones de régimen especial y la adquisición por los comercializadores de último recurso del sector eléctrico”, published in the Spanish Official Gazette (BOE) on March 5, 2011.

<sup>19</sup> Facilities choosing option a) in the article 24.1 of Royal Decree 661/2007 (feed-in tariff option).



auctions. This mechanism reduces the last resorts suppliers' risk, as it lets them purchase all the requested energy at the same cost<sup>20</sup>.

### 3.2.2 Description of the retail market

Since 1 July 2009, all electricity consumers are formally in the liberalised market. However, (as explained in last year's report) in the liberalised market, there is a last resort tariff available only for consumers with contracted load capacity below or equal to 10 kW. In addition to the access tariff (which is a regulated cost), the price for energy in the last resort tariff is computed by the Government according to CESUR auctions. For more information on this, please, refer to the section "Supply of Last Resort Energy Contract Auctions (CESUR Auctions)

It must be mentioned that from an overall amount of 27.338.764 electricity consumers in mainland Spain, most of them (22.741.506) are supplied by last resort suppliers. In terms of energy, by mid 2010, 31% of all energy retailed in Spain was supplied by last resort suppliers.

Therefore, it is worth to analyse separately the market in two categories: last resort supply and rest of the market.

#### Last resort supply:

22.741.506 consumers (by mid 2010) were supplied by last resort suppliers, with a consumption (in the first half of 2010) of 149.141 GWh. Five last resort supply companies were appointed, which have the obligation to supply consumers (below or equal to 10 kW) that request it. These five companies belong to the big five electricity groups active in Spain. Endesa and Iberdrola cover around 80% of the customers.

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<sup>20</sup> Every time the matched energy in the spot market by such special regime facilities is bigger than the last resort suppliers' demand not auctioned in CESUR.

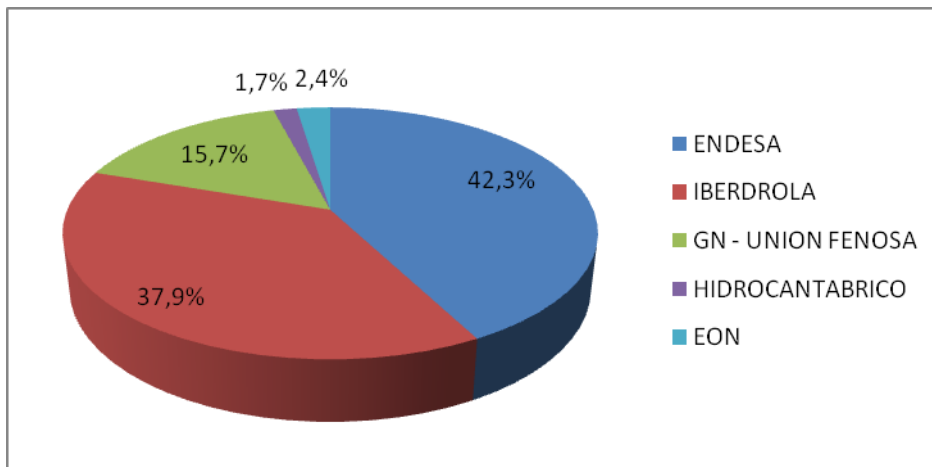


Figure 12. Market shares of last resort suppliers by number of customers (Source: CNE)

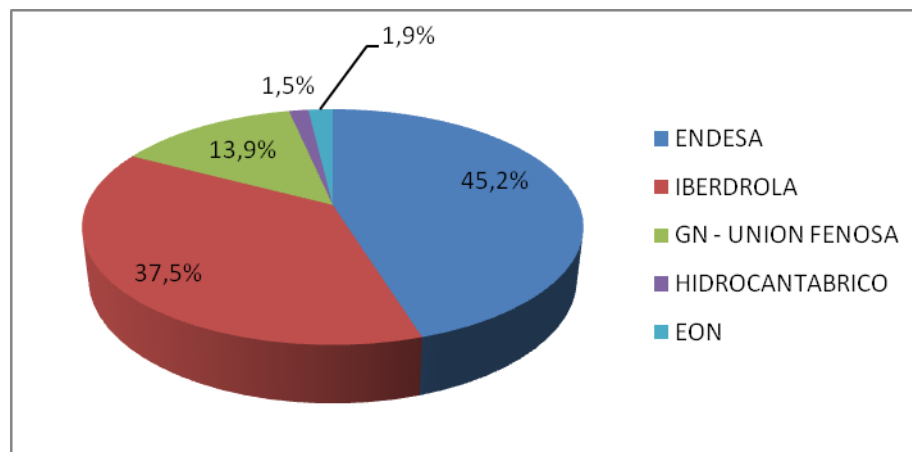


Figure 13. Market shares of last resort suppliers by energy (Source: CNE)

Rest of the market:

In the rest of the market there were (by mid 2010) 4.597.258 consumers with consumption (in the first half of 2010) of 326.834 GWh, which is 68% of all energy retailed in Spain. The companies with the largest liberalised market shares are those belonging to the large established energy groups, i.e. Endesa, Iberdrola and Gas Natural Fenosa, whose market shares add up to 75% in energy (90% in customers).

Supplier company	Share (clients)
ENDESA	38.5%

IBERDROLA	38.3%
GAS NATURAL FENOSA	13.4%
HIDROCANTÁBRICO (EDP)	7.9%
E.ON (Viesgo)	0.7%
Others	1.2%

Table 12. Market shares of supply companies in the liberalised market by number of customers by mid 2010  
(Source: CNE)

The company with the biggest increase was, one more year, IBERDROLA: its share went up from a 20,3% in 2008 to 32,7% in 2009 and 38,3% in 2010, mostly at the expense of ENDESA, which reduced its share from 60,27% in 2008 to 43,5% in 2009 and 38,5 in 2010.

Supplier company	Share (energy)
ENDESA	36.0%
IBERDROLA	22.6%
GAS NATURAL FENOSA	15.4%
HIDROCANTÁBRICO (EDP)	10.0%
E.ON (Viesgo)	1.7%
Others	14.3%

Table 13. Market shares of supply companies in the liberalised market by energy by mid 2010 (Source: CNE)

In the category “others”, there are several suppliers: Fortia has a significant energy share of 8%, Atel’s share is 2.7%, Energya VM has 1.6%, and Nexus is close to 1%.

Considering the geographical scope, the relevant market can be defined as national. There are Spanish retailers active in Portugal and in other European markets (France, UK...) and there are Portuguese (EDP), Swiss (Atel), Italian (ENEL), German (E.ON) and French (EDF) companies participating in the Spanish retail market. The sum of the external (or foreign-controlled) supplier companies’ market share is nearly 50%.

### Switching

Royal Decree 1011/2009 is coherent with the content of Gas Directive 2009/72/EC and Electricity Directive 2009/73/EC, as regards the development of secure, reliable and efficient non-discriminatory systems that are consumer oriented and also helping to ensure consumer protection.

The Directive 2009/72/EC establishes the consumers' right to receive all the data regarding their consumption in an intelligible way and free of charge. These data can also be given/provided to any registered supplier free of charge. Along this line, RD 1011/2009 establishes that the database of gas and electricity distributors supply points can be accessed free of charge and unconditionally not only by any supplier but also by any customer.

The Switching Procedure, agreed by DSOs and retailers, can be seen in detail in the following webs:

- <http://ocsum.es/index.php/doc/procedimientos/electricidad>

According to the RD 1011/2009, OCSUM functions are:

- Monitoring that the switching process is carried out according to the established regulation, complying with the principles of transparency, objectivity and independence.
  - Monitoring the information exchanged among suppliers and distributors.
  - Monitoring that the customer has given the explicit approval to the switching.
  - Processing and Compiling information related to the switching procedures, making all pertinent information available to the CNE, the Ministry of Industry, Tourism and Trade and the local Government on a quarterly basis detailing the information monthly.
- Proposing improvements in the existing supplier switching procedures, including the electronic exchange of information among DSOs and retailers.
- Create and manage an "Information Center" regarding supplier switching, providing information to customers related to procedures, suppliers lists, terms and requirements.

It is important to point out that the CNE has the legal duty to monitor the switching processes and OCSUM activities in compliance with existing regulations.

It is also important to remark that current regulation is under revision in order to adapt it to market evolution, specially the introduction of the Last Resort Tariff or TUR.

The retail market had been quite dormant before 2009 partly because of the existence of “refuge” end-user tariffs. All consumers are in the liberalised market since July 2009, from that moment on, the retail market has been more active. Suppliers are offering new products for different types of consumers including new services. Usually joint offers (gas and electricity) incorporate additional discounts. Consumers can choose among a wide group of suppliers: 177<sup>21</sup> suppliers are registered as of May 2011. However, some of them are only oriented to large consumers.

In order to analyse supplier switching in terms of both: number of customers and energy, the following indicators are presented. In the period July 2009 – July 2010, around 1.9 million customers have switched from last resort supply to the liberalised market. Most of these customers are domestic customers, this explains the modest increase in terms of energy. One of the reasons for this massive switch is that consumers with contracted capacity over 10 kW are incentivised to get out of the last resort supply (otherwise they are charged penalties on top of the last resort tariff).

		E.ON	ENDESA	GASN-UF	HC-NATUR.	IBERDROLA	OTROS	Total
2009	T1	8.349	1.429.079	291.293	131.194	542.360	5.298	2.407.573
	T2	11.498	1.503.294	312.803	226.712	667.210	6.590	2.728.107
	T3	12.880	1.581.727	430.942	278.850	828.115	31.674	3.164.188
	T4	18.139	1.649.970	528.665	310.477	1.235.861	39.606	3.782.718
2010	T1	26.137	1.704.333	595.833	328.943	1.473.068	33.379	4.161.693
	T2	31.059	1.771.077	617.670	365.056	1.759.167	53.229	4.597.258

<sup>21</sup> Source: [http://www.cne.es/cne/doc/publicaciones/Listado\\_Comercializ\\_03052011.pdf](http://www.cne.es/cne/doc/publicaciones/Listado_Comercializ_03052011.pdf)

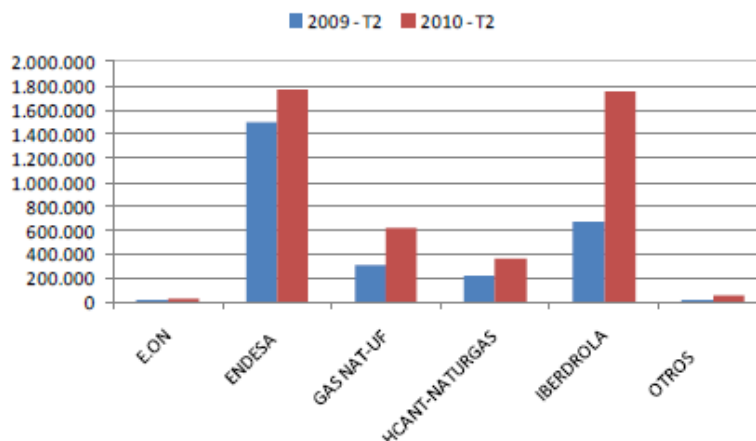


Table 14. Number of consumers supplied by companies in the liberalised market at the end of each quarter (Source: CNE) (T1: 1<sup>st</sup> quarter, T2: 2<sup>nd</sup> quarter...)

		E.ON	ENDESA	GASN-UF	HC-NATUR.	IBERDROLA	OTROS	Total
2009	T1	2.082	53.990	20.881	12.626	21.612	23.836	135.026
	T2	2.456	58.652	22.190	14.511	25.891	23.843	147.543
	T3	2.493	58.730	23.585	15.485	27.500	22.510	150.303
	T4	2.239	58.434	25.227	15.190	32.925	21.965	155.981
2010	T1	2.444	58.848	25.662	16.138	35.554	22.470	161.115
	T2	2.864	59.652	25.585	16.610	37.389	23.619	165.719

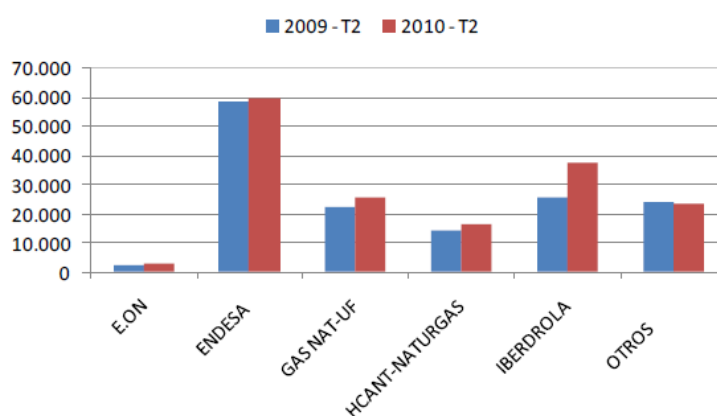


Table 15. Amount of energy (GWh) supplied by companies in the liberalised market at the end of each quarter (Source: CNE) (T1: 1<sup>st</sup> quarter, T2: 2<sup>nd</sup> quarter...)

In the period July 2009 - June 2010, only 49.160 consumers made the reverse change (from liberalised market to last resort supply), 93% of them were residential consumers and the rest, SMEs. The number of switches is very different per company and depending

on the consumer type. It is interesting to note that, in the case of industrial consumers and compared to the previous year, suppliers sold less energy to more consumers.

Supplier	Residential	SME	Industrial (large)	Total
ENDESA	203.021	64.869	-107	267.783
IBERDROLA	954.306	137.030	621	1.091.957
GAS NAT FENOSA	223.293	81.411	163	304.867
HC (EDP)	125.624	12.363	357	138.344
E.ON	10.011	9.557	-7	19.561
OTHER	23.203	23.011	425	46.639
<b>Total</b>	<b>1.539.458</b>	<b>328.241</b>	<b>1.452</b>	<b>1.869.151</b>

Table 16. Annual increase of customers for each liberalised supplier by mid 2010. (Source: CNE)

Supplier	Residential	SME	Industrial (large)	Total
ENDESA	1.450	2.775	-3.225	1.000
IBERDROLA	4.146	4.284	3.068	11.498
GAS NAT FENOSA	2.110	3.320	-2.035	3.395
HC (EDP)	375	893	831	2.099
E.ON	97	601	-290	408
OTHER	259	2.007	-2.489	-223
<b>Total</b>	<b>8.437</b>	<b>13.879</b>	<b>-4140</b>	<b>18.176</b>

Table 17. Annual increase of energy (GWh) for each liberalised supplier by type of consumer by mid 2010. (Source: CNE)

Following, there is an indicator of the loyalty degree, that is, the share of consumers (and energy) that are supplied by the liberalised retailer that belongs to the group of the distributor they are connected to. At the same time, the share of other retailers in each distribution network is shown in the table.

Supplier	Distribution network					Total
	E.ON	ENDESA	GAS NATURAL FENOSA	HC (EDP)	IBERDROLA	
E.ON	<b>66%</b>	11%	9%	1%	13%	100%
ENDESA	0%	<b>89%</b>	3%	0%	7%	100%
GAS NATURAL FENOSA	1%	24%	<b>51%</b>	1%	23%	100%

HC (EDP)	3%	2%	1%	<b>68%</b>	27%	100%
IBERDROLA	0%	4%	2%	0%	<b>93%</b>	100%
OTHER	5%	44%	8%	1%	42%	100%

Table 18. Loyalty degree (and switching) indicators by network (in terms of number of consumers) as of mid 2010 – Source: CNE

Supplier	Distribution network					
	E.ON	ENDESA	GAS NATURAL FENOSA	HC (EDP)	IBERDROLA	Total
E.ON	<b>30%</b>	24%	15%	1%	30%	100%
ENDESA	1%	<b>77%</b>	10%	0%	12%	100%
GAS NATURAL FENOSA	1%	20%	<b>43%</b>	1%	35%	100%
HC (EDP)	2%	16%	9%	<b>24%</b>	50%	100%
IBERDROLA	1%	9%	4%	9%	<b>78%</b>	100%
OTHER	5%	36%	12%	1%	47%	100%

Table 19. Loyalty degree (and switching) indicators by network (in terms of energy) as of mid 2010 – Source: CNE

The typical duration of household contracts is one year renewable unless any of the parts notify the contrary.

### Retail price levels

According to Eurostat<sup>22</sup>, the retail electricity prices, excluding taxes, computed with the new methodology (from 2007 onwards) are the following:

- Domestic consumers

2009 1 <sup>st</sup> semester	2009 2 <sup>nd</sup> semester	2010 1 <sup>st</sup> semester	2010 2 <sup>nd</sup> semester
129,4	138,1	141,7	149,2

<sup>22</sup> <http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/database>



Table 20. Price (€/MWh) for domestic consumers (DC consumption: 2500 – 5000 kWh a year):

- Industrial consumers

2009 1 <sup>st</sup> semester	2009 2 <sup>nd</sup> semester	2010 1 <sup>st</sup> semester	2010 2 <sup>nd</sup> semester
109,8	106,6	111,0	104,0

Table 21. Price (€/MWh) for industrial consumers (IC consumption: 500-2000 MWh a year):

For a more detailed analysis, like in previous sections, last resort tariff must be addressed separately from the rest of the market:

#### Last resort tariff:

The Order ITC 1659/2009 sets forth the last resort tariff regime. There are two subtypes: with or without hourly discrimination (day/night).

The last resort tariff that applied since October 2010<sup>23</sup> until end 2010 has two terms:

Without hourly discrimination:

- Contracted load (fix) term: 20,633129 €/kW year
- Energy (variable) term: 0,125159 €/kWh

With hourly discrimination:

- Contracted load (fix) term: 20,633129 €/kW year
- Energy (variable) term: 0,149253€/kWh peak; 0,058616 €/kWh off peak

The average prices (€ per MWh consumed) paid by consumers supplied under the last resort tariff in 2010 are the following:

consumer type	access tariff (€/MWh)	last resort supply margin (€/MWh)	energy cost (€/MWh)	final cost (before taxes) (€/MWh)	final cost (taxes included) (€/MWh)
last resort supply	82,8	6,1	62,8	151,7	186,6

<sup>23</sup> <http://www.boe.es/boe/dias/2010/09/30/pdfs/BOE-A-2010-14944.pdf>

last resort supply with day/night discrimination	44,1	2,8	53,7	100,7	123,8
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Table 22. End user price by components of consumers in the last resort supply (€/MWh). Year 2010

Taxes are obtained by applying to the end price the electricity tax (5,113%) and then VAT (16% until 1<sup>st</sup> July 2010 and 18% since 1<sup>st</sup> July 2010).

