Spain in the genesis of Europe's new energy policy

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Francisco Andrés Pérez and Jordi Vaquer i Fanés
Europe Programme of the CIDOB Foundation

During the last four years energy policy has transited from a relatively discrete and peripheral role in the EU's political agenda to an increasingly central one, not only in the internal debates amongst Member States, but also in European Foreign Policy. At the same time, Spain has experienced an accelerated evolution from being an isolated and marginal player in the European game, with a high degree of external dependency, into becoming active in the genesis of a new European energy policy in which Spain can contribute new and valuable experiences.

Energy Policy at the centre of the European political agenda

The inclusion of energy in the European Union's political agenda is not entirely new. In fact, one of the objectives behind the establishment in the 1950s of the European Coal and Steel Community (ECSC) and the European Atomic Energy Community (EURATOM) was to secure energy supply in a devastated post-war Europe. The 1973 oil crisis highlighted the vulnerability of Western economies due to their high dependency on the 'black gold', and multilateral initiatives, such as the International Energy Agency (1974), put forward the obligation, assumed by CEE, to face the physical interruption of oil supply through the build-up of strategic reserves [1].

In the 1980s and the 1990s the EU member states, by and large, left energy issues in the hands of economic bureaucracies or private firms, which had been created from national monopolies, in the negotiations for fixing the new rules of the game in a liberalised environment. Since 1996 the Commission established the integration of gas and electricity as the first step that would lead to a real energy internal market[2]. The external dimension, in the framework of the Union's foreign and security energy policy, kept its low profile through political coordination, and the attempt to build a new multilateral framework based on the Energy Charter Treaty (1998) failed due to the lack of ratification by crucial consumers (such as the United States) and large producers (Russia, OPEC countries).

At the beginning of the XXI century, the perception of the energy policy turned to a more political approach due to both political and structural changes. First, concerning security of supply, the 2000 Green Paper, launched by then Energy Commissioner Loyola de Palacio, warned that in the following 20-30 years up to 70% of the Union's energy demand would have to be imported, as opposed to 50% at the time[3]. The report pointed out the EU's dependence on Russian gas. Russia supplies a fourth of EU's gas consumption and holds more than 25% of the World's natural gas reserves. Second, the commitment, derived from the Kyoto Protocol, to reduce CO_2 emissions, caused mainly by transport and energy sector, introduced a new factor in the EU's quest for a sustainable and competitive energy structure. In spite of the Commission's efforts, common energy policy remained low on the Member States' list of priorities.

Awareness on the fact that energy deserved much stronger political emphasis first arose in those member states most dependent on the declining North Sea reserves and most committed to fighting climate change, such as the United Kingdom and the Netherlands, and some new member states after the 2004 enlargement[4]. In 2003, the EU's Security agenda, deeply influenced by the British government, included a section on energy[5]. The 2004 enlargement did not produce an increase of the EU's external dependency in terms of global net imports[6], as Central and Eastern European countries had less developed economies and their energy mix structure was mainly based on coal or nuclear energy, but in geopolitical terms it had a noticeable impact as the Central and Eastern European countries had belonged to the Soviet sphere of influence area and still were highly dependent on Russian oil and gas supplies. Moreover, enlargement transformed the EU's geopolitical environment as it modified its political approach to transit countries, which had a strong impact in relations with Russia, and incorporated the Central and Eastern European vision that suspected the German-Russian entente[7]. In December 2005, under British Presidency, the Council advocated an integrated strategy of the three dimensions: economic efficiency, ecological sustainability and the external dimension.

The decisive fact that accelerated events took place in January 2006, an it was the conflict of gas between Russia and Ukraine which resulted in a partial and temporary interruption of supplies[8]. The supply cut reached the German locomotive. The reaction was immediate. In Spring 2006 a second Green Paper was published to set up the basis of the European Strategy in energy security and an energy policy compatible with sustainability[9]. The external dimension had finally achieved the necessary level of politization and Mr PESC, Javier Solana, was asked to produce a strategy document coherent with European interests, the basis for an action plan that would transform principles into action[10]. Some member states, like Poland, had before seen the issue of energy policy "through the lenses of national security"[11]. In this context the *all-for-one-one-for-all* solidarity became central and Poland proposed the creation of a European Energy Security Treaty (referred in the media with the unfortunate name of "Energy-NATO") to provide the joint response mechanisms for a hypothetical threat to energy supplies. Although the proposal was rejected, some early warning mechanisms were developed later by the Energy Correspondents[12]. The external dimension, in face of a less favourable context where economic nationalism and the use of resources as a political instrument have become commonplace, takes shape in the form of global political dialogue with producers (Russia, OPEP, Mediterranean, South America), transit countries (Ukraine, Moldova) and consumers (China, India) and the quest for alternatives to Russian gas (Caspian Basin). Despite these efforts, the EU policy, fluctuating "between the geopolitics and markets", has not succeeded in speaking with one voice; external energy policy is still dominated by bilateral agreements signed by member states[13].