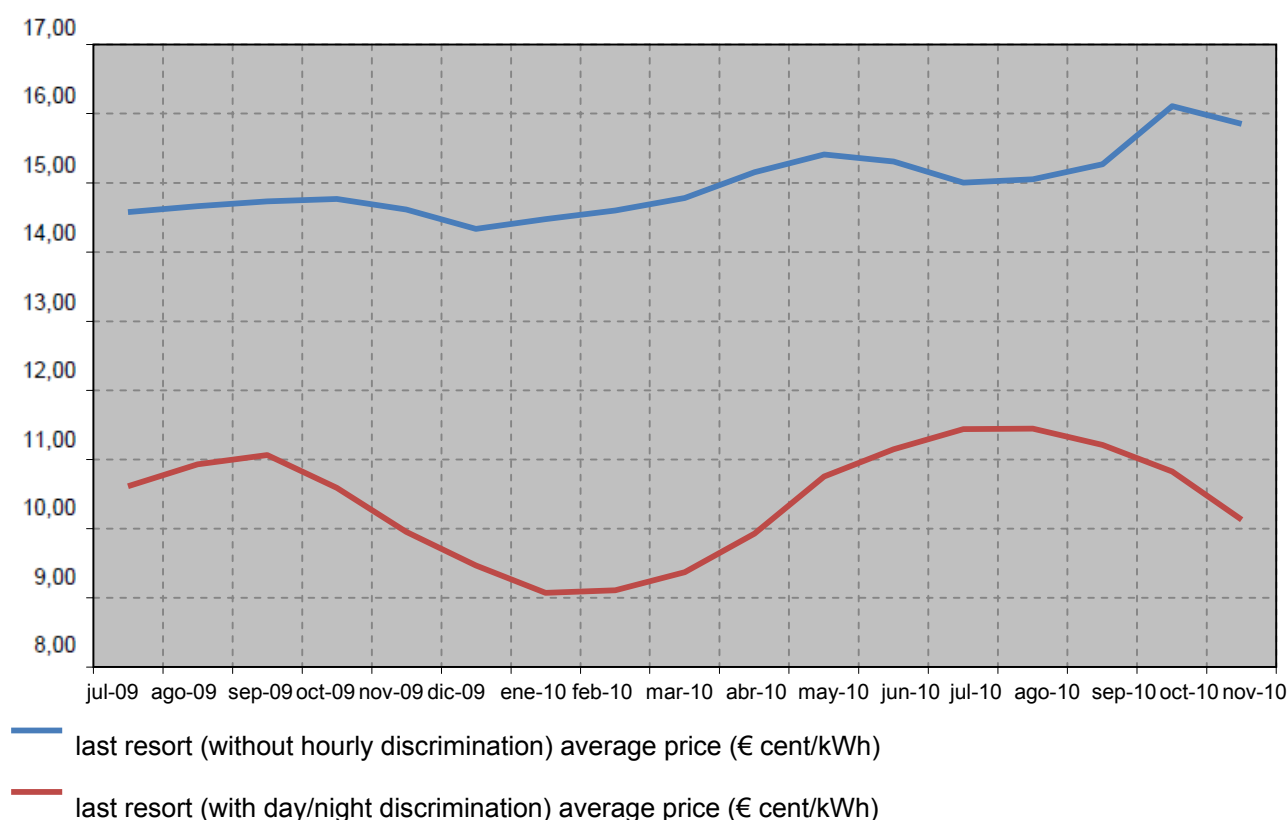


Figure 14. Evolution of average end user price for consumers in the last resort supply (€ cent/kWh) excluding taxes.

### Rest of the market:

Based on the information received by CNE from suppliers, the following average end-user prices were charged to customers located in Spain<sup>24</sup>. End-user prices are shown divided in two components: energy and access tariff. Taxes are not included.

For this information, the following categories of customers have been considered:

<sup>24</sup> Source: [http://www.cne.es/cne/doc/publicaciones/IAPAnexoMinEle\\_29062011.pdf](http://www.cne.es/cne/doc/publicaciones/IAPAnexoMinEle_29062011.pdf)

- Small customers: load  $\leq 15$  kW (in practice, includes most of domestic customers).
- Intermediate customers:  $15$  kW  $\leq$  load  $\leq 450$  kW.
- Large customers: load  $\geq 450$  kW.

	Energy	Access tariff	Total (excluding taxes)
2009	75.84	59,37	135.21
2010	71.29	75,36	146.65

Table 23. End user average price by components (excluding taxes) for small customers. €/MWh

	Energy	Access tariff	Total (excluding taxes)
2009	76.68	41,22	117.90
2010	73.24	50,65	123.89

Table 24. End user average price by components (excluding taxes) for intermediate customers. €/MWh

	Energy	Access tariff	Total (excluding taxes)
2009	62.59	24,31	86.90
2010	55.02	28,87	83.89

Table 25. End user average price by components (excluding taxes) for large customers. €/MWh

It must be noted that actual prices may vary depending on the deals agreed between each supplier and each customer.

Taxes are obtained as follows: electricity tax (5,113%) and then VAT (18%).

The more remarkable changes on the previous year are the increase in access tariffs and the decrease in energy cost. The first is explained partly by soaring overall amount of subsidies for Special Regime generation. The second is explained by a significant drop in demand.

### Measures to promote market transparency

CNE has launched a new web price comparison tool for gas and electricity offers. The tool was opened to the public at a press conference on 26 of April. The tool is available at the following website [www.comparador.cne.es](http://www.comparador.cne.es)

The comparison tool includes 388 active offers of gas, electricity or dual supply from 18 different companies. A tutorial video for consumers is also available at You Tube at the following link: <http://www.youtube.com/user/videoscne?feature=mhum>

### Complaints

CNE just offers information services to consumers since the Spanish regulator has no competences to resolve consumers' disputes. The regulator may advise consumers and provides information on the functioning of the market, the options available, the consumers' rights and steps to be taken when issuing a complaint.

In Spain, the Autonomous Communities have the responsibility of customer complaint handling and dispute settlement.

CNE receives around 300 oral complaints a month by telephone and 320 written complaints a month by mail. At least, two thirds are related to electricity and the rest, to gas. Most of the complaints refer to billing, contractual terms, misleading information and supply problems. The number of customer inquiries received is less significant.

The development of the retail market has been accompanied by a growing number of consumer complaints due to bad commercial practices by the suppliers which reveal the vulnerability of consumers. CNE has opened an investigation dossier which will inform further actions potentially including the initiation of infringement proceedings<sup>25</sup>.

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<sup>25</sup> [http://www.cne.es/cne/doc/publicaciones/cne34\\_11.pdf](http://www.cne.es/cne/doc/publicaciones/cne34_11.pdf)

### 3.2.3 Measures to avoid abuses of dominance

The Spanish legislation includes provisions and tools to avoid market abuse.

The National Competition Commission is the body responsible for applying the Competition Act 15/2007, of 3rd July, promoting and protecting the maintenance of competition in all the production sectors and throughout the national economy. The National Competition Commission and sector regulators such as CNE cooperate in exercising their functions. Law 2/2011 establishes new cooperation procedures between the CNC and CNE.

Since July 2007<sup>26</sup> the National Energy Commission, besides the functions that assumes in the paragraph 3 of the Eleventh additional Provision of the Law 34/1998 and in order to guarantee absence of discrimination, real competition and effective functioning of the market, monitors (as established in article 3.5 of Law 54/1997):

- a) The management and allocation of interconnection capacity.
- b) Mechanisms aimed at settling capacity congestions in the networks.
- c) Time spent by the transporters and distributors in carrying out connections and repairs.
- d) The suitable publication of the necessary information on the part of transporters and distributors on the interconnections, the use of the network and the allocation of capacities to the interested parties.
- e) Effective separation of accounts with the objective to avoid cross subsidies among transport activities, distribution, storage and provision.
- f) Conditions and access tariffs to be applied to the electricity generators.
- g) The extent to which the transmission and distributing companies are complying with their functions.
- h) The level of transparency and competition.
- i) The fulfillment of regulation and procedures related to the changes of supplier, as well as the activity of the Supplier Switching Office.

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<sup>26</sup> Law 17/2007

- j) The compliance with the information duty regarding the origin of the energy consumed and the environmental impact of the different energy sources.

To that end, the CNE adopts information by-laws, which will have to be published in the Spanish Official Gazette, to request from the agents that operate in the electricity markets all the information needed to carry out the monitoring functions.

### Generation

As regards transparency, availability information is required to generators. The bids in OMEL and in the balancing markets, managed by REE, are published ex-post. CNE carries out market surveillance examining bids and market results. Furthermore, CNE executes inspections on generators when suspicious bidding behaviour or unavailability is observed. Sanctions can be imposed by the Ministry after the infringement procedure is resolved. Besides, the (general) Competition Authority (CNC) can investigate and impose penalties on generators when anticompetitive behaviour is detected.

VPPs have been put in practice in order to prevent abuse of dominant position and foster competition. For information on VPPs, please, refer to chapter 3.2.1.

### Supply

Suppliers have to comply with a series of rules concerning the supply contract.

The main focus in supply activity (for promoting competition) is the procedure for switching supplier. For that purpose, the “Supplier Switching Office (OCSUM)” was set up. (See 3.2.2 Switching: Royal Decree and Directives and OCSUM Functions).

Other important activity for promoting competition is the price comparison tool mentioned in the previous section.

In April 2009, the CNC fined IBERDROLA, ENDESA, UNIÓN FENOSA and VIESGO for preventing CENTRICA from accessing the distribution points data base, while allowing access to the retail companies of their own groups.

## Recent mergers and acquisitions in the electricity sector

As a consequence of the GAS NATURAL/UNIÓN FENOSA concentration in 2009, the CNC (the Spanish Competition Authority) imposed the following remedies on GAS NATURAL:

- Sale of 2.000 MW of its CCGT electricity generation capacity.
- Commitment to sell its participation in ENAGAS.
- Divestment of 600.000 gas distribution points in the areas where GAS NATURAL gas networks overlap with UNION FENOSA electricity networks.
- Divestment of 600.000 gas customers associated to the gas distribution points.
- Commitment to supply gas to the buyer or buyers of the above mentioned generation plants and divested customers during at least 2 years and at market conditions.

Due to the difficulties in carrying out the 2.000 CCGTs MW sale, in January 2011, the CNC decided to reduce it to 1.600 MW and to establish in return the divestment of additional 300.000 gas distribution points of GAS NATURAL's distribution networks and the divestment of the associated customers.

The following mergers and acquisitions in the electricity sector are also worth mentioning:

VILLAR MIR/CENTRICA ENERGIA: in August 2010, VILLAR MIR ENERGÍA<sup>27</sup> acquired 100% of CENTRICA<sup>28</sup>, one of the most active new entrants in the Spanish energy market. The transaction was considered not to have a negative impact on competition, as the “maverick” agent was replaced by another new entrant, possibly leading to a strengthened competitor in the gas and electricity wholesale and retail markets.

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<sup>27</sup> The VILLAR MIR group is mainly active in the wholesale electricity market and owns two large industrial customers of gas and electricity. VILLAR MIR has registered as retailer in gas and electricity, but has not yet started operations in this field.

<sup>28</sup> Having presence in the wholesale secondary gas market, and the retail gas and electricity markets, CENTRICA also acts as a representative of renewable facilities in the wholesale electricity market, but does not own any generation capacity.



ENDESA/GAS NATURAL/EUFER: EUFER was a renewable generation joint venture between GAS NATURAL FENOSA and ENEL-ENDESA (50%-50%). Due to different business strategies of the parent companies EUFER was equally divided between both groups, carrying out two different transactions in September and October of 2010. This division was considered not to have a significant impact on competition in the affected relevant markets, that is, the wholesale market and the wind farm developing market.

Further measures to avoid abuses of dominance adopted in 2010 include the following:

The CNE on the 10th February 2011 approved the Resolutions by which the lists of main and dominant operators in the energy sectors are established and made public. First, the CNE declared and published the list of the five companies with major market shares (the so called “main operators”) in the electric sector (ENDESA S.A, IBERDROLA S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO S.A and E.ON ESPAÑA, S.L.) and in the natural gas sector (GAS NATURAL SDG. S.A., IBERDROLA, UNION FENOSA GAS, S.A., ENDESA, S.A. and HIDROELECTRICA DEL CANTABRICO). There is also a similar list for liquid fuels and liquefied gas.

According to Article 34 of Royal Decree-law 6/2000 there is a limitation on the voting rights corresponding to shares in excess of 3% held by the same person in more than one company that ranks among the biggest five (in terms of market shares) in the sector or market in question.

Secondly the CNE on the 10<sup>th</sup> February 2011 published a list of operators with a market share of over 10% in various energy sectors (the so called “dominant operators”) including: ENDESA, IBERDROLA, EDP/HIDROCANTABRICO, GAS NATURAL FENOSA for the electricity sector and GAS NATURAL FENOSA, IBERDROLA, UNION FENOSA GAS Y ENDESA for the gas sector and REPSOL-YPF and CEPSA for liquid fuels.

According to the 16<sup>th</sup> additional disposition of Law 54/1997, the Government may by regulation establish markets mechanisms to foster forward trading of electricity. These mechanisms shall take the form of a primary issue of a certain amount of electricity equivalent to a set capacity in the conditions and for a period of time specified in the issue.

This primary energy issue shall be released by those electricity producers included in the published list. This energy cannot be purchased by an operator that has a market share of over 10% for generation or supply of electricity.

Moreover, according to article 13 of Law 54/1997, dominant operators in the electricity sector cannot import energy from outside MIBEL. They are also forbidden from selling energy generated by special regime generators on behalf of third parties that do not belong to their group (Royal Decree 661/2007 25<sup>th</sup> May).

Finally the CNE on 11<sup>th</sup> March 2010 published a report supervising the development of competition in the electric and gas markets (years 2006-2008) pursuant to the 5th additional disposition of Law 12/2007 and 17/2007.

## 4 REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET

### 4.1 *Regulatory Issues [Article 25(1)]*

#### 4.1.1 Management and allocation of interconnection capacity and mechanisms to deal with congestion

In Spain, there is plenty of available capacity in all (six) LNG imports terminals, so the free capacity is allocated in a first come - first serve base.

TSOs must publish in its web page monthly information on unloading of ships, gas to be unloaded and free unloading slots. Demand and operational information is also available, together with capacity. Market players must provide their annual, quarterly, monthly and daily forecasts to TSO about the operations they plan to execute.

There are special allocation mechanisms to deal with congestion for underground storage (market base mechanisms: annual auctions) and for the international connection between Spain and France (OS and OSP procedures).

##### a) **Capacity allocation rules at underground storages (auctions)**

The underground storage capacity in Spain is insufficient and it constitutes a scanty resource.

To manage high interest in this resource and avoid congestion, the Ministerial Order ITC/3862/2007 of 28 December established a yearly mechanism for the allocation of underground storage capacity for natural gas to their users for each annual period from the 1 April of the current year to the 31 March of the following one.

There are two criteria for underground storage capacity allocation: part of the capacity is allocated to the supplying companies in proportion to their final sales in the previous year, and the remaining capacity is allocated by an auction mechanism.

- In 2009, a 85 % of underground capacity was allocated in proportion to the sales to final clients on a pro-rata basis, and 15 % was allocated by auction.

- In 2010, a 74 % of underground capacity was allocated in proportion to the sales to final clients on a pro-rata basis, and 26 % was allocated by auction.
- In 2011, a 68 % of underground capacity was allocated in proportion to the sales to final clients on a pro-rata basis, and 32 % was allocated by auction.

The conditions and rules of this auction procedure are established every year in a Resolution of the General Secretariat for Energy of the Ministry of Industry, Tourism and Trade. The CNE is the supervisory body for these auctions and the Operador del Mercado Ibérico de Energía, Polo Español, S.A. (OMEL)<sup>29</sup> is the institution responsible for organising them

The auction was held on March applying a mechanism of multiple-round rising price (“ascending clock”), with the following price result:

		Auction for the allocation of underground storage capacity of natural gas	
Type	Multi-round ascending-price, electronic mechanism		
Date	30 March 2009	25 March 2010	
Allocated capacity (GWh)	4 257	7 397	
Supply period	1 April 2009 - 31 March 2010	1 April 2010 - 31 March 2011	
Capacity price (with TPA)	6 603 €/GWh per year	3 932 €/GWh per year	

Table 26. Auctions for underground storage of natural gas: results of auctions in 2009 and 2010<sup>30</sup>  
(Source: auction administrator and CNE)

## b) Capacity Allocation rules at the France-Spain interconnection (OSP and OS)

In order to manage congestion at the international interconnection with France, it is worth mentioning the work carried out in the framework of the South Gas Regional Initiative that

<sup>29</sup> Through its subsidiary OMEL Diversificación S.A.U. from 2009.

<sup>30</sup> The capacity price is obtained as the equilibrium price of the auction (1767 €/GWh (2009 auction) and 1000 €/GWh (2010 auction) plus the Third Party Access (TPA) rate (4836 €/GWh for period 1 April 2009-31 March 2010 and 4932 €/GWh for period 1 April 2010-31 March 2011).

has led to the implementation of a system of Open Subscription Periods (OSP) and Open Season procedures (OS) at the FR-SP border.

In particular, capacity in the IPs with France is still deemed very scarce and has been identified as one of the main obstacles to create a Gas Regional Market in the South Region, as an interim step through the single Internal Energy Market in Europe. The existence of sufficient accessible interconnection capacity between France and Spain is a prerequisite to foster competition between gas companies, increase market liquidity and enhance diversification and security of supply.

a) Open Subscription Period (OSP)

The OSP procedure is the allocation process, among requesting shippers, of the available existing capacity between France and Spain. The OSP establishes the process to allocate, in a coordinated way, exit capacity from one country and entry capacity into the adjacent network, in both flow directions.

The capacity offered under the OSPs is split, in order to promote competition in the supply business and enhance liquidity of the Spanish and French markets:

- *Long-Term Capacity*: 80% of the firm capacity offered, reserved for multiannual and multi-seasonal requests until 2013.
- *Short-Term Capacity*: 20% of the firm capacity, reserved for requests of one year or less.

The first allocation through OSP was in 2008, where all the capacity offered both in the long term (from April 2009 to March 2013) and the short term, and on the short term (from April 2009 to March 2010) was allocated

In 2009 a new OSP was launched for allocating yearly capacity from April 2010 to March 2011.

In 2010 a new OSP was launched for allocating yearly capacity, in this last case for capacity from April 2011 to March 2012. In contrast to what happened in previous years when the entire capacity in both directions was allocated, the capacity was just partially allocated in Spain-France direction and capacity were not requested in France-Spain direction. .

This process of short term capacity allocation will be reproduced annually until 2013.

b) Open Season (OS) procedure

The OS procedure emerges from the need to increase interconnection capacity between France and Spain. The aim of this procedure is to assess the interconnection capacity needs of the stakeholders between the two countries and inside France and, on a second phase, to organize a request and allocation procedure for these capacities in order to develop the new infrastructure needed.

French and Spanish TSOs and NRAs started working in close cooperation in 2008, with the support of Ministries from both countries, in order to put in place such a coordinated procedure aiming at developing new capacities in two different axes:

- Western axis: new investments in existing interconnections (Larrau, Irún-Biriatou, and TIGF-GRTgaz interface) to be available from 2013.
- Eastern axis: setting up a new interconnection point at Figueras/Perthus, creating a new corridor (Midcat) for transmission of gas from South to North and from North to South, to be available from 2015.

In 2009 was launched the binding phase of the 2013 Open Season and the non-binding phase of the 2015 Open Season. The process ended successfully with the positive French TSOs' decision of investing in the infrastructures associated to 2013 capacities. As a result of this process, capacity will be increased up to 5,5 bcm/year at Larrau interconnection as of March 2013.

In 2010 was launched the binding phase of the 2015 Open Season for the allocation of 2015 capacities. The second and final Open Season 2015 procedure ended in July of 2010.

As a result, the capacity at Irun/Biriatou interconnection will increase in 2 bcm/year in Spain-France direction, reaching 7,5 bcm/year as of 2015. This will represent 15% of the demand natural gas in France and 18% of the demand for gas in Spain in 2009.

The capacity requested was not sufficient to validate development of the Midcat project. Finally, no capacity has been allocated in France-Spain direction.

Below is a chart with the gas interconnection capacity between Spain and France today, the capacity which will be reached in 2015 after the OS process and those that would have been reached if the development of Midcat had been validated.

c) Spain - Portugal interconnection

Harmonization of Capacity allocations mechanisms between Spain and Portugal is going to be analyzed in the context of the next working program of the South Gas Regional Initiative (SGRI),

Portugal has a transit contract throughout Spain (from Morocco to Portugal) concluded pursuant to Article 3(1) of Directive 91/296/EEC. This contract represents around 70% of the interconnection capacity from Spain to Portugal.

#### **4.1.2 The regulation of the tasks of transmission and distribution companies**

##### Network Tariffs and Balancing

The Government approves rates, tolls and fees of natural gas (previously, the NRA issues a non-binding report) and publish them in the Official Spanish Gazette. The tariff model for transmission applied in Spain is the entry-exit model with a single balancing area. In addition regulated rates for LNG facilities and underground storage are applied.

To undertake the studies necessary to underpin the reports on the Ministerial Order draft on the sale rates, tolls, levies and remuneration in the gas industry, the CNE gathers the necessary information from the different actors in the industry.

Firstly, in order to calculate total revenues of the gas system, information is gathered from suppliers on projections for invoicing variables – number of customers, capacity and consumption – broken down by tariff groups. Information is requested for the end of the year in progress and for next year. Forecasts provided by companies are compared to available information by the CNE for settlements of regulated activities in natural gas. In like manner, individualised information is requested on the forecasts of major consumers of gas such as combined cycles, electrical plans and supplies under the interruptible sale rate.

In the annual rate exercise, determination is made of the variations to be applied in sale rates, tolls and levies of natural gas, so as to cover the regulated costs of the system.

Secondly, for transport, storage and regasification of natural gas, remuneration for new facilities is set at service cost, calculated at standard levels. Operating costs are remunerated at standard levels. Furthermore, standard levels of investment and operating costs are updated by means of an index that takes into account the variation of the CPI (Consumer Prices Index) and PPI (Producer Prices Index). Nevertheless, remuneration of each distribution company is set according to a revenue cap formula, established in 2002. In 2008, remuneration system for regasification and storage of natural gas has been updated in Order ITC/3863/2007. The system adopted for these activities is similar to the remuneration system for electricity transport facilities in place since January, 1<sup>st</sup> 2008.

In 2010, Order ITC/3520/2010, dated December 28<sup>th</sup>, established rates, tolls and fees of natural gas for 2010.

### **4.1.3 Effective Unbundling**

The Spanish Hydrocarbons Act 34/1998, establishes the current unbundling regulatory framework for natural gas and the penalties for breaches of legal, functional and accounting unbundling requirements.

Law 12/2007 amended article 63 of the Hydrocarbons Act, so as to adapt it to articles 9 and 13 of Directive 2003/55/EC. This article establishes the legal and functional unbundling requirements applicable to all regulated activities including distribution and transport. Further ownership requirements apply only to the transport system operator.

The CNE published on 22<sup>nd</sup> July 2010 a report advising the Ministry on the need to transpose Directive 2009/73/EC with different proposals for ISO and ITO models.

Further unbundling measures related to transport and distribution are foreseen in the regulatory proposals pending for 2011.

#### General requirements



*Legal and functional unbundling for regulated activities (including DSO)*

Article 63 of the Hydrocarbons Act (as modified in 2007) states that companies that engage in one or more regulated activity – regasification, strategic storage, transmission and distribution – must have as their sole corporate purpose the performance of such activities. Therefore, they may neither engage in production or commercialization nor be shareholders in companies that carry out such activities. Likewise, it provides that transmission companies that operate any of the basic network facilities of natural gas must have as their sole corporate purpose in the gas industry the transmission activity.

Finally, the law establishes that a group of companies may undertake activities that are incompatible, provided they are performed by different corporate entities and meet a number of conditions criteria to guarantee the functional unbundling. These include management separation and measures relating to effective decision-making rights in accordance with the 2003 Directive.

Article 63 of the Hydrocarbons Act states that an annual report, setting out the internal code of conduct and the measures taken by each regulated company in order to implement the unbundling requirements, should be sent to the CNE and the Ministry for approval and shall be published.

Accordingly, during 2010, vertically integrated energy companies have implemented their compliance programs and submitted required reports on the unbundling measures they have adopted to the CNE and to the Ministry. CNE has been monitoring this process since 2008.

Among the measures adopted and explained in the aforementioned reports, the following are worthy of note:

- Measures related to the reorganization of the legal companies that form part of the vertically integrated undertaking including the transfer of assets, personnel and share holdings in order to comply with unbundling requirements.

- The modification of the job functions of certain workers, and of the persons in charge of the management of the regulated activities.
- Reference to measures still being carried out as well as planned for the next years;
- Revision of the remuneration and contracts of persons in charge of the management of regulated activities;
- Obligation for persons in charge of the management of the regulated firms to sign a formal declaration declaring that they do not own shares or other participations in undertakings which carry on production or supply activities;
- With respect to commercially sensitive information:
  - o revision of procedures of access to that information,
  - o introduction of confidentiality clauses in contracts with third parties,
  - o designation of persons in charge of the custody of information,
  - o incorporation of disciplinary measures for any breach of the code on separation of activities.

#### *Unbundling and transparency of accounts*

The amended article 62 of the Spanish Hydrocarbons Act, which adapts article 17 of the Directive 2003/55/EC, establishes the accounting and reporting requirements for gas companies.

Entities that engage in one or more natural gas activities shall keep their accounts in accordance with Chapter VII of the Law on Limited Liability Companies. Companies involved in regulated activities shall, in their internal accounting, keep separate accounts for each of their regulated activities specifying those revenues and expenses strictly allocated to each activity. This rule also applies to the Technical Manager of the System and the suppliers of last resort.

Undertakings must explain in the annual report the criteria for the allocation of assets and liabilities, expenditures and incomes.

Companies that carry out deregulated gas-related activities shall keep separate accounts for production and sales, and likewise for any other non-gas-related activity they may be involved in within the Spanish territory, and any others they may perform abroad.

The gas undertakings must comply with any information requirements of the CNE, especially with regard to any gas provisioning and supply contracts they may have entered into and in relation to on their annual accounts and shall, in particular, make sure that the obligation to avoid discrimination and cross-subsidies is respected.

In case of vertical undertakings, the obligation to inform shall also apply to the parent company, if it carries out operations in any energy sector, and to other group companies that are engaged in operations with the gas subsidiary.

The Ministry of Industry, Tourism and Trade and the CNE receive, by virtue of Order ITC/2348/2006, regular accounting and economic-financial information. The Order establishes that the information must be presented separately for the following activities: regasification, storage, transmission, gas trading, Technical Manager of the Gas System, distribution, sales to tariff-based customers, retailing, other gas activities and other activities.

Companies are audited by independent companies according to the current regulation. In addition, the Spanish Hydrocarbons Act assigns the CNE specifically the function of verifying the effective unbundling of accounts.

#### *Transmission system operator unbundling requirements*

The Hydrocarbons Law designated one public limited company, ENAGAS, which was already the owner of the majority of transmission infrastructures, to be the independent transmission system operator.

Royal Decree–Law 6/2009, modifying article 67 of the Hydrocarbons Act 34/1998, consolidated ENAGAS, the independent transmission system operator, as the sole owner of the main network of primary transmission of natural gas (for new infrastructures).

On top of the general legal and functional unbundling requirements between regulated and unregulated activities within a group, there are further functional unbundling and accounting separation requirements applicable to ENAGAS. Furthermore, in order to guarantee TSO's independence, the law limits share capital ownership and voting rights in ENAGAS.

Thus a single person or society cannot, directly or indirectly, own more than 5% share capital or use more than 3% of voting rights. For gas companies the limit drops to 1% of voting rights. There is also an aggregate limit of 40% share capital for gas companies. These limits do not apply to State ownership.

At the date of preparation of this report, the significant shareholders of ENAGAS, S.A. are those shown in the following table:

<b>ENAGÁS shareholders</b>	<b>% total shareholding</b>
Oman Oil Company S.A.O.C.	5.00
Sagane Inversiones, S.L.	5.00
CIC, S.L. (Cajastur)	5.00
Kartera 1 (BBK)	5.00
SEPI	5.00
Free Float	75.00

*Table 27. Shareholding structure of ENAGAS*

*Source: ENAGAS website*

As for the functional unbundling requirements, in order to separate operation of the system from transport, the 2007 Act, amending former 20<sup>th</sup> Additional Provision of the Hydrocarbons Acts, requested ENAGAS to create a unit integrated within the same company to be entrusted with the operation of the System. This unit had to implement accounting and functional unbundling for other activities (transport) and its workforce had to sign a code of conduct to guarantee its independence from all other activities.

However, in 2011, Law 12/2011 has modified the Hydrocarbons Act and has required ENAGAS to transfer the operation of the transmission system and the actual transport (with the ownership of the assets) into two different companies within the group. Existing equity limits will be applicable to the holding company that owns 100% of those companies.

As for the remaining transmission assets that do not belong to ENAGAS but still to vertically-integrated companies, the transposition of Directive 2009/73/EC requires the adoption of new legislation. To that effect, the CNE published on 22<sup>nd</sup> July 2010 a report on the implications of the third package advising the Ministry on the need to transpose Directive 2009/73/EC with different proposals for ISO and ITO models.

Thus, unbundling measures related to transmission, necessary in order to transpose Directive 2009/73/EC into national law, have been proposed by the Government and are currently in the process of being adopted by Parliament.

## **4.2 Competition Issues [Article 25(1)(h)]**

### **4.2.1 Description of the wholesale market<sup>31</sup>**

#### **a) Origin of gas supplies (imports)**

The figure below shows the origin of gas sources in 2010 in the Spanish market:

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<sup>31</sup> Defined as covering any transaction of gas between market participants other than final end-use customers.

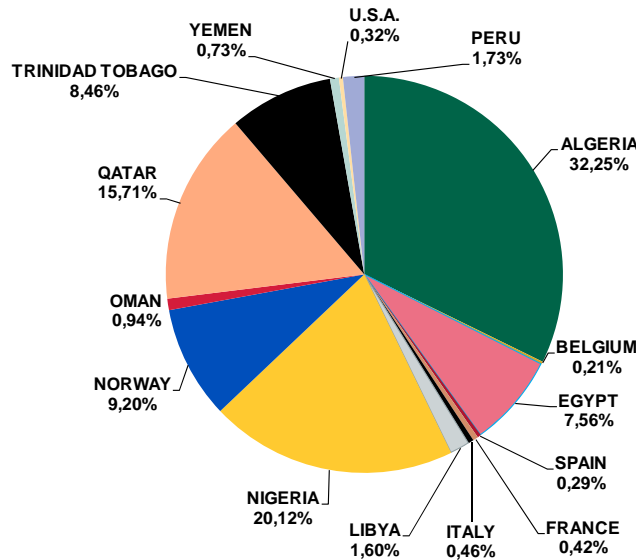


Figure 15. Origin of gas supplies in Spain in 2010

The imports basket of the Spanish gas system roughly keeps the structure of the previous years, resulting in a very high diversification of sources (up to 14 different countries). Algeria stood out once again with a share of 32,25%, then Nigeria (20,12%), Qatar (15,71%), Norway (9,20%), Trinidad and Tobago (8,46%) and Egypt (7,56%).

With regard to the previous year 2009, total natural gas imports have increased in 2010 by 0,4%, amounting around 414 TWh (412,2 TWh in 2009). 76% of natural gas reached the national grid through LNG ships, while the remaining 24% came via gas pipelines. The shipments unloaded from LNG ships continued at the high levels of the previous years and kept Spain among the most important LNG destinations in the world.

#### Domestic gas production

National production of gas was only 1.201 GWh, accounting for 0,3% of Spanish gas demand. This production comes from three gas fields that are close to depletion and are intended to be used as underground storages in the future.

#### **b) Gas import share**

Finally, the following chart shows the share of gas imports per company:

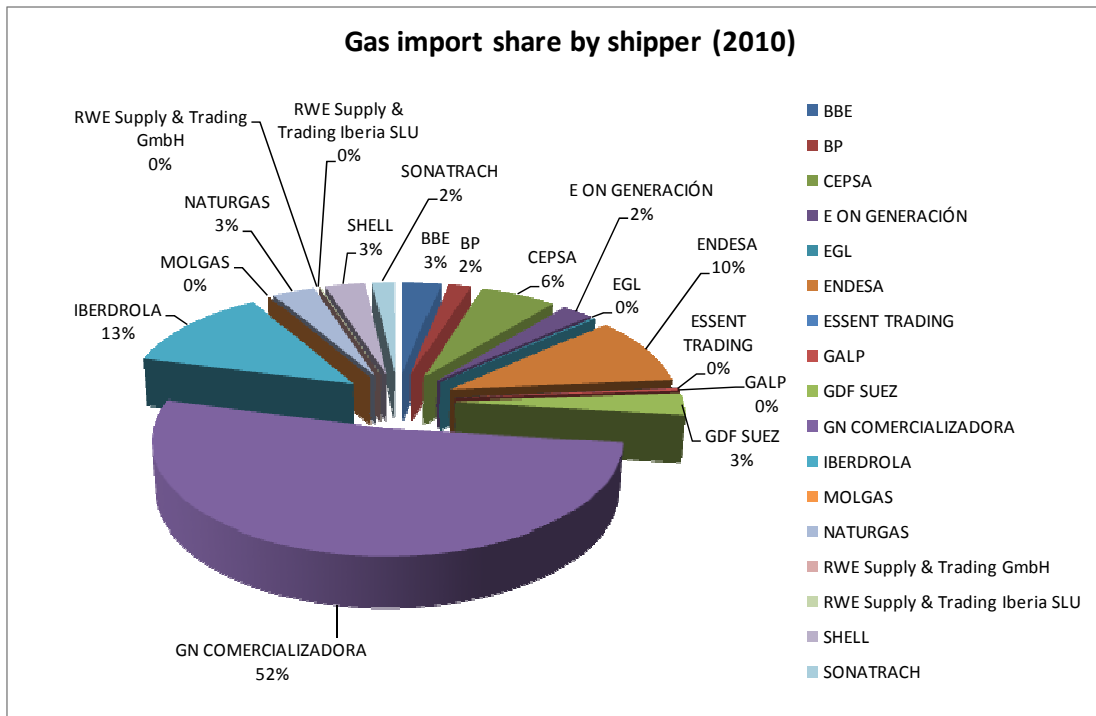


Figure 16. Share of gas imports in the Spanish market in 2010

**c) Evolution of gas import prices**

Since there is no organised gas hub at present to provide a price reference for gas in Spain, CNE has developed an index for natural gas border prices, out of gas imports data which are available in the Web of the Office of Economics and Export Control (AEAT).

The following graph shows the evolution of natural gas prices at the border according to this index, from January 2002 to December 2010, including LNG and natural gas introduced to Spain through pipelines from Maghreb and France:

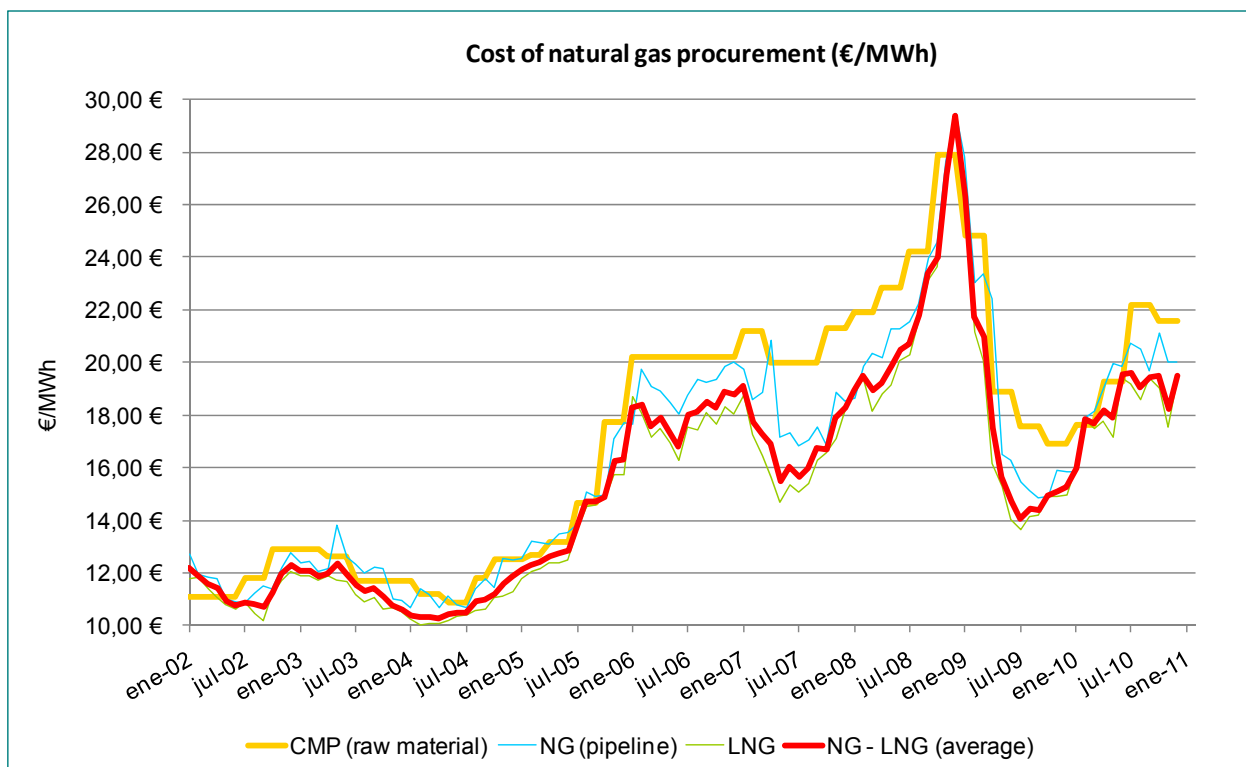


Figure 17. Evolution of natural gas border prices in Spain (€/MWh), 2002-2010.

As shown in the figure above, prices reached their peak values in 2008, when prices rose sharply up to 29,37 €/MWh in December 2008. In the year 2010, natural gas border prices has increased a 22,1%, from 15,96 up to 19,48 €/MWh.

The table below shows the monthly evolution of these prices in 2010 (in €/MWh):

(€/MWh)	Natural gas (pipeline)	LNG	Average import price
Jan 2010	15,85	16,01	15,96
Feb 2010	17,89	17,82	17,84
Mar 2010	18,14	17,51	17,70
Apr 2010	18,99	17,76	18,20
May 2010	19,99	17,19	17,89
Jun 2010	19,86	19,42	19,53
Jul 2010	20,75	19,17	19,60
Aug 2010	20,53	18,61	19,05
Sep 2010	19,71	19,39	19,43
Oct 2010	21,10	19,04	19,48
Nov 2010	19,99	17,53	18,25
Dec 2010	20,02	19,26	19,48

Table 28. Natural gas border prices in Spain, 2010



**d) Spanish OTC gas market (MS-ATR Platform)**

Most of gas traded in the Spanish market is negotiated in bilateral OTC transactions, over an electronic trading platform operation developed by ENAGAS, called “MS-ATR”. There are nearly 33 active marketers in this platform.

At the moment, gas is actively traded in Spain across eight balancing points: the six LNG terminals; the virtual balancing point (so called AOC) and the virtual storage point comprising the two Spanish underground storage sites in operation (Serrablo and Gaviota).