In March 2007 the targets of the new Common Energy Policy were put forward. Under German Presidency the Council commited the EU to leading the global fight against climate change (with the target of limiting global warming to a +2ºC increase) and the conclusions about climate and energy from the Commission's proposals were adopted. [14] The long-term strategy set up high-priority targets in 2020 on interconnections (France-Spain, Germany-Poland-Lithuania, Europe-Central Asia and among Nordic countries); energy saving (reduction of 20% on consumed energy); greenhouse gas emissions (20% reduction by 2020, or up to 30% with international agreement) and a substantial increase of the share of renewable energies (20% in the energy mix in 2020) and biofuels (10% in transport).

Change and continuity in Spain's role: from energy island to relevant actor

From the point of view of European energy integration, the Iberian Peninsula is an energy island, isolated from mainland European gas and electricity networks. This isolation aggravates the problem of external dependency (81,2%, well over the EU average of 52,3%) and places Spain at the level of some Southern European (Greece, Portugal), island (Ireland, Cyprus, Malta) and small (Luxemburg, Belgium) countries with no energy resources. Spain has converged with its European partners in the growing role of gas in the overall mix, an increase in the share of renewable energy and a decline in coal and nuclear energy[15]. As a consequence of economic take-off and an energy sector structure deeply based on fossil fuels, Spain's dependency doubled in absolute terms between 1990 and 2005[16]. One of the paths undertaken by Spain to tackle this problem is the diversification of energy sources. In 1975 oil represented 70% of Spanish demand. It currently amounts to 50%, half of which is consumed by transportation where, until recently, no viable alternatives seemed at hand. The biofuel sector, strongly supported by agriculture unions, has not achieved substantial progress despite hefty private investment and public subsidies. During the last eight years government's attention focused on gas and renewable energies, while the debate on the nuclear issue has been postponed.

In the last fifteen years Spain's gas consumption has risen sevenfold, pushed by the replacement of oil with gas in electricity generation in combined cycle power plants. Zapatero's government priority has been to reduce the strong dependency on Algerian gas, up to 50% in 2004 – despite the fact that Algeria has always proved to be reliable supplier. In this strategy Spain counts on a competitive advantage: its high capacity in infrastructure to import liquefied natural gas (LNG), a technology in which it is a pioneer since 1969[17]. This strategy has succeeded in substituting part of Algerian LNG supplies with other imports from North of Africa (Libya, Egypt), the Persian Gulf (Oman, Qatar) and the Caribbean Sea (Trinidad and Tobago).

At the environmental level, despite the Spanish government's rhetoric in international fora, Spain is the EU's third major deviator from its Kyoto target (32,4% over target). Although both Aznar's and Zapatero's governments attributed this deviation to the process of convergence of Spain with Europe and to population increase, there is no doubt that Spanish problem has an energy efficiency problem. The Spanish alternative to its old model is based on the increase in the production of energy from renewable sources, mainly wind energy, supported by a system of subsidies inspired on the German model. Spain's wind energy sector has experienced Europe's most spectacular boom, and the country currently leads the per capita production of this kind of energy. Up to 10% of electricity generation comes from wind[18]. The next decade will be characterized by the development of hydrogen, a new generation of biofuels, biomass, photovoltaic energy, off-shore wind energy plants, and the energy captured from waves, all of them under research and development in Spain.

Spanish contributions to the new energy policy and future perspectives

Spain's role in the EU's energy policy is closely related to the above mentioned characteristics, and went through an unequal evolution. Spain's peripheral and unique position concerning energy supply sources limits its relevance in some important debates. Its high external dependency and its deviation over targets to cut greenhouse gas emissions do not contribute to its legitimacy in energy debates. However, progressive diversification of energy supply sources and, over all, success in the policy

of promotion of renewable energy have gradually changed Spain's role in the European context.