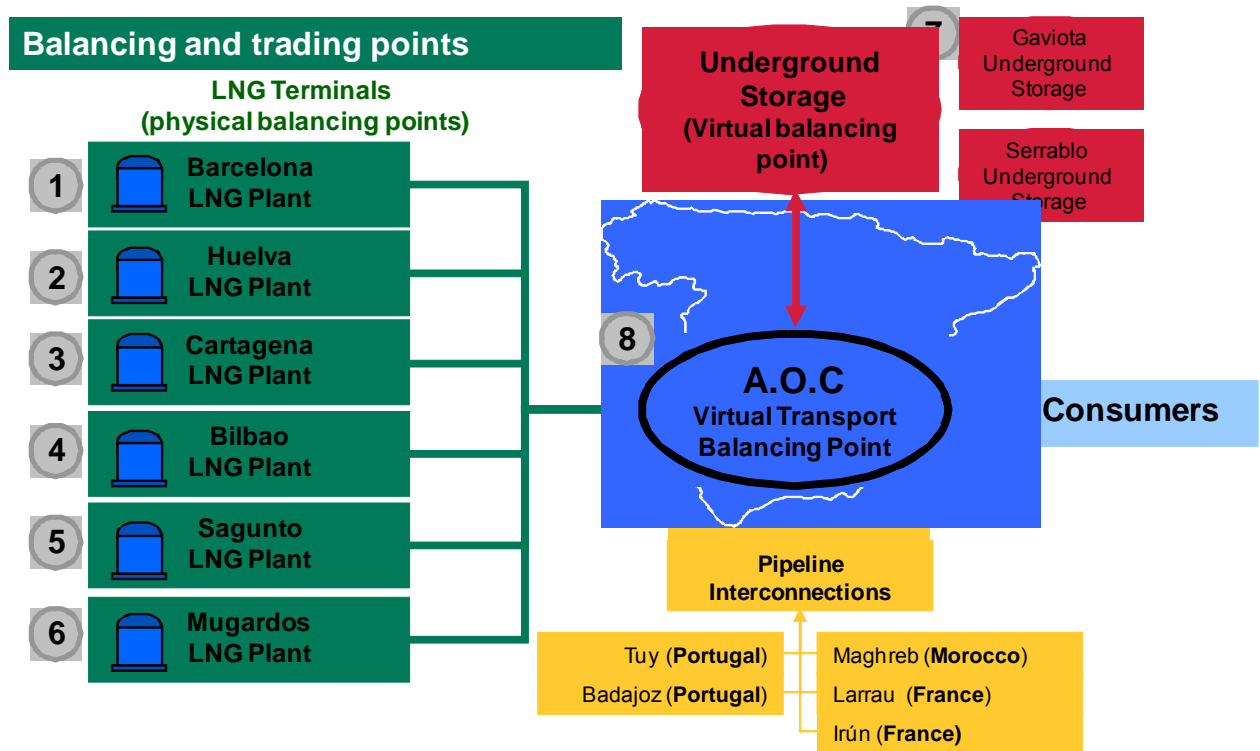


Figure 18. Balancing and trading points

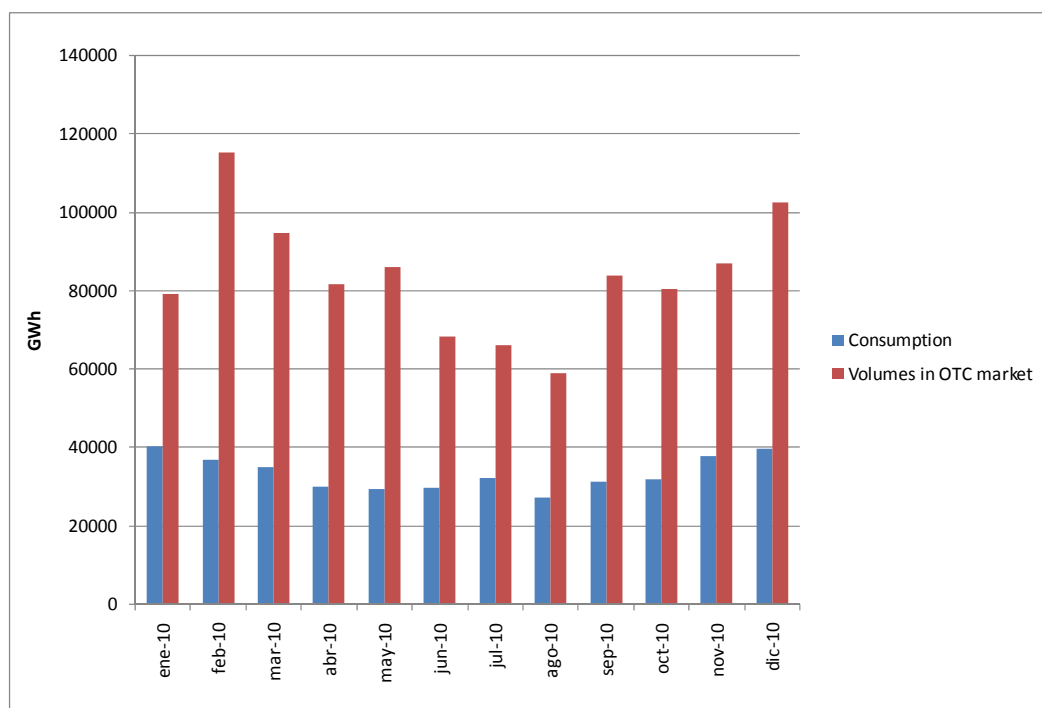


Figure 19. Spanish OTC gas market vs. consumption 2010 (GWh/month)

Liquidity lies almost completely on the LNG terminals, which accounted for 92% of all OTC trade in 2010. Huelva LNG terminal was the main trading point with 33% of gas trade. The AOC, which could look like an attractive virtual trading point, only drew 7,3% of OTC trade.

Balancing point	Traded gas 2010 (TWh)	Production (TWh)	Churn rate	Number of active traders	Market share of 3 main traders
Huelva LNG Terminal	331.463	67.620	4,9	17	48%
Barcelona LNG Terminal	229.132	77.423	3,0	18	60%
Bilbao LNG Terminal	148.570	49.933	3,0	10	63%
Sagunto LNG Terminal	59.445	56.095	1,1	7	85%
Cartagena LNG Terminal	93.817	41.964	2,2	12	66%
Mugardos LNG Terminal	64.244	19.330	3,3	6	100%
<b>Total LNG</b>	<b>926.671</b>	<b>312.365</b>	<b>3,0</b>	<b>23</b>	<b>45%</b>
Underground storage	4.695			17	86%
Transmission balancing point (AOC)	73.316	88.335	0,8	27	33%
<b>Total Spain</b>	<b>1.004.682</b>	<b>400.700</b>	<b>2,5</b>	<b>33</b>	<b>43%</b>

Figure 20. Main features - OTC

Transactions in the Spanish OTC market in 2010 represented globally 1.004,7 TWh. Next figures show the monthly evolution of gas traded and of the number of transactions – more than 39.100 – registered in the Spanish OTC market in 2010.

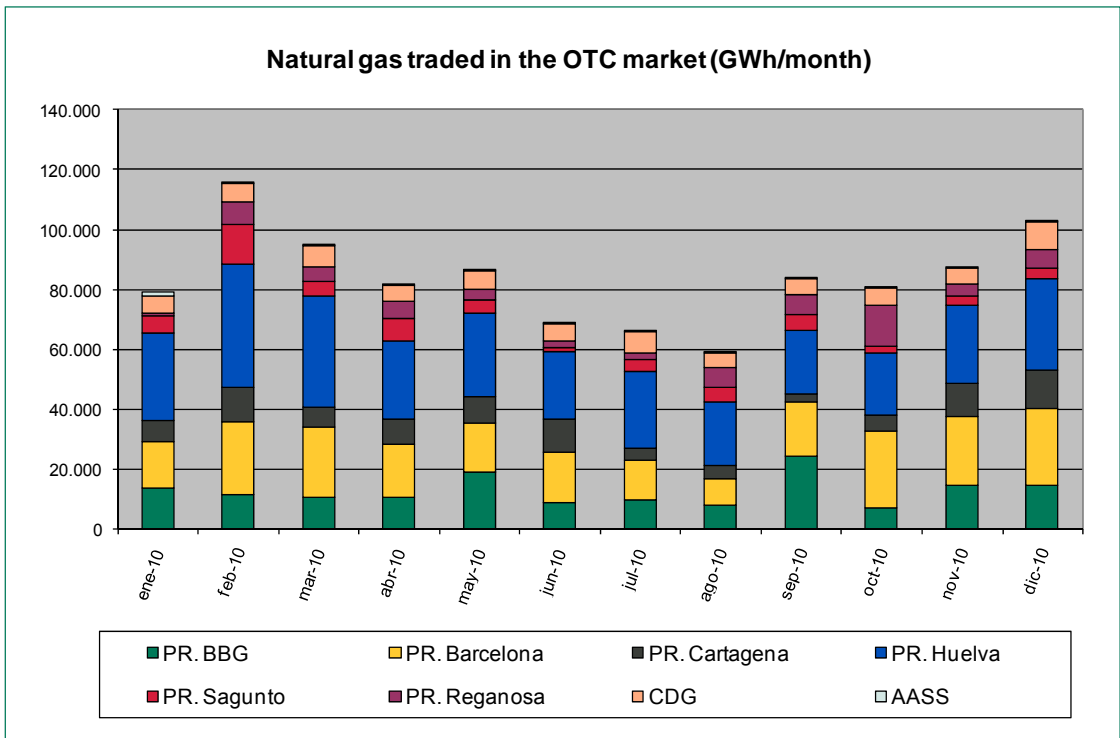


Figure 21. Gas traded 2010 (GWh/month)

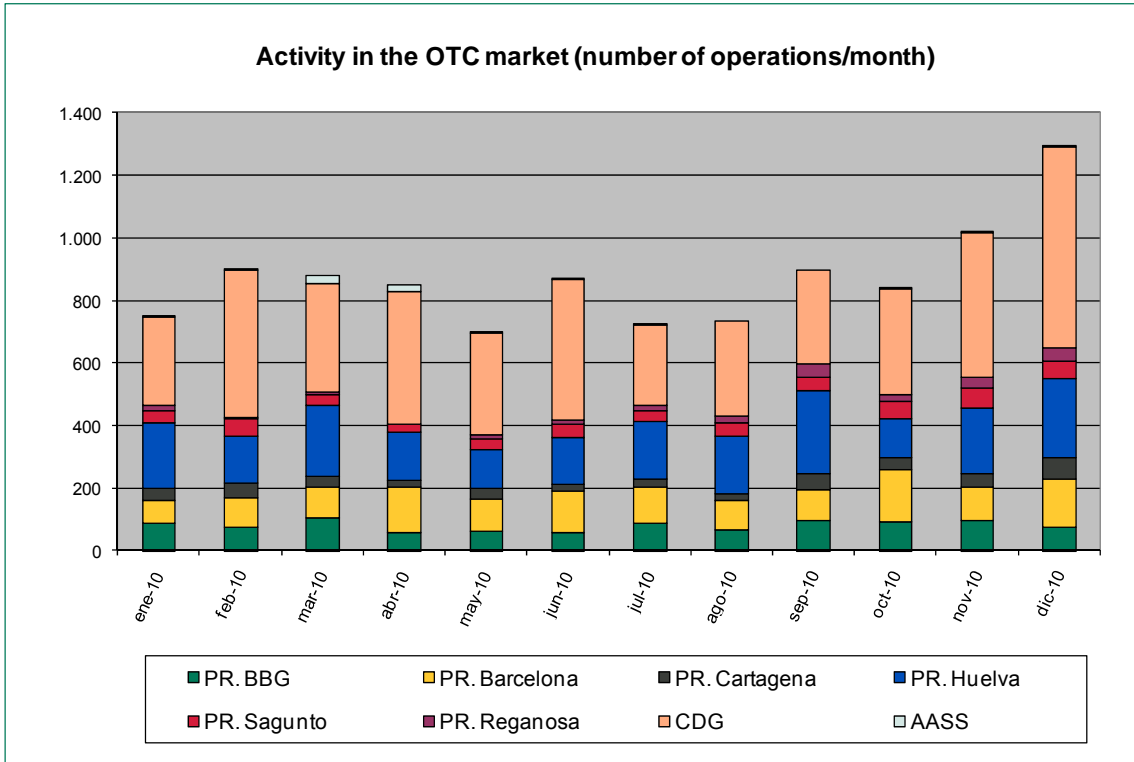


Figure 22. Gas transactions 2010 (nº Transactions/month)

The figure below shows the market sharing-out in the OTC gas market for 2010 in terms of purchased energy. The highest shares belong to Gas Natural Comercializadora with 16,5% and Endesa Energia with 15%.

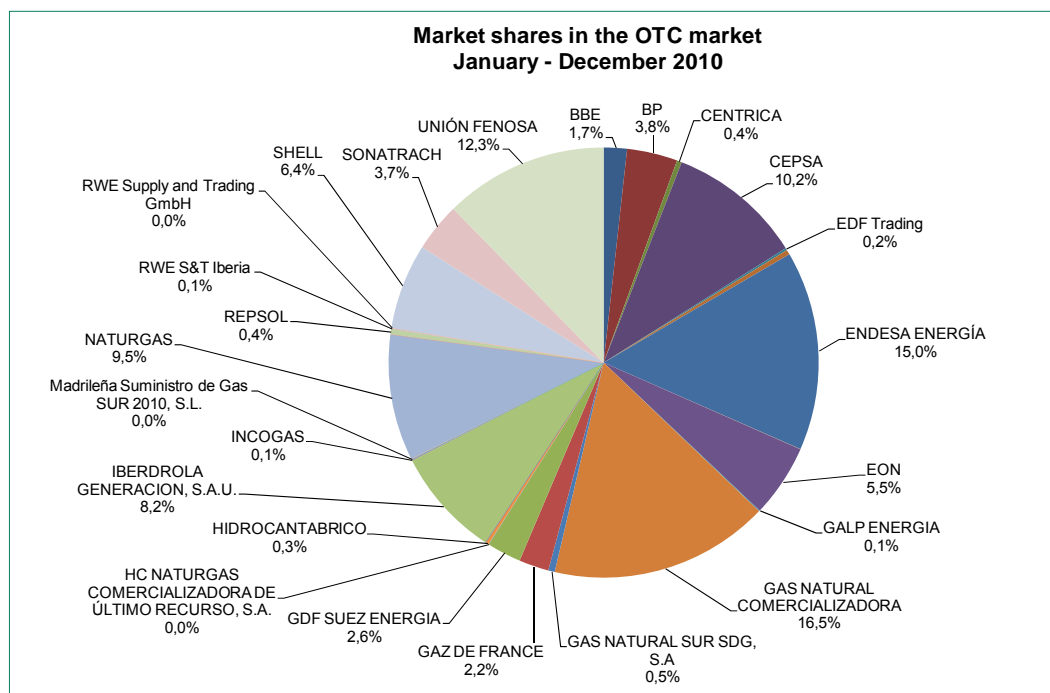


Figure 23. Market share (purchases) in the OTC market in 2010

Given that the OTC platform MS-ATR allows free trading through direct gas exchanges, without a price, there is no public information available on OTC prices.

**e) Road map to develop a gas exchange in Spain**

In April 2010 the CNE published a road map to develop a gas exchange in Spain. The objective is to accelerate the creation of a gas hub in the Spanish Gas System in order to promote competitiveness, transparency, and reducing the lack of transparency of the current OTC market.

The analysis concluded that the current conditions experienced in the Spanish Market are enough for the development of the hub, with similar services to the ones offered in other gas hubs in Europe. However the wholesale market is facing problems regarding lack of liquidity and transparency in price issues.

The creation of a gas hub in Spain requires the support of the regulatory authorities, by creating, under the current regulation, an exchange gas market, with free access to traders and consumers, and the designation of an independent market operator.

It's also necessary the introduction of some regulatory measures in order to reinforce trust and increase market liquidity.

The development of the organized gas market would help to increase the liquidity and transparency of the OTC market (they both would co-exist)

#### **f) Auctions to buy operational gas for TSOs**

Transmission and LNG system operators must purchase every year the gas they need for their own consumption (operating gas) and for the minimum filling level of their assets (minimum filling level gas) by means of an annual auction procedure covering the acquisition of the gas needs from the 1 July of the current year to the 30 June of the following one. The CNE is the supervisory body for these auctions and the Operador del Mercado Ibérico de Energía, Polo Español, S.A. (OMEL)<sup>32</sup> is the institution responsible for organising them.

The auction is based on a mechanism of multi-round descending clock price

Auction for the acquisition of natural gas necessary for own consumption (operating gas) and for the minimum filling level of gas pipelines of the transport network and regasification plants		
Type	Multi-round descending-price, electronic mechanism	
Date	28 May 2009	25 May 2010
GWh operating gas	1 259.2	1 518.6
GWh min. filling level	356.8	416.6
GWh Total gas	1 616.0	1 935.2
Supply period	1 July 2009 - 30 June 2010	1 July 2010 - 30 June 2011
Auction price	14.65 €/MWh	19.37 €/MWh

*Table 29. Auctions for operating and minimum filling level gas: results of the auctions held in 2009 and 2010 (Source: auction administrator and CNE)*

<sup>32</sup> Through its subsidiary OMEL Diversificación S.A.U. from 2009.

**g) Auctions for the acquisition of the natural gas whose price will be used as a reference for establishing the last resort tariff (TUR).**

The Ministerial Order ITC/863/2009, approved on 2 April 2009, regulates the auction procedure for the acquisition of the natural gas whose price will be used as a reference for establishing the last resort tariff (TUR).

The products subject to auction during year 2010 were: (i) the base load gas at a pre-established monthly amount for the period 1 July 2010 - 31 December 2010 and for the period 1 January 2011 – 30 June 2011; and (ii) the winter gas for pre-established monthly amounts for the period November 2010 - March 2011.

Two auctions are to be celebrated each year for the “base load gas” product and one for the “winter gas” product<sup>33</sup>.

A multiple-round descending-clock price mechanism was used for the two auctions celebrated during year 2010, and their results were as follows:

Auction for the acquisition of natural gas for the last resort tariff		
Type	Multi-round descending price, electronic mechanism	
Date	16 June 2010	26 October 2010
Monthly base load gas (GWh)	2 400 GWh (400 GWh/month) for second half of year 2010	2 400 GWh (400 GWh/month) for first half of year 2011
Winter gas (GWh)	3 700 GWh (November 2010 - March 2011)	not applicable
Supply period	1 July 2010 - 30 June 2011	
Auction price for base load gas	21.67 €/MWh	21.30 €/MWh
Auction price for winter gas	24.44 €/MWh	not applicable

*Table 30 Auctions for natural gas devoted to last resort supply: results of the auctions held in 2010 (Source: auction administrator and CNE)*

## 4.2.2 Description of the retail market

<sup>33</sup> According to Article 5.4 of Order ITC/1660/2009, of 22 June 2009, establishing the calculation methodology for the Last Resort Tariff of natural gas, by means of the redaction given by Order ITC/1506/2010, of 8 June 2010.

Natural gas consumption in 2010 in Spain reached 400.9 TWh, 0,4 % lower than in 2009. The number of gas customers in 2010 surpassed 7 millions, with 123.575 new customers.

#### 4.2.2.1 Market opening

All Spanish customers (including household) have been free to choose supplier since 1 January 2003.

Since July 2008, regulated tariffs for end-users (last resort tariff – TUR) only apply to residential consumers consuming less than 50.000 kWh/year and connected to a network at a pressure under 4 bar.

There are five suppliers designated as suppliers of last resort, which supply all consumers submitted to the TUR.

In 31 December 2010, the number of consumers supplied at a free price was 4.180.058 (58,2% of all consumers), while the number of consumers supplied at the regulated tariffs was 3.000.274 (41,8% of the consumers).

In volume, consumers supplied at regulated tariffs represent only 5,4% of the Spanish gas market.

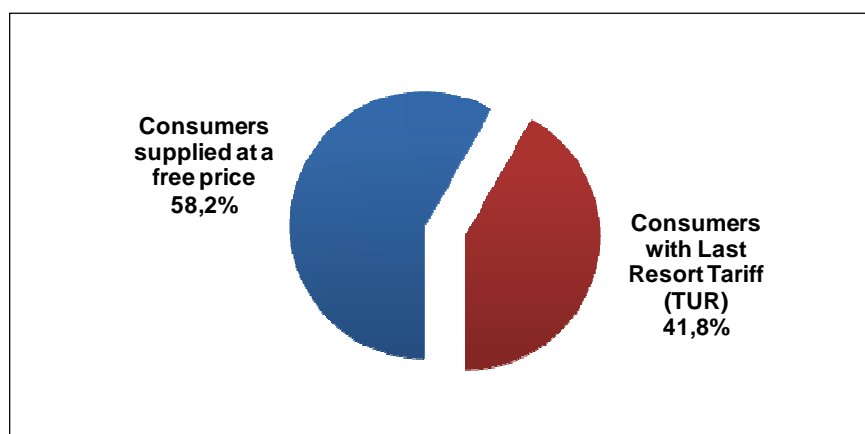


Figure 24. Consumers at the Last Resort Tariff vs consumers at free price

#### 4.2.2.2 Retail market structure

The total number of gas consumers in December 2010 was 7.180.332 (+125.984 consumers with regard to December 2009), and the gas demand was 400,9 TWh (-0,4 % compared to 2009).

The figure below shows the share of supplies in the Spanish market in 2010 by company, in terms of energy volume:

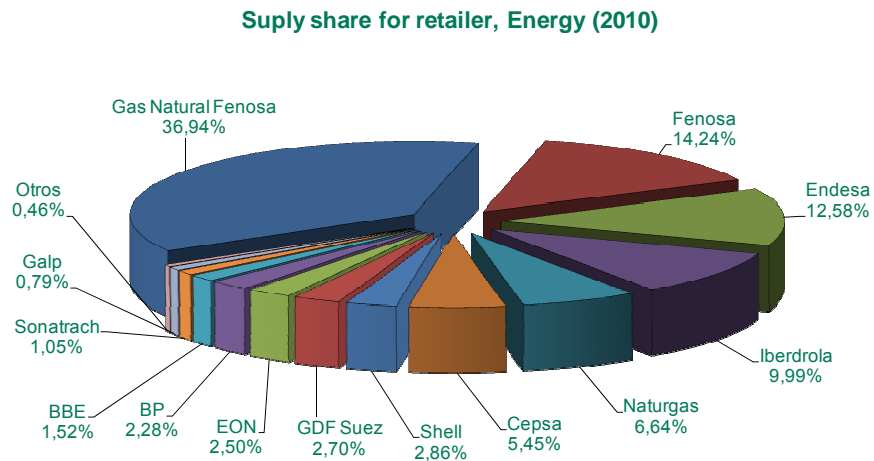


Figure 25. Share of natural gas supplies by company (in energy volume)

In terms of number of customers, the sharing-out of supplies at 31 December 2010 was:

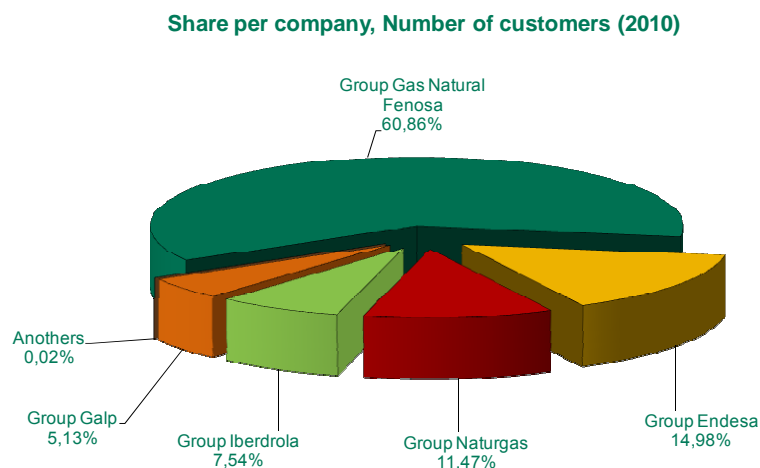


Figure 26. Share of natural gas supplies by company (in number of customers)

The sharing-out of natural gas consumption by end-use sectors in 2010 was as follows:

- Household-commercial: 16,1%
- Industrial: 48,5%



- Electricity generation (CCGTs and gas-fired power plants): 33,9%
- Non-energetic use (natural gas as raw material): 1,5%

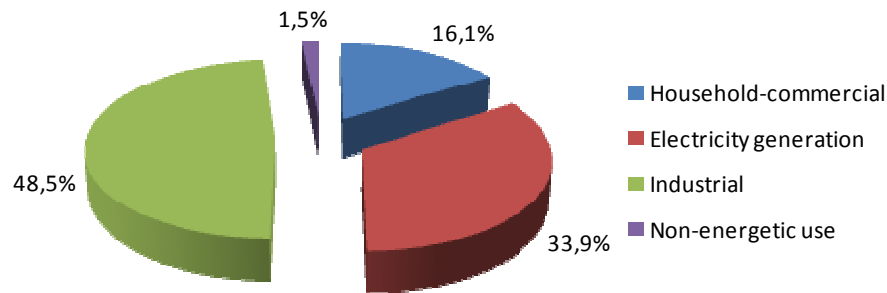


Figure 27. Consumption of natural gas by sectors (2010). Source: Sedigas

The evolution of this segmentation over time shows a very remarkable increase in the share of gas dedicated to electricity generation, reaching a percentage of nearly 35% in the last years, although the two last years there have been a decrease in the use of gas in electricity generation due to the reduction in consumption because of the crisis and the increase of production with renewable energies.

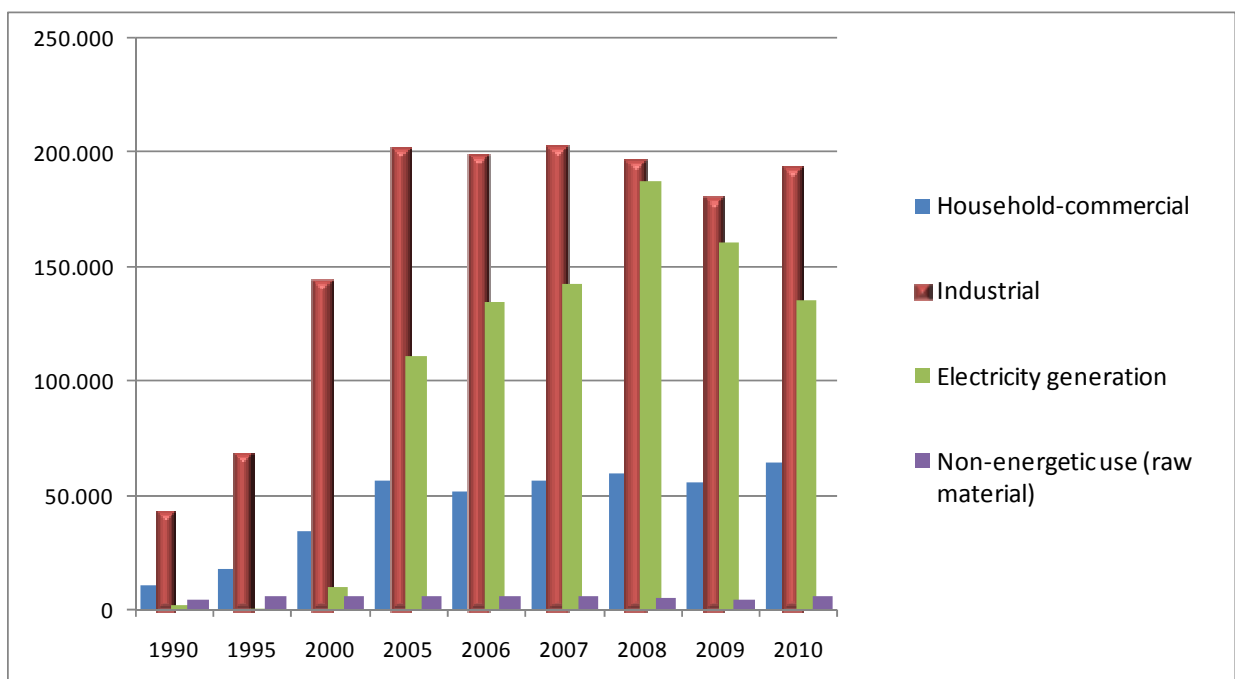


Figure 28. Natural gas sales in Spain (GWh). Source: Sedigas

The following table shows the sharing-out of gas consumption in the Spanish market, broken down by levels of pressure and consumption, according to the different tariff groups existing in the Spanish gas system for the characterisation of consumers:

Consumption groups (Pressure range and annual consumption)	MWh	Number of Consumers (31 Dec 2010)
<b>Group 1 ( Pressure &gt;60 bar)</b>		
1.1: Consumption <= 200 GWh/year.	1.735.267	17
1.2: Consumption > 200 GWh/year <= 1.000 GWh/year.	18.199.147	33
1.3: Consumption > 1.000 de GWh/year.	138.300.596	60
<b>TOTAL Group 1</b>	<b>158.235.010</b>	<b>110</b>
<b>Group 2 ( Pressure &gt;4 bar and =&lt; 60 bar)</b>		
2.1: Consumption <= 500.000 KWh/year.	275.904	731
2.2: Consumption > 500.000 KWh/year <= 5 GWh/year.	3.000.584	1.363
2.3: Consumption > 5 GWh/year <= 30 GWh/year.	13.578.257	1.039
2.4: Consumption > 30 GWh/year <= 100 GWh/year.	21.716.249	475
2.5: Consumption > 100 GWh/year <= 500 GWh/year.	55.442.927	283
2.6: Consumption > 500 GWh/year.	43.186.688	38
<b>TOTAL Group 2</b>	<b>137.200.609</b>	<b>3.929</b>
<b>Group 2 BIS ( Pressure =&lt; 4 bar)</b>		
2.1 bis: Consumption <= 500.000 KWh/year.	46.062	159
2.2 bis: Consumption > 500.000 KWh/year <= 5 GWh/year.	872.444	466
2.3 bis: Consumption > 5 GWh/year <= 30 GWh/year.	1.304.258	142
2.4 bis: Consumption > 30 GWh/year <= 100 GWh/year.	54.313	1
2.5 bis: Consumption > 100 GWh/year <= 500 GWh/year.	0	0
2.6 bis: Consumption > 500 GWh/year.	0	0
<b>TOTAL Group 2 BIS</b>	<b>2.277.078</b>	<b>768</b>
<b>Group 3 ( Pressure =&lt;4 bar )</b>		
3.1: Consumption <= 5.000 kWh/year	9.707.681	3.618.641
3.2: Consumption > 5.000 kWh/year <= 50.000 kWh/year.	34.961.467	3.490.056
3.3: Consumption > 50.000 kWh/year <= 100.000 kWh/year.	1.458.135	22.127
3.4: Consumption > 100.000 kWh/year hasta 1 GWh.	19.871.596	43.862
3.5: Consumption > 8 GWh/year.(night consumption)	3.885.766	227
<b>TOTAL Group 3</b>	<b>69.884.645</b>	<b>7.174.913</b>
<b>Group 4 ( Interruption )</b>		
<b>(Pressure &gt; 60 bar)</b>		
4.1:Consumption <= 200 GWh/year.	0	0
4.2:Consumption ia 200 GWh/year.<= 1000 GWh/year.	0	1
4.3:Consumption > 1000 GWh/year.	11.007.376	6
<b>( Pressure &gt;4 bar and =&lt; 60 bar)</b>		
4.4:Consumption <= 30 GWh/year.	0	0
4.5:Consumption > 30 GWh/year <= 100 GWh/year.	0	0
4.6:Consumption > 100 GWh/year <= 500 GWh/year.	844.123	7
4.7: Consumption > 500 GWh/year.	3.386.144	1
<b>TOTAL Group 4</b>	<b>15.237.643</b>	<b>15</b>
<b>Non-energetic use (raw material)</b>	<b>6.073.881</b>	<b>2</b>
<b>LNG satellite plant for a single consumer</b>	<b>11.999.895</b>	<b>595</b>
<b>TOTAL GENERAL</b>	<b>400.908.760</b>	<b>7.180.332</b>

Table 31. Natural gas consumption and number of consumers – 2010

#### 4.2.2.3 Evolution of gas market share and switching of gas clients

At the end of 2010 there were 49 companies registered as retailers in the Spanish gas market. At this time, new entrants had already got more than 60% of market share in terms of energy, which reveals a fair level of competition in the Spanish gas market.

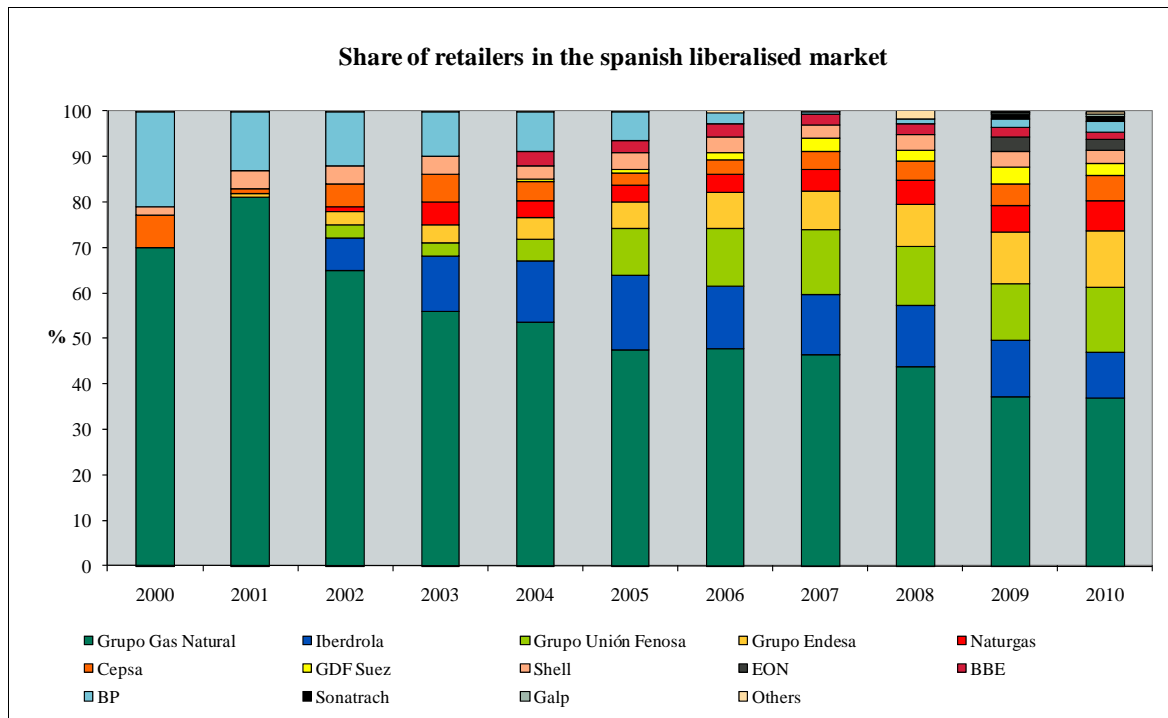


Figure 29. Spanish retail gas market. Sharing-out in terms of energy

#### 4.2.2.4 Switching rate of gas clients

There has been a increase in the switching rate since 2006. In 2010, the number of customers that have change of supplying company was 834.115, more than double from 2009.

The gas switching rate in 2010 was a **11,6%**, as shown in the following figures:

	2006	2007	2008	2009	2010
Number of switch	272.207	332.944	427.293	390.437	834.115
Total customers	6.411.033	6.737.358	6.930.550	7.054.348	7.180.332
<b>Switching rate</b>	<b>4,2%</b>	<b>4,9%</b>	<b>6,2%</b>	<b>5,5%</b>	<b>11,6%</b>

Table 32. Natural gas. Annual switching rate (number of customers / year)

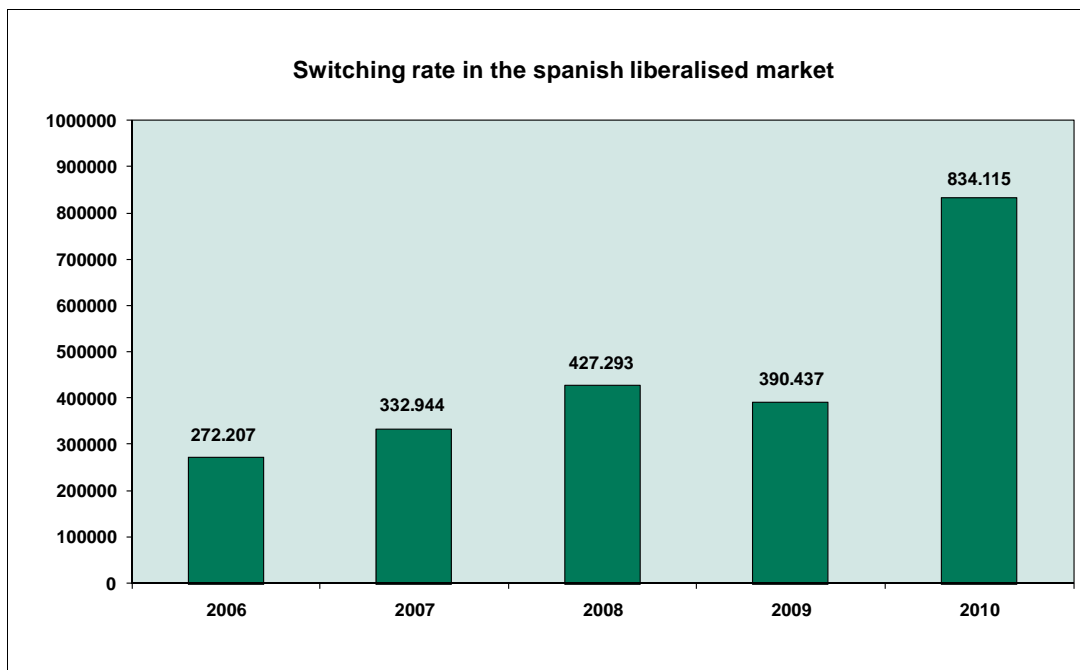


Figure 30. Natural gas. Annual switching rate (number of customers / year)

Royal Decree 1011/2009 is coherent with the content of Gas Directive 2009/72/EC and Electricity Directive 2009/73/EC, as regards the development of secure, reliable and efficient non-discriminatory systems that are consumer oriented and also helping to ensure consumer protection.

The Directive 2009/72/EC establishes the consumers' right to receive all the data regarding their consumption in an intelligible way and free of charge. These data can also be given/provided to any registered supplier free of charge. Along this line, RD 1011/2009 establishes that the database of gas and electricity distributors supply points can be accessed free of charge and unconditionally not only by any supplier but also by any customer.

The Switching Procedure, agreed by DSOs and retailers, can be seen in detail in the following webs:

- <http://ocsum.es/index.php/doc/procedimientos/gas-natural>

According to the RD 1011/2009, OCSUM functions are:

- Monitoring that the switching process is carried out according to the established regulation, complying with the principles of transparency, objectivity and independence.
  - Monitoring the information exchanged among suppliers and distributors.
  - Monitoring that the customer has given the explicit approval to the switching.
  - Processing and Compiling information related to the switching procedures, making all pertinent information available to the CNE, the Ministry of Industry, Tourism and Trade and the local Government on a quarterly basis detailing the information monthly.
- Proposing improvements in the existing supplier switching procedures, including the electronic exchange of information among DSOs and retailers.
- Create and manage an “Information Center” regarding supplier switching, providing information to customers related to procedures, suppliers lists, terms and requirements.