During its first term in power (2004-2008), the socialist government has made a difference on five main issues: the inclusion of Algeria and the Mediterranean area in the EU's energy policy dialogue, the Spanish strategy for diversifying supply sources of natural gas; the building of an European energy market, the strategies to cut the greenhouse gas emissions and, narrowly linked to this, the strategy to stimulate renewable energy production[19].

The dependence-vulnerability on energy supply pushed the Spanish government to align with the "Europeanising" thesis, advocating energy solidarity between member states and the need for joint response mechanisms in the event of crises. At the same time, due to its geostrategic position, Spain benefited from the support of some Central and Eastern European countries in favour of balancing dependence on Russia with alternative connections to the South[20]. The Spanish action in Brussels has assured the inclusion in the European documents of mentions to other states, specifically Algeria, in an attempt to balance EU external energy policy, guaranteeing that the understandable focus on Russia did not result on EU's neglect of African and Middle Eastern producers. On one hand, the Socialist government feared that Algeria might became a southerly version of Russia's highly politicised negotiation style, as Sonatrach's decision to exclude two Spanish firms from the exploitation of Gassi Touil's gas field in 2007 and a hardened Algerian position on prices might imply[21]. On the other, the intense dialogue between the Russian government and some of Spain's key gas suppliers, such as Algeria or Qatar, the signature of a memorandum of understanding between Gazprom and Sonatrach in August 2007, and the extension of activity of Gazprom in North of Africa, with the support of Italian and French companies, made Spanish government aware of the importance of the Russian factor, despite the fact that Spain does not import gas from Russia[22].

The Spanish choice for natural gas has been complemented with a diversification of suppliers thanks to a large LNG import capacity. In addition to an exceptional capacity to import LNG (46% of the EU total), Spanish plans have focused on interconnections, supported by the EU Commission, and launched projects of new gas pipelines that would connect the North of Africa to EU ('Medagaz' connecting Beni-Saf, in Northeast Algeria, to Almeria, in Southeaster Spain; 'TranSaharian' connecting Nigeria to Algeria) and its own connection to Europe (with the enlargement of Irun-Biriatou and Larrau pipelines and the new project 'Medcat' connecting Southeast France with Catalonia). These infrastructures could make Spain become a new transit and distribution centre of gas to Europe.

As for the European energy market, Aznar's Spain was a relatively advanced pupil in the Commission's liberalization initiatives, and achieved a high degree of vertical unbundling among the different stages of activity in the energy sector (production, commercialization, distribution). This remains one of the battle lines between the Commission and states like Germany or France, whose operators are larger and more integrated than Spanish ones. However the relation with the European Commission has not always been easy. Spain has benefited from the intervention of Nelie Kroes, Competence Commissioner, forcing Algerian state monopoly Sonatrach, to eliminate the clauses that prevented its clients reselling gas to third countries, opening the door to a more important, transit role for Spain and Italy in the European internal gas market. This was a clear example of the EU's greater negotiating capacity than that of individual states. But in another subject the conditions imposed by the Spain's energy regulator on, firstly, the German EON's bid and secondly the Italian Enel and the Spanish

Acciona's bid for the acquisition of the electricity company ENDESA moved the Commission to launch an action against Spanish government, including infringement proceedings for incompatibility with EU laws in defence of competence. [23] This conflict highlighted that despite not questioning the ideological and normative framework, the Zapatero's government was still prepared to force exceptions for in sensitive cases for national interests, or, at least, to try to do it.

The reduction in greenhouse gas emissions is a sensitive question for Spain [24]. The population growth has been alleged by the government as one of the reasons for blatant infringement of Spain Kyoto commitment and, therefore, the Spanish authorities have demanded the inclusion of this variable in the distribution of targets to cut emissions. Spain is investing in renewable energy, but it fails to reduce consumption (energy demand has been growing faster than GNP since the 1990s with the low price tariffs policy) and does not consider the increase in nuclear energy production to be an alternative[25]. Zapatero's government not only has proved his profound determination to close the nuclear power plants after their life cycle has finished, but also has turned Spain, together with Austria, into one of the most belligerent states against any hint of including in European documents a mention to the nuclear alternative as a viable alternative to reduce emissions, contrary to the strategy followed by France, United Kingdom or Finland[26].

The most striking change is, perhaps, in the area of renewable energies. The Commission included Spain in the leading group of nine member states that are on the way to reach the national targets for renewable energies[27]. Spain and Germany had an important role in the phase of preparation of the Commission's proposal for a Directive on promotion of the use of renewable energy to reach the target of 20% of the total energy consumption in the EU, the same target that has been proposed for Spain[28]. Both states lead the rejection to the creation of a European market of certifications, a trading scheme that would allow countries that did not reach their targets to buy additional production from other EM's. Eighteen member states, including Spain, use feed-in tariffs systems that have succeeded in guaranteeing the necessary long-term investment. The harmonised trading system, in place in 5 member states only and advocated by the Commission for the whole EU, would endangered the viability of the efficient German and Spanish subsidies system, according to their governments. The pressure of the Madrid-Berlin front, with the support of other states like Slovenia and Latvia and the European lobby of renewable energy producers (European Council of Renewable Energy) succeeded in convincing the Commission to modify its earlier drafts and to discard the trading system[29].

Conclusions

The genesis of the renewed European energy policy has coincided with the transformation of Spanish energy structure. Spain still is structurally vulnerable (strong external dependency, energy isolation, inefficiency and ecological impact) in its production model, and this fact jeopardizes its role in the European framework. Nevertheless, the private and public initiatives to diversify in the gas sector and the success of wind energy anticipate a more decisive and differentiated role within the EU.

Although election results may be crucial to determine possible changes in some policies, for instance whether or not the official position will remain clearly set against nuclear energy, it is highly likely that the new government, whichever political sign it has, will keep renewable energy and the improvement of connections (both electricity grid connections and pipelines) as priorities. Improved interconnection with a more

liberalized and integrated gas market, where Spain could become a new distribution hub, and the evolution of the renewable energy sector, in particular once subsidies start to decline, will be the main conditions that will determine what impact Spain can have on Europe's energy policy.

Notes

[1] Directives 68/414/CEE, 73/238/CEE and 98/93/CEE conveyed to Member States the IEA obligation to hold emergency oil stocks equivalent to 90 days of net imports. The Commission tries to convert national obligations into a system of solidarity which includes gas supply, but has met the rejection of the member states.

[2] For a detailed analysis of the current situation, see "Prospects for the internal gas and electricity", COM(2006) 841 final

[3] European Commission (2000) "Green Paper: Towards a European strategy for the security of energy supply". COM(2000) 769. To see the update previsions, European Commission (2006) "European Energy and Transport: trends to 2020- update 2005"

[4] In 2003 the United Kingdom became a net importer of energy. The UK's dependency has increased at 87,5% rate per year on average in the period 2000-2005. In 2004 the British Foreign and Commonwealth Office published an international "Energy Strategy" with a specific policy view, and the following year Netherlands finished a similar document. See "UK International Priorities. Energy Strategy". London, October 28, 2004. http://www.fco.gov.uk/KFile/Energy_Report_2810040.pdf

[5] European Council (2003) "A secure Europe in a better World. European Security Strategy". Bruselas, December 12, 2003.

[6] After enlargement in 1004 the external dependency of EU decreased from 55.6% to 50.4% (EUROSTAT, 2007. Energy data base)

[7] In September 2005 the Russian-German agreement was concluded on the construction of the North European Gas Pipeline ("Nord Stream") through Baltic Sea and by-passing the new EU member states.

[8] The cut of supply affected over all to Hungary and Austria and, to a lesser extent, to Germany, Italy, Poland, Slovenia, Slovakia and France.

[9] European Commission (2006) "Green Paper: A European strategy for sustainable, competitive and secure energy". COM(2006) 105 final

[10] European Council (2006) "An external policy to serve Europe's energy interests". European Commission (2006b) "Communication from the Commission to the European Council. External Relations –From Principles to Action" COM(2006) 590 final

[11] Ernest Wyciszkiewicz(2007) "One for All-All for one –The Polish perspective on External European Energy Policy" *Foreign Policy in Dialogue*, 8(20)

[12] In December 2006, the European Council approved the establishment of the Network of Energy Correspondents as an important tool for collecting, processing and distributing reliable information relevant to the security of energy supplies

[13] See Richard Youngs (2007) "Europe's External Energy Policy: between Geopolitics and the Markets", Centre for European Policy Studies, 278, November.