It is important to point out that the CNE has the legal duty to monitor the switching processes and OCSUM activities in compliance with existing regulations.

It is also important to remark that current regulation is under revision in order to adapt it to market evolution, specially the introduction of the Last Resort Tariff or TUR.

As a measure to promote market transparency, CNE has launched a new web price comparison tool for gas and electricity offers.

The tool was opened to the public at a press conference on 26 of April 2011. The tool is available at the following website [www.comparador.cne.es](http://www.comparador.cne.es)

The comparison tool includes about 400 active offers of gas, electricity or dual supply from 18 different companies.

#### **4.2.2.5 Summary of Spanish market**

##### **Market share in trading and infrastructure activities**

There are around 20 active gas suppliers in Spain. Gas Natural is the main marketer, but his share in the retail market has dropped from 90 % at the beginning of liberalization (2003) to than 37% in 2010.

The table below shows the sharing-out in the different liberalised and regulated activities of groups and companies at the end of 2010. The first column is the share of available gas, based on gas imports to Spain. The second column shows the share of companies in the OTC market. The third column is the retail market share, based on sold volumes to final customers.

	GAS TRADING ACTIVITIES		
	Share of available gas (imports)	Share of traded gas in the OTC market	Share in the retail market
GAS NATURAL FENOSA	44,5%	17,0%	36,9%
IBERDROLA	10,7%	8,2%	10,0%
UNION FENOSA (UF GAS COMERCIALIZADORA)	14,7%	12,3%	13,0%
ENDESA	8,5%	15,0%	12,6%
NATURGAS	2,8%	9,5%	6,6%
CEPSA	5,2%	10,2%	5,5%
SHELL	2,7%	6,4%	2,9%
GDF SUEZ	2,6%	2,6%	2,7%
E.ON	2,0%	5,5%	2,5%
BBE-BBG	2,6%	1,7%	1,5%
BP	1,5%	3,8%	2,3%
SONATRACH	1,5%	3,7%	1,0%
GALP	0,4%	0,1%	0,8%
ENAGAS	-	-	-
MORGAN STANLEY	-	-	-
OTHERS	0,3%	4,1%	1,7%
	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>

Table 33. Summary of Spanish gas market in 2010

### Retail Gas prices levels

The Prices in the table below resume the end consumer price in 2009 and 2010 according Eurostat data, excluding taxes.

Reference Consumers			End prices (c€/kWh)	
			2009	2010
Household end-users	D1	Consumption < 55,5 MWh	5,92	5,82

D2	55,5 MWh < Consumption < 555 MWh	4,62	4,58
D3	Consumption > 555 MWh	3,92	4,32

Reference Consumers		End prices (c€/kWh)		
		2009	2010	
Industrial end-users	I1	Consumption < 2775 MWh	4,32	4,10
	I2	2 775 MWh < Consumption < 27 750 MWh	3,18	3,59
	I3	27 750 MWh < Consumption < 277 500 MWh	2,71	2,91
	I4	277 500 MWh < Consumption < 2 775 000 MWh	2,35	2,53
	I5	2 775 000 MWh < Consumption < 11 100 000 MWh	2,13	2,34
	I6	Consumption > 11 100 000 MWh	1,87	2,08

Table 34. Final consumer price (cent€/kWh). 2009 and 2010. Source: Eurostat.

### Measures to promote market transparency

CNE has launched a new web price comparison tool for gas and electricity offers.

The tool was opened to the public at a press conference on 26 of April. The tool is available at the following website [www.comparador.cne.es](http://www.comparador.cne.es)

The comparison tool includes 388 active offers of gas, electricity or dual supply from 18 different companies.

A tutorial video for consumers is also available at You Tube at the following link:

<http://www.youtube.com/user/videoscne?feature=mhum>

### Consumer complaints and inquiries

CNE just offers information services to consumers since the Spanish regulator has no competences to resolve consumers' disputes. The regulator may advise consumers and provides information on the functioning of the market, the options available, the consumers' rights and steps to be taken when issuing a complaint.

In Spain, the Autonomous Communities have the responsibility of customer complaint handling and dispute settlement.

CNE receives around 300 oral complaints/month by telephone and 320 written complaints/month by mail. At least, two thirds are related to electricity and the rest, to gas. The number of customer inquiries received is less significant.

The development of the retail market has been accompanied by a growing number of consumer complaints due to bad practices by the suppliers which reveal the vulnerability of consumers. CNE has opened an investigation dossier which will inform further actions potentially including the initiation of infringement proceedings<sup>34</sup>.

#### **4.2.3 Measures to avoid abuses of dominance**

The Spanish legislation includes provisions and tools to avoid market abuse. The National Competition Commission is the body responsible for applying the Competition Act 15/2007, of 3rd July, promoting and protecting the maintenance of competition in all the production sectors and throughout the national economy. The National Competition Commission and sector regulators such as CNE cooperate in exercising their functions. Law 2/2011 establishes new cooperation procedures between the CNC and CNE.

Since July 2007<sup>35</sup> the National Energy Commission, besides the functions that assumes in the paragraph 3 of the Eleventh additional Provision of the Law 34/1998, of October 7, of the Sector of Hydrocarbons, and in order to guarantee absence of discrimination, real competition and effective functioning of the market, monitors (as established in article 3.4 of Law 34/1998):

- a) The management and allocation of interconnection capacity.
- b) Mechanisms aimed at settling capacity congestions in the networks.
- c) Time spent by the transporters and distributors in carrying out connections and repairs.

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<sup>34</sup> [http://www.cne.es/cne/doc/publicaciones/cne34\\_11.pdf](http://www.cne.es/cne/doc/publicaciones/cne34_11.pdf)

<sup>35</sup> Law 17/2007



- d) The suitable publication of the necessary information on the part of transporters and distributors on the interconnections, the use of the network and the allocation of capacities to the interested parties.
- e) Effective separation of accounts with the objective to avoid cross subsidies among transport activities, distribution, storage and provision.
- f) Conditions of access to storage facilities.
- g) The extent to which the transmission and distributing companies are complying with their functions.
- h) The level of transparency and competition.
- i) The fulfillment of regulation and procedures related to the changes of supplier, as well as the activity of the Supplier Switching Office.

To that end, the CNE adopts information by-laws, which will have to be published in the Spanish Official Gazette, to request from the agents that operate in the gas markets all the information needed to carry out the monitoring functions.

Suppliers have to comply with a series of rules concerning the supply contract. The main focus in supply activity (for promoting competition) is the procedure for switching supplier. For that purpose, the “Supplier Switching Office (OCSUM)” was set up (for more information, see 4.2.2.4 “Switching”).

#### Recent mergers and acquisitions in the gas sector

As a consequence of the GAS NATURAL/UNIÓN FENOSA concentration in 2009, the CNC (the Spanish Competition Authority) imposed the following remedies on GAS NATURAL:

- Sale of 2.000 MW of its CCGT electricity generation capacity.
- Commitment to sell its participation in ENAGAS.
- Divestment of 600.000 gas distribution points in the areas where GAS NATURAL gas networks overlap with UNION FENOSA electricity networks.
- Divestment of 600.000 gas customers associated to the gas distribution points.

- Commitment to supply gas to the buyer or buyers of the above mentioned generation plants and divested customers during at least 2 years and at market conditions.

Due to the difficulties in carrying out the 2.000 CCGTs MW sale, in January 2011, the CNC decided to reduce it to 1.600 MW and to establish in return the divestment of additional 300.000 gas distribution points of GAS NATURAL's distribution networks and the divestment of the associated customers.

The following mergers and acquisitions in the electricity sector are **also worth mentioning**:

MORGAN STANLEY/GAS NATURAL FENOSA: this acquisition fulfils one of the conditions imposed on the GAS NATURAL/UNIÓN FENOSA concentration by the CNC in 2009. The transaction entails the acquisition by MORGAN STANLEY of the 600.000 gas distribution points, which previously belonged to GAS NATURAL FENOSA, in Autonomous Region of Madrid. Although the relevant market is a regulated one, the acquisition could have a significant positive impact on competition in the downstream markets, as it implies the entry of a new non-vertically integrated agent and a reduction of market concentration in the regional and national gas distribution market.

GALP/GAS NATURAL FENOSA: this acquisition fulfils one of the conditions imposed on the GAS NATURAL/UNIÓN FENOSA concentration by the CNC in 2009, and it is associated to the aforementioned transaction. GALP<sup>36</sup> acquired the customer portfolio, which previously belonged to GAS NATURAL FENOSA, corresponding to the 600.000 gas distribution points that were sold to MORGAN STANLEY. The acquisition was considered not to impact negatively on competition, and to contribute to strengthen the position of a new entrant in the retail market, especially in the household segment.

GOLDMAN SACHS/ENDESA: in this transaction GOLDMAN SACHS acquired 80% of NUBIA 2000, whose 20% belonged to ENDESA. NUBIA 2000 was a company that

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<sup>36</sup> GALP had presence in the retail gas market. The operation involved a small quantity of electricity customers, extending GALP's presence to the retail electricity market.

encompassed most of ENDESA's gas transport and distribution network assets. The purchase involved a Call Option Agreement through which ENDESA was able to buy the whole of the shares between the 5<sup>th</sup> and 7<sup>th</sup> year after the operation had been concluded, thus recovering the assets. Although the relevant markets, gas transmission and distribution, are regulated, the acquisition could potentially be pro competitive, as it entails a new non-vertically integrated entrant in both markets, a reduction of market concentration, and an increase in ex-ante competition (due to the higher number of agents in regional distribution tender processes). However, the former potential benefits would not materialize if ENDESA finally decided to exercise its Call Option Agreement.

ENAGAS/Various gas system facilities: ENAGAS, the main transport company in Spain, as well as the gas system operator, acquired 100% of the Gaviota underground gas storage in two consecutive operations in 2010, and 25% of the BBG LNG plant. It was considered that the transactions would not affect competition, since all involved assets are subject to regulated Third Party Access and ENAGAS is, by law, an independent undertaking.

Further measures to avoid abuses of dominance adopted in 2010 include the following:

The CNE on the 10<sup>th</sup> February 2011 approved the Resolutions by which the lists of main and dominant operators in the energy sectors are established and made public.

First the CNE declared and published the list of the five companies with major market shares (the so called "main operators") in the electric sector (ENDESA, S.A., IBERDROLA, S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO, S.A and E.ON ESPAÑA, S.L.) and in the natural sector (GAS NATURAL SDG. S.A., IBERDROLA, UNION FENOSA GAS, S.A., ENDESA, S.A. and HIDROELECTRICA DEL CANTABRICO). There is also a list for fuels and liquefied gas.

According to Article 34 of Royal Decree-law 6/2000 there is a limitation on the voting rights corresponding to shares in excess of 3% held by the same person in more than one company that ranks among the biggest five (in terms of market shares) in the sector or market in question.

Secondly the CNE on the 10<sup>th</sup> February 2011 published a list of operators with a market share of over 10% in various energy sectors (the so called “dominant operators”) including: ENDESA, IBERDROLA, EDP/HIDROCANTABRICO, GAS NATURAL FENOSA for the electricity sector and GAS NATURAL FENOSA, IBERDROLA, UNION FENOSA GAS Y ENDESA for the gas sector and REPSOL-YPF and CEPSA for liquid fuels.

It should be mentioned that in the natural gas sector dominant operators are so far not affected by the restrictions and limitations applicable within the electric sector and described in paragraph 3.2.3.

Finally, the CNE on 11<sup>th</sup> March 2010 published a Report supervising the development of competition in the electric and gas markets (years 2006-2008) pursuant to the 5th additional disposition of Law 12/2007 and 17/2007.

## 5 SECURITY OF SUPPLY

### 5.1 Electricity [Article 4 and 2005/89/EC Article 7]

#### 5.1.1 Evolution of electricity demand

The demand for electrical energy on the Spanish peninsula finished the year at 259,940 GWh, 3.2 % higher than in 2009. Factoring in the effects of seasonal and working patterns, the annual growth was 2.9 %, compared to a fall of 4.8 % registered in 2009.

The evolution of overall annual growth of demand, from 2006 to 2010, is shown below:

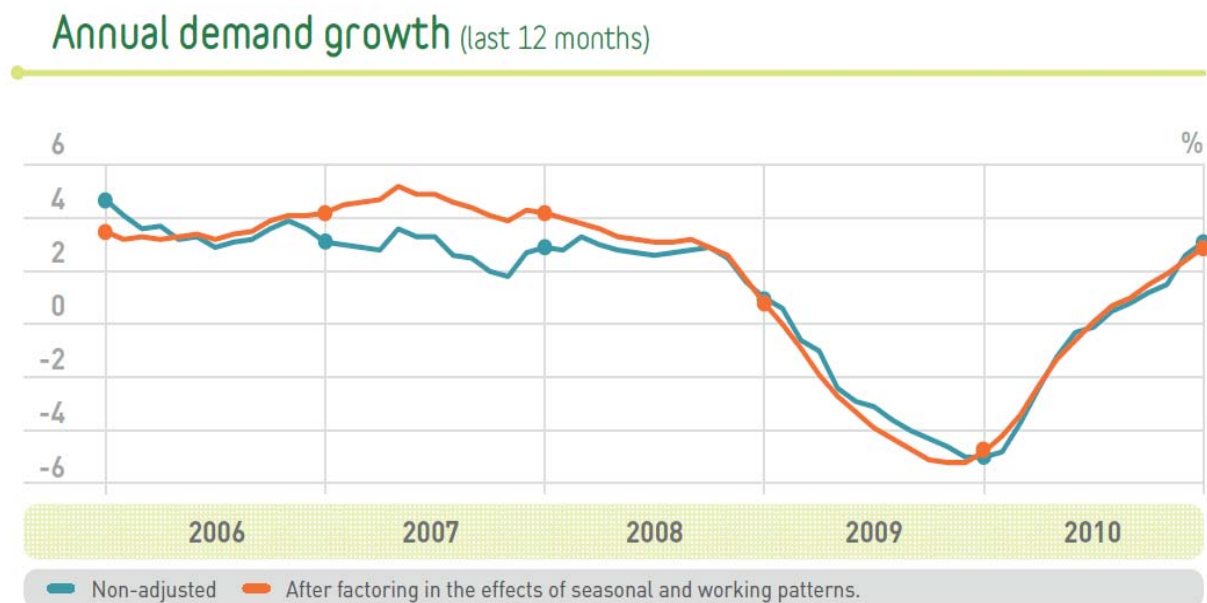


Figure 31. Rolling annual demand growth in % (blue: non-adjusted; green: labor-and-temperature adjusted)  
Source: REE

The yearly maximums for hourly average power demand and daily energy demand were reached on 11 January with 44,122 MW and 12 January with 895 GWh respectively. With

respect to the summer period, on 19 July a new historical record of an hourly average power of 40,934 MW was reached.

Installed power in generating facilities showed a net growth of 3,717 MW during 2010, reaching a total of 97,447 MW, representing an increase of 4 % compared to the previous year. The majority of this increase comes from combined cycle which had a net growth of 2,154 MW in addition to renewable origin facilities (1,094 MW corresponded to wind and 540 MW to solar energy). Regarding decommissioning, a fuel generation plant with a power of 148 MW was closed.

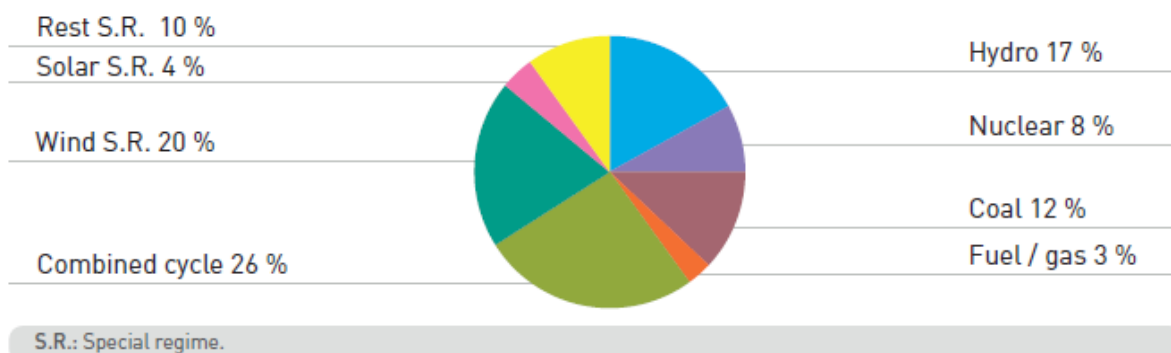
One of the most notable events has been the breaking of the trend in dry years which had been registered since 2004. Abundant rainfall registered throughout the majority of 2010 has placed producible hydroelectric at 36.568 GWh, the highest since 1997. This value is 30 % higher than the historical average value and 65 % above the 2009 figure.

### **5.1.2 Current generation fuel mix and expected developments**

A further increase in renewables' share is expected, especially wind and solar thermoelectric (concentrated solar power). CCGTs remains the only "ordinary regime" (non-renewable nor CHP) technology to grow, mainly at the expense of coal; their speed and efficiency makes them most complementary with steadily increasing RES.

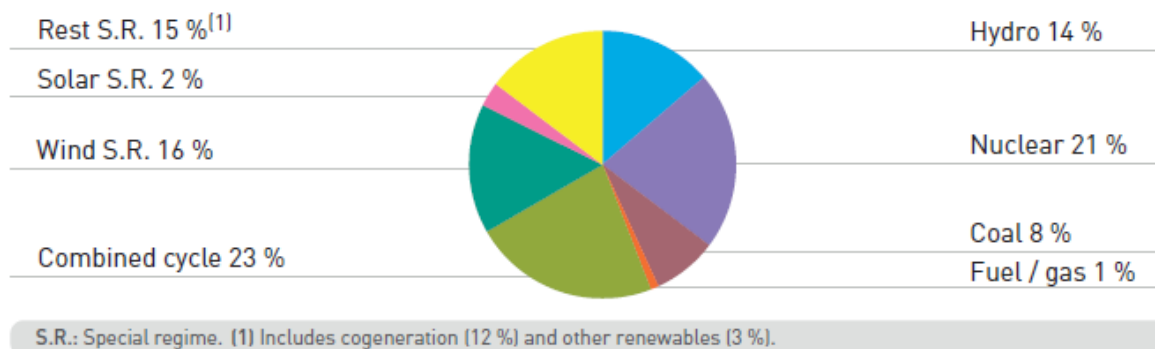
Peninsular system:

Installed capacity as of 31<sup>st</sup> December (97,447 MW)



Peninsular system:

Demand coverage



Actual investments commissioned/retired

New generation facilities under ordinary operating conditions

	Connected Type	MW	Disconnected Type	MW
Besós 5(1)	Combined cycle	859		
Castejón 1	Combined cycle	30		
Los Barrios	Coal	21		
Puerto de Barcelona 1	Combined cycle	413		
Puerto de Barcelona 2(1)	Combined cycle	435		
Soto de la Ribera 5(1)	Combined cycle	432		

Escatrón Peaker		Combined cycle	15
Cristóbal Colón 2		Fuel / gas	148
TOTAL	2,190		163

### 5.1.3 Role of regulatory or other authorities regarding authorization criteria and incentives to build capacity

Spain has introduced **capacity payments** mechanisms, which require compliance to specific availability requirements that make the capital costs of new investments in conventional energy generation viable.

New conventional generation, including large hydro with installed capacity over 50 MW, are eligible to receive capacity payments if their annual average available capacity is equal (or above) 90 % of the net installed generation capacity during the periods of peak demand.

Generators installed after 1998 receive 20.000 €/MW per year for ten years since installation. Older coal-fired power plants having undergone relevant environmental investments (usually de-sulphuration facilities) are awarded 8.750 €/MW per year for ten years.