[14] European Commission (2007a) "An energy policy for Europe" COM(2007) 1 final. European Commission (2007b) "Limiting Global Climate Change to 2° Celsius: The way ahead for 2020 and beyond". COM(2007) 2 final. European Council (2007) "Presidency Conclusions" 8-9, Mach, 2007

[15] The Spanish energy mix is 49% oil, 20% natural gas, 12% nuclear, 14% coal, 6% renewable compared with an EU average of 37% oil, 25% gas, 14% nuclear, 18% coal, 7% renewable. (Eurostat, 2007. Energy Data Base)

[16] Spain's major oil suppliers are: Russia (20%), Mexico (12%), Saudi Arabia (11%), Nigeria (10%), Libya (9%), Iran (8%), Iraq (5%) and Venezuela (5%). The main differences in suppliers between Aznar's and Zapatero's governments are the irruption of Iraqi imports in 2003 - with a

69% increase – under the former, and the doubling of Venezuela's imports with the latter (Ministry of Industry, Commerce and Tourism of Spain, 2006. "La Energía en España 2006")

[17] The liquefied natural gas is transported on LNG carriers on liquid state at low temperature and when it reaches its destination it is regasified in an LNG plant. It is estimated that LNG is more profitable than pipeline gas for distances above 3000 kilometres. Spain is the third worldwide importer behind Japan and South Korea and accounts for 46% of total EU LNG imports.

[18] Spain has taken the European leadership in the sector after Germany and Denmark reached a certain stagnation in this area.

[19] To see the Spanish position in the European energy debate, see "Note from Spanish Delegation to the European Council, 7, February, 2006. 6084/06"

[20] Spain was one of the few countries that supported Polish proposal for a European Energy Security Treaty.

[21] Sonatrach, Algeria's gas monopoly, had entered into a joint venture with Spanish firms Repsol YPF and Gas Natural to explore and commercialize in the from of LNG the gas reserves in the Algerian area of Gassi Touil, in what had been Algeria's first gas project under foreign control. Sonatrach decided to cancel its agreement and transfer Repsol and Gas Natural rights to two American firms, claiming that the Spaniards had not upheld their contractual commitments. Spain's press and the opposition interpreted this decision as a response to the Socialist government new, pro-Moroccan line in the Western Sahara issue, although this link was never made explicit or hinted by the Algerian government. See Cembrero, Ignacio and Carcar, Santiago 'Luz al final del 'túnel' energético con Argelia' *El País,* 30th July 2007, 68.

[22] *El País* reported that a confidential document sent by the Spanish permanent representative to the EU mentioned the Spanish fear of being left out of the game of European bilateral agreements with Russia. "El conflicto energético europeo. Acuerdos Bilaterales". *El País*, 12 November 2006.

[23] See Commission's press releases IP/06/1265 and IP/06/1853 for EON's bid and IP/07/1858 and IP/08/164 for Enel and Acciona's.

[24] The Kyoto's target to cut greenhouse emissions by 8% on 1990 levels by 2012 is over as in 2004 the greenhouse emissions were up to 41,5% and in 2007 up to 49% as the Spanish Ministry of Environment has estimated (there are only official data for 2006).

[25] Paradoxically, the 2006 success of Zapatero's government in cutting greenhouse emissions by 4% was partially due to an outstanding performance of the nuclear sector that year. (Ministry of Industry, Commerce and Tourism 2006. "La energía en España 2006")

[26] The EU Member States situations as far as nuclear energy is concerned are hugely diverse. While in France its share in electricity generation is 78% and in Lithuania it is 72% , there are 12 Member States without nuclear power plants (Austria, Denmark, Greece, Ireland, Italy, Estonia, Cyprus, Latvia, Luxemburg, Poland, Portugal and Malta). France and Finland are the only ones that are building third generation power plants. United Kingdom, Bulgaria, Romania and Lithuania have plans for new plants. Finally, Germany, Belgium, Sweden and Spain keep nuclear moratoria.

[27] European Commission (2006c), *Renewable Energy Road Map. Renewable energies in the 21st century: building a more sustainable future*, COM(2006) 848 final

[28] European Commission (2008) *Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy for renewable sources*, COM(2008) 19 final

[29] In a joint letter sent to the Energy and Transport Commissioner by Joan Clos Matheu, Spanish Minister of Industry, Commerce and Turism of Spain and Signar Gabriel, German Minister for Environment, Nature Conservation and Nuclear Safety to the Energy Commissioner, Andris Piebalgs. Madrid, 10 January, 2008. http://www.euractiv.com/29/images/Spain%20Germany%20RE%20letter_tcm29-169554.pdf.
See, for example, the open setter of the president of European Council of Renewable Energy, Arthouros Zervos, to the president of the European Commission. Brussels, 14 January, 2008. http://www.erec.org/fileadmin/erec_docs/Documents/OPEN_LETTER_President_Barroso.pdf

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