## 5.1.4 Progress on major infrastructure projects and interconnections

### Interconnection with France

During 2010, INELFE, the company jointly and equally owned by Red Eléctrica and its French counterpart, RTE, awarded contracts for the construction of the 400 kV electricity interconnection line between Spain and France. In the section which crosses the border, approximately 70 km in length, the line will be underground and in Direct Current, which requires the construction of converter stations, one at each end of the line.

The construction of this new interconnection, classified as high priority interest by the European Union, will allow the present interconnection capacity between both countries to be doubled, increasing from 1,400 to 2,800 megawatts (6% of the maximum Spanish electricity demand), whereby the security of supply will be increased and it will be permit the integration of a higher volume of renewable energy production. Similarly, this new line will guarantee the power supply in the province of Gerona and for the future High Speed Train.

Regarding the new interconnection Santa Llogaia-Baixas, the project has now all the administrative authorisations needed for it to begin. Work will start at the end of 2011, with power-up by the end of 2013 and entry into service by 2014. Ministers of Energy of Spain and France stated their aim of increasing the Franco-Spanish interconnection to at least 4,000 MW by 2020. A joint working group is to be set up and will bring forward proposals before the end of the year.

### Interconnection with Portugal

During 2010, we continued progressing with the reinforcement works of the Duero and Andalusia axes, as well as advancing in studies for new interconnections from north-eastern Spain, with the objective of having a commercial exchange capacity equivalent to 3,000 MW with the neighbouring country.

Regarding the transmission line Aldeadavila –Lagoaca (Duero Intern.) 400 kV, the schedule of the project shows as follows:

- Phase I with topological changes in the 220 kV – year 2010
- Phase II with new topological changes in the 220kV – years 2010/2011

More projects in the pipeline to be completed in the coming years.

### *Interconnection with the Balearic Islands*

The electricity interconnection between the Spanish peninsula and the Balearic Islands, whose conclusion is forecasted for the first half of 2011, is the first submarine transmission interconnection in Direct Current in Spain and the second in the world in which the cables run along the sea bed at depths of up to 1,485 metres. The project involves a high voltage submarine interconnection composed of three cables (one return cable) 237 km in length, which must be in Direct Current technology, given the distances and the power necessary for this link, which requires the construction of two converter stations one at either end of the interconnection.

This electricity link is fundamental to assure and improve the reliability of the electricity supply in the Balearic system and, at the same time, allows its integration into the Iberian electricity market, which facilitates the existence of a competitive electricity generation market on the islands.

## **5.2 Gas [Article 5 and 2004/67/EC Article 5]**

### **5.2.1 Evolution of gas demand**

Total demand for natural gas was 400,700 GWh, a similar figure to 2009.

Conventional demand for natural gas rose by 10% in 2010 and has returned to pre-recession levels, mainly as a result of the effect of low temperatures on domestic consumption and higher industrial consumption.

However, there have been a decrease of 15,7% in the use of gas in electricity generation mainly due to the increase of production with renewable energies.

The table below shows the evolution of gas demand in the Spanish market in 2010.

	2009 (GWh)	2010 (GWh)	Annual variation (%)
Demand of gas (except power generation)	241.062	265.083	+10,0
Demand of gas for power generation	160.793	135.617	-15,7
<b>Total demand in Spain</b>	<b>401.855</b>	<b>400.700</b>	<b>-0,3</b>

*Table 35. Gas demand in Spain. 2010 vs 2009. Source: Enagas*

The following table shows the evolution of gas imports to the Spanish market, including imports through pipeline and as LNG:

	2009 (GWh)	2010 (GWh)	Annual variation (%)
Pipeline	106.578	101.053	-5,0
LNG	305.661	312.911	+2,0
<b>Total</b>	<b>412.239</b>	<b>413.964</b>	<b>+0,4</b>

*Table 36. Gas imports in Spain. 2010 vs 2009. Source: Enagas*

The demand forecasts developed by the System Operator in Spain provide the following figures for 2011-2015:

Energy Demand (TWh)	2011	2012	2013	2014	2015	2020
Conventional	265	271	277	282	287	305
Power generation	149	141	138	133	127	116
<b>Total demand</b>	<b>414</b>	<b>412</b>	<b>415</b>	<b>415</b>	<b>414</b>	421

*Table 37. Forecast of annual gas demand 2011-2015. Source: Enagas. Efficiency Scenario*

We expect a stabilization of the gas demand with regard to the actual value, with a slight increase of conventional demand, but with declining demand for electricity generation, largely because of increased renewable sources, mainly wind power.

### 5.2.2 Procurement of gas supplies. Origin and mix of gas imports

The domestic production of Spanish fields is marginal and reaches only 1.201 GWh, 0,3% of Spanish gas demand in 2010. This production comes from three gas fields that are close to depletion and are thought to be used as underground storages in the future. The rest of the gas consumed in Spain is imported.

In 2010 Spain received natural gas from a total of 15 different countries. Also, the Spanish gas system added new supply sources, most notably shipments from the new liquefaction plant in Peru.

The figure below shows the mix of gas supplies to the Spanish system in 2010:

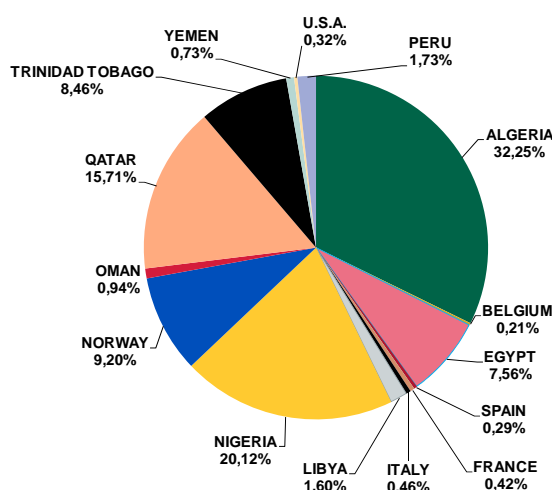


Figure 32. Sources of gas imported to Spain in 2010

This diversification in gas supplies contributes very significantly to security of supply in the Spanish system, representing a natural risk-hedging against a possible disruption of gas from a source, due to problems in infrastructure, geopolitical issues or any other reason.

Another relevant factor that influences positively security of gas supply in Spain is the importance of LNG in gas procurement:

	2010 (GWh)	% of imported gas
Pipeline	101.053	32,3%
LNG	312.911	67,7%
<b>Total</b>	<b>413.964</b>	<b>100%</b>

Table 38. Gas imports in Spain. 2010. Source: Enagas

LNG high presence provides the Spanish system with a sound level of flexibility, favoring the access to new upstream gas sources and enabling gas suppliers to benefit from low-price situations by arbitrating and interacting with other markets. Moreover, the geographic situation of Spain, with access to both Atlantic and Mediterranean basins, enlarges the scope of available LNG sources, allowing gas suppliers to import gas from virtually any LNG producing country. Finally, LNG also serves as a competition driver, enabling newcomers to access the wholesale market and introduce gas in the Spanish network via spot contracts. The high share of LNG in gas imports is a consequence of the remarkable development of LNG import capacity in Spain, as explained below.

### **5.2.3 Import capacity**

Six LNG import terminals are operational in the Spanish gas system and a new LNG terminal in Gijón (Asturias) is foreseen for the end of 2012.

Spain has international gas pipeline connections with Morocco, Portugal and France. A direct connection with Algeria went into operation in April of 2011.

While LNG terminals represent around 61 bcm/year of entry capacity to the transmission network, the connection from Algeria through Morocco represents 12 bcm/year (8 to Spain and 4 to Portugal) and the connection with France at Larrau, 3 bcm/year.

The new direct connection with Algeria (Medgaz pipeline) added 8 bcm/year of import capacity.

#### **a) Capacity of LNG import terminals**

In Spain there are six LNG regasification plants. All of them are subject to regulated TPA, allowing the access to new capacity by new entrants, which has favored the development of gas competition in Spain. Capacity use rate is around 47% in average for these plants, varying from 29% (the minimum, at Cartagena), to 60% (maximum, at Bilbao).

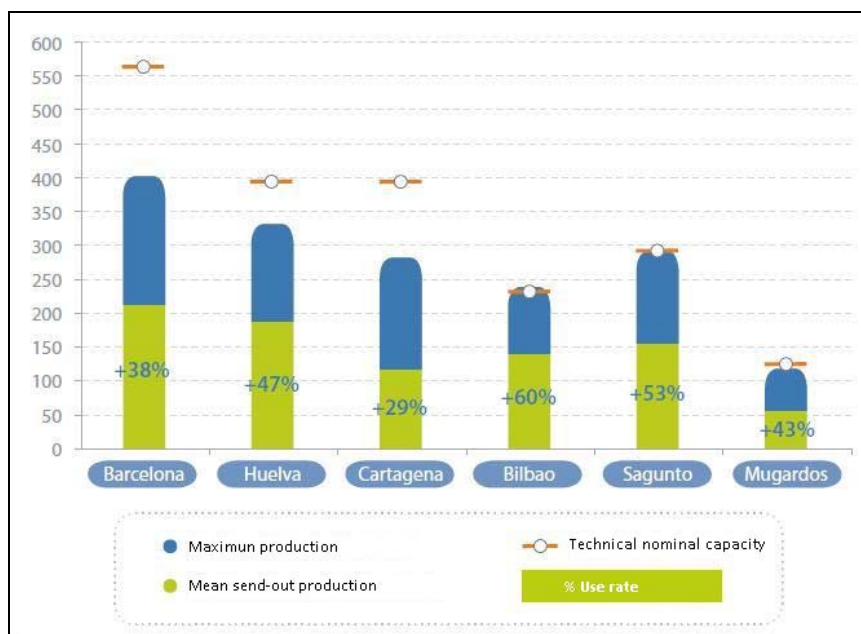


Figure 33. Use rate of LNG terminals in 2010. Source: Enagas

The following table shows the LNG storage and send-out capacity of each one of the six terminals:

LNG Terminal	LNG storage capacity (m <sup>3</sup> )	Send-out capacity (m <sup>3</sup> (n)/h)
Barcelona	690.000	1.950.000
Huelva	619.500	1.350.000
Cartagena	587.000	1.350.000
Bilbao	300.000	800.000
Sagunto	450.000	1.000.000
Mugardos	300.000	413.000
<b>TOTAL</b>	<b>2.946.500</b>	<b>6.863.000</b>

Table 39. Capacity of LNG terminals at 31 Dec 2010. Source: ENAGAS

**b) Capacity of international pipeline interconnections**

Spain has several international gas pipeline connections to other countries: to Algeria through Morocco (Tarifa), to Portugal through Tuy and Campo Maior (Badajoz), and to France through Larrau and Irún.

A new interconnection with Algeria, MEDGAZ, is operational since April of 2011. MEDGAZ is a strategic project for Algeria and Spain. It will allow natural gas to be supplied directly from Algeria, without requiring transit through third countries, and in addition it will

considerably enhance security of supply and diversification in the balance NG/LNG in the imports to the Iberian Peninsula. Its initial capacity will be 8 bcm/year, and the pipeline will possibly be enlarged in the future in order to reach other European countries, becoming this way an entrance corridor of gas into Europe.

The current capacity of international interconnections is the following:

Pipeline connection	Capacity (GWh/day)
Larrau (FR->ES)	100
Irún (ES->FR)	5 (Winter) / 9 (Summer) <sup>37</sup>
Irún (FR->ES)	0 (Winter) / 10 (Summer)
Tarifa (MO->ES)	355 (+ 89 transit to PT)
Badajoz (ES->PT)	134 (including 89 transit to PT)
Badajoz (PT->ES)	68-105 <sup>38</sup>
Tuy (ES->PT)	36
Tuy (PT->ES)	12

Table 40. Interconnection physical capacities at 31 Dec 2010. Source: ENAGAS

### c) **Booked and available capacity**

At the end of 2010 there was available capacity in all LNG terminals. Mean booked TPA capacity at LNG terminals was 57,4% throughout the year. Available capacity ranges from a minimum mean value of 26,8% in Bilbao up to a 59,2% in Cartagena.

In the pipeline interconnections, there was available capacity in both IPs with Portugal, except exports through Badajoz. In the connection through Tuy all capacity was available in the direction from Portugal to Spain throughout the year, and more than 75 remained free in the opposite sense. In the connection through Badajoz, some 75,6% average of technical capacity was free for booking during 2010 from Portugal to Spain, while no available capacity in the opposite sense, Spain to Portugal.

The situation was different in the connections with Morocco and France. In the Maghreb pipeline, importing gas from Algeria through Morocco, the capacity was booked in almost 73% throughout the year. There was low free capacity either at the connection with France

<sup>37</sup> Minimum capacity value determined by the entry capacity on the French side.

<sup>38</sup> Depending on the demand of CCGTs in Portugal and the underground storage of Carriço.

through Larrau, with 93% of mean capacity booked during 2010 and only 7% left. However the Irún-Biriatou connection was free for booking, though its capacity is much smaller.

The following table shows the situation at all these IPs, in terms of average rates of booked and available capacity during the year:

Entry (or exit) point	Booked capacity in 2011-12 (%)	Available capacity in 2011-12 (%)
Barcelona LNG terminal	53,0%	47,0%
Sagunto LNG terminal	60,5%	39,5%
Cartagena LNG terminal	40,8%	59,2%
Huelva LNG terminal	67,3%	32,7%
Mugardos LNG terminal	62,6%	37,4%
Bilbao LNG terminal	73,2%	26,8%
<i>TOTAL LNG TERMINALS</i>	57,4%	42,6%
Maghreb pipeline (import)	72,9%	27,1%
Larrau (import F=>E)	93,0%	7,0%
Irún-Biriatou	Import (F=>E)	0,0%
	Export (E=>F)	80,0%
Tuy	Import (P=>E)	0,0%
	Export (E=>P)	23,1%
Badajoz	Import (P=>E)	24,4%
	Export (E=>P)	100,0%

Table 41. Available physical capacities for 2011-2012. (LNG terminal and Interconnections).

Source: ENAGAS. Date: 15 June 2010

## 5.2.4 Gas infrastructure investments in 2010

Some capacity expansions in current infrastructure were accomplished and further new facilities were incorporated within the Spanish gas system in 2010, including both LNG terminals and new transmission pipelines.

In 2010 LNG storage capacity was substantially increased by the addition of three new 150,000m<sup>3</sup> tanks: the seventh tank at the Barcelona plant at the end of October, the fifth tank at the Cartagena plant early in November, and the fifth tank at the Huelva plant at the end of December.

The Montesa compressor station came into operation in February 2010, increasing the transport capacity of the Levante Axis, the Transversal Axis and the pipeline connecting the Balearic Islands to the Spanish mainland system.

The most significant additions in 2010 include the duplication of the Castelnou-Tivissa



pipeline at the end of October, significantly increasing transport capacity in the Ebro valley. The new gas pipeline is one of the infrastructures regarded by the SGRI as necessary for flow reversibility in the Larrau international connection.

Main ongoing projects were LNG import terminal of Gijón and the Medgaz pipeline between Algeria and Spain.

Gas Infrastructure Investments in 2010			
Regasification plants			
Infrastructure	Planification Type	Current state	Launch date
7 <sup>th</sup> storage LNG tank BARCELONA	A	In operation	oct-10
5 <sup>th</sup> storage LNG tank CARTAGENA	A	In operation	nov-10
5 <sup>th</sup> storage LNG tank HUELVA	A urgent	In operation	dic-10
Compression stations			
Infrastructure	Planification Type	Current state	Launch date
Compression station at Montesa	A urgent	In operation	feb-10
National Pipelines			
Infrastructure	Planification Type	Current state	Launch date
Duplication Castelnou - Tivissa	A urgent	In operation	nov-10
Duplication Vergara-Irun (Phase III)	A urgent	In operation	ago-10
Regional Pipelines			
Infrastructure	km	Current state	Launch date
Gallur - Tauste - Ejea	39	In operation	nov-10
Cala Gracio - Ibiza - Thermal Power Station	16	In operation	nov-10
El Puerto Sta Maria - Rota	22	In operation	jun-10
Azaila - Albalate del Arzobispo - Ariño	51	In operation	ag-10
Serinya - Figueres	22	In operation	feb-10
Lobon - Montijo - Puebla de la calzada	14	In operation	dic-10
Larraga - Los arcos	35	In operation	dic-10
G.Zona Industrial de Hernani	3	In operation	jan-10

### **5.2.5 Forthcoming investments for the next three years**

In Spain, gas network investments are planned by means of a Gas Planning Procedure, which is responsibility of the Government and counts with the participation of the Autonomous Communities, the Technical System Operator, transmission and distribution system operators and other actors, as well as the CNE.

The document deals, inter alia, with the following areas:

- Demand forecast for natural gas over the stipulated period (ten years).
- Forecast of the high pressure natural gas transportation network development and total LNG regasification capacity required to supply gas to the gas system, under a set of optimization criteria on a nation-wide basis.
- Definition of priority gasification areas, network expansion and execution stages, with the aim of assuring uniform development in the gas system.
- Forecasts relating to gas storage facilities and LNG terminals. It assures gas system stability and regular and continuous gas supplies.
- Environmental protection criteria are also established.

The Order ITC 2906/2010 revised some infrastructure project, to adjust them to the changes in the gas demand projections (lower demand).

#### **5.2.5.1 Investment in LNG import terminals (2011-2013)**

- **New LNG import terminal of Gijón (Asturias).**

A seven LNG terminal is actually in construction in Gijón, located in the north coast of Spain. The capacity of the installation will be 300,000 cubic metres between two storage tanks and a docking terminal will handle LNG tankers with capacities of 250,000 cubic metres. The regasification send-out capacity of the first-phase terminal will be 800,000 cubic metres an hour. It is expected to be finished in 2012.

Other expansions of capacity for the Spanish LNG terminals are shown in the table. The table includes only those infrastructures whose construction is foreseen to be finished in the period 2011-2013.

Investments in LNG import terminals 2011-2013			
Transmission System Operator	New infrastructures	Current state	Foreseen date
<b>ENAGAS</b>	<b>Gijón (Asturias) New LNG terminal</b> Two storage tanks; send out capacity 800.000 m <sup>3</sup> /h	Under construction	2013
<b>ENAGAS</b>	<b>Barcelona LNG terminal</b>		
	8 <sup>th</sup> storage LNG tank	Under construction	2011
<b>SAGGAS</b>	<b>Sagunto LNG terminal</b>		
	Increase in emission capacity up to 1.000.000 Nm <sup>3</sup> /h	Under construction	2012
	4 <sup>th</sup> storage LNG tank.	Planned	2012
<b>BBG</b>	<b>Bilbao LNG terminal</b>		
	Increase in emission capacity up to 1.200.000 Nm <sup>3</sup> /h	Planned	2012
	3 <sup>rd</sup> storage LNG tank	Planned	2012

Table 42. Planned LNG infrastructures for 2011-2013.

### 5.2.5.2 Investment in Pipeline international interconnections

- **Medgaz pipeline (Algeria – Spain)**

In April 2011, came into operation the interconnector with Algeria (MEDGAZ). This new pipeline provides an additional entry capacity to the Spanish system of 8 bcm/year.

- **Spain – France interconnections**

As a result of the Open Season procedures explained before:

- The capacity at Larrau interconnection will be increased up to 5,5 bcm/year as of March 2013 in both sides.
- The capacity at Irun/Biriatou interconnection will increase in 2 bcm/year in Spain-France direction, reaching 7,5 bcm/year as of 2015.

**Capacidades físicas (GWh/d)**

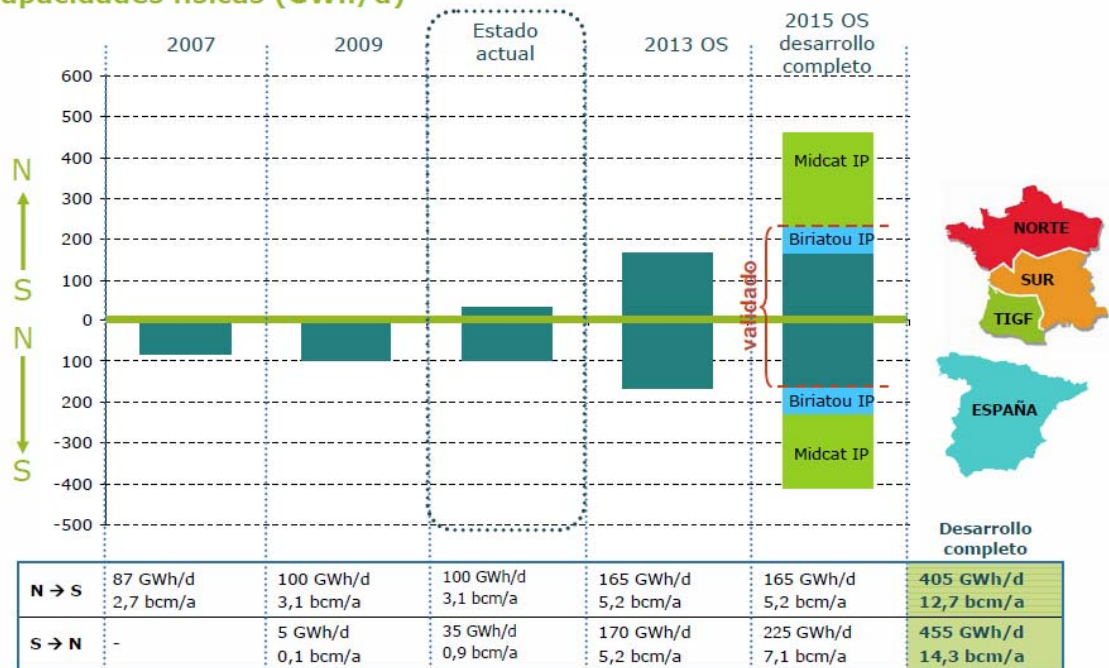


Figure 34. Interconnection capacity between Spain and France. Source: Enagas

**5.2.5.3 Investment in Transmission network**

In the coming three years, the Spanish transmission network will continue to be developed and enlarged in order to maintain its reliability and its ability to serve the foreseen demand, taking into account that the demand forecasts have been reduced significantly since the last planning exercise 2008-2016, released when the economic downturn was still at an early stage.

The list of national and regional transmission pipelines is published in the Planification document.

**5.2.6 Underground storage**

In Spain, underground storage capacity is small – only 6% of demand in 2010 – and has historically been a scarce resource. Withdrawal capacity is even more restrictive. That is why the available capacity is subject to a specific allocation mechanism: a first amount of underground storage capacity is allocated to those users obliged to keep strategic and operational gas reserves proportionally to the gas sales in the previous year; the remaining

capacity is allocated through an auction.

ENAGAS manages the two existing underground storage facilities in Spain: Serrablo and Gaviota, both old natural gas fields which are now depleted.

The Serrablo gas field is located between in the province of Huesca, near the Pyrenees. Gaviota is an off-shore facility located near Bermeo (Vizcaya).

Underground Storage	Gas storage capacity Mm <sup>3</sup> (n)		Maximum Intake/Offtake Mm <sup>3</sup> (n)/day	
	Available capacity	Cushion gas	Intake	Offtake
Serrablo	820	280	3,8	6,8
Gaviota	1.346	1.135	4,5	5,7
<b>TOTAL</b>	<b>2.120</b>	<b>1.659</b>	<b>8,4</b>	<b>12,5</b>

Table 43. Capacity of underground storages Serrablo and Gaviota. Source: Enagas

It is interesting to compare this capacity with the storage potential of the other facilities that allow for the storage of natural gas: LNG tanks and the marginal storage capacity of the transmission network (linepack):

	Maximum storage capacity (GWh)
Underground storage	24.656
Tanks in LNG terminals	16.920
Linepack	1.000
<b>TOTAL</b>	<b>42.576</b>

Table 44. Storage capacity in Spain: underground storages, LNG tanks and pipelines

### 5.2.6.1 Investment in Underground Storage projects

Actually there are three new underground storage projects in execution: Yela, Castor and Marismas, which are expected to come into operation in the next three years

The sites of Yela and Castor are expected to come into operation in 2012. The entry of both projects will increase underground storage capacity around 14% of demand in 2012.

Company	Underground Storage Project	Available capacity	Foreseen date
<b>ENAGAS</b>	Yela	1.050 million m <sup>3</sup>	2012-2013
<b>ESCAL</b>	Castor	1.550 million m <sup>3</sup>	2012-2013
<b>PETROLEUM</b>	Marismas	600 million m <sup>3</sup>	2014
<b>Total</b>		<b>3.200 million m<sup>3</sup></b>	

Table 45. Underground Projects 2011-2014.

- **Yela underground storage project**

The Yela Underground Storage Facility, scheduled to start operations in 2012, will have operating capacity of 1.050 million m<sup>3</sup> and a maximum flow rate of 15 million m<sup>3</sup> /day.

Yela Underground Storage Facility is located at Guadalajara, in the central area of Spain. The installation will be connected to Enagás' basic network via three gas pipelines.

Work is currently under way to drill the 11 wells needed to develop the storage facility.

- **Castor underground storage project**

The Castor UGS project consists of the conversion of a depleted oil field (the Amposta field) into an underground gas storage. The Amposta field lies at a depth of 1 800 m approximately 22 km off the east coast of Spain in the Mediterranean Sea.

The project involves two offshore platforms for 13 wells and processing facilities, the drilling and completion of 13 new wells, an onshore compression and processing plant located in the municipality of Vinaroz (Castellón), and an adjoining 30" pipeline 30 km long.

Total Storage Capacity Castor is 1.550 million m<sup>3</sup> of natural gas (1.9 bcm).

Escal UGS is the company responsible for developing the Castor Project

- **Marismas underground storage project**

It will be located in the province of Huelva, namely under the Doñana region and draw natural gas deposits located between Almonte and Hinojos.

The earth's field of marshes in Huelva, including concessions marismas A, B1, C1, C2 and Rebujena, all belonging to 100% Petroleum Oil & Gas Spain (Gas Natural subsidiary).

This storage will be medium in terms of capacity (600 million m<sup>3</sup>).

## **5.2.7 Competitive impact of measures taken pursuant to Articles 3 and 4 of Directive 2004/67/EC on gas market players**

The Law 12/2007, that modified the Hydrocarbons Law 34/1998, endowed CNE with new attributions regarding monitoring of several aspects of gas markets, capacity management and security of supply, in accordance with article 5 of Directive 2003/55/EC. These new competencies also included supervising the effective functioning of the market, unbundling of activities and the level of transparency and competition (deriving from article 25 of Directive 2003/55/EC).

Concerning measures reinforcing security of supply, the Royal Decree 1766/2007 the Spanish regulation, modifying the Royal Decree 1716/2004, established the following obligations for companies supplying gas to final consumers:

- The obligation of diversifying supplies, so that the proportion thereof deriving from the main country supplying Spain (currently Algeria) should not exceed 50%. With a view to facilitating the entry of new companies to the market, the application of this obligation to diversify procurement has been limited to those agents importing more than 7% of the Spanish total gas supply.
- The obligation of maintaining at every moment a minimum security stock of gas of 12 days of firm sales to final consumers. At the beginning of winter, the security gas stocks must be increased to 20 days, in order to be ready for winter demand. Supplies used for the consumption of facilities with alternative fuels, and under certain circumstances, are exempted from this requirement.

Finally, there is another provision in Spanish regulatory regime that aims at assuring security of gas supplies to consumers on a daily basis, which is contained in the rule 9 of the System Operation Network Code (NGTS). This provision establishes the obligation for all users to be balanced after their operations in the network, and introduces economic penalties to those users incurring in imbalance. This guarantees an appropriate behavior of gas suppliers enhancing a safe operation of the gas system by the Technical System Operator.

### **5.2.8 Long term gas supply contracts**

In Spain the information of the duration of the individual long-term gas supply contracts is not public. However, historically most of the gas supply contracts of all Spanish marketers have been long-term contracts with producing countries. That applies for both, LNG and pipelines supply contracts.

Long term gas supply contracts don't hinder competition, since there is available entry capacity in Spain, with the exception of France and Morocco interconnections; in addition, LNG can be diverted to other markets.



## **6 PUBLIC SERVICE ISSUES [ARTICLES 3(9) ELECTRICITY AND 3(6) GAS]**

### **6.1 Electricity**

#### *Maintenance of end user price regulation in electricity*

The Law 17/2007, dated 2<sup>nd</sup> July, establishes the schedule for the elimination of the end-user regulated prices (the so-called “integral tariffs”) as well as for the introduction of last resort tariffs, which are aimed at consumers with low consumption levels in the electricity sector. The suppression of integral tariffs is the final stage in the move to a fully competitive market.

The Law 17/2007 defines last resort tariffs (TUR) as the maximum price to be applied to consumers with right to be supplied at the TUR, and it also establishes the principles to be used in the calculation of last resort tariffs, which are the following:

- Single tariff for the whole country.
- Cost reflective (incomes enough to cover expenses).
- Additive structure: generation costs, access tariffs and commercialization costs.

The abovementioned Law sets up the implementation of last resort tariffs and the suppression of integral tariffs on January 1<sup>st</sup> 2009. From that date onwards, distributors will not perform the supply activity anymore.

However, Royal Decree 485/2009, dated 3<sup>rd</sup> April, delays the introduction of last resort tariffs and the elimination of integral tariffs in the electricity sector to July 1<sup>st</sup> 2009. It also determines that, starting on July 1<sup>st</sup> 2009, only low voltage consumers (less than 1 kV) with contracted load capacity lower than or equal to 10 kW may be supplied at last resort tariffs.

Royal Decree 485/2009 also defines the last resort tariff as the maximum and minimum (unique) price to be charged by last resort suppliers to consumers with right to be supplied at the TUR.

The Order ITC/1659/2009, dated June 22<sup>th</sup>, establish the methodology to determine the last resort tariff. The last resort tariff includes the access tariffs, the commercialization costs and the energy cost. Order 1601/2010 introduces changes in the method used to calculate the energy cost component of the TUR.

The energy component of the last resort tariff includes the energy cost, that contains the result of the electricity auctions, the ancillary service cost, the premium risk, the capacity payment and the impact of the losses over the energy costs.

According to the Law, the following last resort suppliers are appointed for a period of four years:

- Endesa Energía XXI, S.L.U.
- Iberdrola Comercialización de Último Recurso, S.A.U.
- Gas Natural S.U.R., SDG, S.A.
- HC-Naturgás Comercializadora Último Recurso, S.A.
- EON Comercializadora de Último Recurso, S.L.

Notice that in Spain last resort suppliers can supply all customers, including those who are not eligible to be supplied at TUR.

The following table shows the percentage of customers in each segment, both domestic and other (commercial and industrial)<sup>39</sup> who receive their supply by a last resort supplier in December 2010.

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<sup>39</sup> Low voltage consumers (less than 1 kV) with contracted load capacity lower than or equal to 15 kW.

In connection with the customers who receive their supply by the last resort supplier, it should be noted that in Spain the last resort suppliers can supply all customers, including consumers with or without right to be supplied at the TUR.

Consumer Segments	2010
	% of customers who receive their supply by the last resort supplier
Domestic	84%
Rest	18,4%

Table 46. Share of customers in each segment supplied by last resort supplier.

#### Appropriate treatment of vulnerable customers in electricity

Royal Decree-Law 6/2009 approved the social bonus from July 1<sup>st</sup> 2009 onwards subject to the fulfilment of several requirements established by law such as being a large family, a pensioner older than 60 years old with minimum retirement pension, unemployed, or low voltage consumers (less than 1 kV) with contracted load capacity lower than or equal to 3 kW.

The abovementioned Royal Decree-Law established that the social bonus is the difference between the last resort tariff and the integral tariffs that are in force the June 30<sup>st</sup> 2009. The Royal Decree-Law 6/2009 also established the percentages to distribute the cost of the social bonus between the generators. In December of 2010, 2.877.276 customers has social bonus.

#### Implementation of labelling for electricity (guarantee of origin)

The “guarantee of origin and disclosure of electricity system” was launched by CNE as of December 1<sup>st</sup> 2007, following Ministerial Order 1522/2007, aiming to inform final electricity consumer in detail about origin and environmental impact associated to energy consumption.

This initiative is an adaptation of European Regulation; already Directive 2001/77/EC on promotion of electricity generated by means of renewable energy sources (now superseded by Directive 2009/28/EC) established in its 5<sup>th</sup> article the need for such a guarantee of origin of the electricity purchased. Directive 2004/8/EC also promotes the highly efficient cogeneration (combined heat & power). Directive 2009/72/EC establishing common rules for the internal power market requests electricity retailers to inform their consumers via bills and promotional material about the contribution of each primary energy source during previous year, as well as its environmental impact — at least in terms of CO<sub>2</sub> emissions and nuclear waste.

The guarantee of origin and disclosure of electricity system makes possible to certify the provenance of power generated from renewable sources or high-efficient cogeneration, thus determining both national annual global mix of primary sources and each supplier's mix for previous year, and their corresponding environmental impact associated.

It might be argued that it's not possible to distinguish instantly the source of incoming electricity onto the system, no matter if it comes from coal-fired thermal plants or wind farms. Nevertheless, during a given time period, say a year, each technology's contribution to national domestic demand coverage can be precisely gauged.

Whenever a supplier wants to offer to his clients cleaner electricity (even 100% renewable or high-efficient cogeneration), that supplier has the possibility (regardless how clean "his" mix is) to take part in the guarantee of origin system and purchase additional guarantees to improve his mix versus the national mix. Additionally, supplier's guarantees of origin can be applied to specific consumers, so as he can assure, in annual terms, that his energy comes from clean sources in a certain amount. Generators can then request the transference of guarantees of origin from suppliers, so that they can cancel them via end-consumer supply.

All this system is controlled by CNE, including inspections covering the accounting of guarantees issued and their use (cancellation). CNE annually publishes by end of March an electricity labeling for each supplier, similar to the ones used for energy efficiency

purposes in home electrical appliances, disclosing previous year retailer's mix, CO<sub>2</sub> emissions and nuclear waste originated as compared to average nation-wide values. These data must be included, in a given format, in electricity bills and any promotional material.

## 6.2 Gas

### Maintenance of end user price regulation in gas

The Law 12/2007, dated 2<sup>nd</sup> July, establishes the calendar for both the elimination of end-user regulated prices and the introduction of last resort tariffs, aimed at consumers connected to a gas pipeline pressure lower than 4 bars in the gas sector, since January 1<sup>st</sup> 2008. As a consequence, distributors companies cannot retail gas to their clients anymore.

The Law 12/2007 defines last resort tariffs as the maximum price to be applied to with right to be supplied at the TUR and it also establishes the principles to be used in the calculation of last resort tariffs, which are the following:

- Single tariff for the whole country.
- Cost reflective (incomes enough to cover expenses).
- Additive structure: generation costs, access tariffs and commercialization costs.

The above mentioned Law also eliminates end-user regulated prices for consumers connected to a gas pipeline with design pressure above 4 bars and equal to or below 60 from July 2007 onwards. It also included the definition of last-resort suppliers and tariffs, the creation of the [Supplier Switching Office](#), and the establishment of the Energy System Technical Management Monitoring Committee.

The calendar for applying last resort tariffs in the gas natural sector, it is established by the Law 12/2007 as follows: as from July 1<sup>st</sup> 2008, consumers connected to gas pipelines with a pressure equal to or smaller than 4 bar and annual consumption smaller than 3 GWh could apply. From 1 July 2009, the limit is reduced to 2 GWh and, one year later, to 1

GWh. Since 1 July 2010, only consumers connected to a gas pipeline with design pressure equal to or below 4 bars and consumption below 1 GWh per year may be supplied at last resort tariffs.

The abovementioned calendar was modified by Order ITC/1251/2009, dated 14<sup>th</sup> May, following an agreement of the Council of Spanish Ministries, dated 3<sup>rd</sup> April 2009, so from July 1<sup>st</sup> 2009 only consumers connected to gas pipelines with a pressure equal to or smaller than 4 bar and annual consumption of less than 50.000 kWh may be supplied at last resort tariffs in the gas natural sector.

By means of the introduction of last resort tariffs consumers who were supplied at end-user regulated prices in the regulated market with right to be supplied at the last resort tariffs are transferred to the liberalized market where they are provided with natural gas by last resort suppliers. Hence, all consumers of natural are supplied in the liberalized market starting July 1<sup>st</sup> 2008.<sup>40</sup>

Royal Decree 104/2010 also defined the last resort tariff as the maximum and minimum (unique) price to be charged by last resort suppliers to consumers with right to be supplied at the TUR.

According to the Law, the following last resort suppliers are appointed for a period of four years:

- Endesa Energía, S.A.
- Gas Natural SUR , S.A.
- Iberdrola, S.A.
- Naturgas Energía Comercializadora, S.A.U.
- Unión Fenosa Comercial, S.L.
- Madrileña Suministro de Gas S.U.R 2010, S.L.

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<sup>40</sup> Only consumers from Baleares remain in the regulated market.

Order ITC/3861/2007, dated 28<sup>th</sup> December, establish the mechanism for setting the maximum prices to be applied by last resort suppliers. The last resort tariff includes the rates, tolls and fees, the commercialization costs and the energy cost. The energy component of the last resort tariff includes the result of the gas auctions, and also the crude oil quotation and the settlement prices of the futures of natural gas in international markets.

Afterwards, Order ITC/1506/2010, of 8 June, modified Order ITC/1660/2009, which stipulated methods for calculating the last resort rate for natural gas. This Order revises the formulae published to take account of the increased number of auctions.

In 31 December 2010, 99.0% of consumers had the right to be supplied at the last resort tariff. However, only 41.8% of consumers were supplied at the last resort tariff in 31 December 2010. In other words, 42.3% of consumers with the right to be supplied at the last resort tariff were supplied by last resort suppliers.

#### Measures to promote market transparency

CNE has launched a new web price comparison tool for gas and electricity offers. The tool was opened to the public at a press conference on 26 of April. The tool is available at the following website [www.comparador.cne.es](http://www.comparador.cne.es)

The comparison tool includes 388 active offers of gas, electricity or dual supply from 18 different companies.

A tutorial video for consumers is also available at You Tube at the following link:  
<http://www.youtube.com/user/videoscne?feature=mhum>

#### Complaints

CNE just offers information services to consumers since the Spanish regulator has no competences to resolve consumers' disputes. The regulator may advise consumers and provides information on the functioning of the market, the options available, the consumers' rights and steps to be taken when issuing a complaint.

In Spain, the Autonomous Communities have the responsibility of customer complaint handling and dispute settlement.

CNE receives around 300 oral complaints a month by telephone and 320 written complaints a month by mail. At least, two thirds are related to electricity and the rest, to gas. The number of customer inquiries received is less significant.

The development of the retail market has been accompanied by a growing number of consumer complaints due to bad practices by the suppliers which reveal the vulnerability of consumers. CNE has opened an investigation dossier which will inform further actions potentially including the initiation of infringement proceedings<sup>41</sup>.

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<sup>41</sup> [http://www.cne.es/cne/doc/publicaciones/cne34\\_11.pdf](http://www.cne.es/cne/doc/publicaciones/cne34_11.pdf)