

Public Acceptance of Nuclear. European and Spanish Perspectives¹

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Public acceptance of nuclear energy has been rising over the past years. This is true for Spain as well, where nuclear is less supported than in the European average. In parallel, the European Commission has been and is taking steps to establish an advanced legal frame for the sector, reflecting a renewed interest in this source of energy across the continent. This article looks at a series of opinion polls on nuclear energy, carried out for the European Commission over recent years, and presents major developments on nuclear at European level.

La aceptación pública de la energía nuclear ha ido en aumento en los últimos años. Esto es cierto para España donde el apoyo nuclear es menor que la media europea. Paralelamente, la Comisión Europea está tomando medidas para establecer un marco jurídico avanzado para el sector, lo que refleja un renovado interés en esta fuente de energía en todo el continente.

Este artículo analiza una serie de encuestas de opinión sobre la energía nuclear, llevadas a cabo por la Comisión Europea en los últimos años, y presenta los principales acontecimientos ocurridos en el sector nuclear a nivel europeo



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Public acceptance is becoming more and more relevant in debates on energy, including nuclear. Drawing from public opinion polls carried out for the European Commission this article highlights certain aspects of how Europeans and Spaniards look at this source of energy and what initiatives the European Union is taking to address the concerns of the public.

WHAT DO THE EUROPEANS THINK OF NUCLEAR?

The so-called Eurobarometers², for which some 27,000 Europeans are interviewed, give on the one hand a good overview of what the average European thinks. On the other hand they also provide a comparison of the situation in the 27 countries of the European Union.

A poll of March 2008 shows that while the Europeans are still split on nuclear, support is growing: 44% of the Europeans are in favour, 45% against using nuclear. Compared to 2005, sup-

port has gone up by 7 percentage points, opposition is down by 10.

Support for nuclear, however, varies widely: between genders (54% of the males in favour, 52% of the females opposed), level of education (with the better educated more supportive of nuclear), and between countries.

Support for nuclear is typically higher in Member States with nuclear programmes. This is particularly true for Finland and Sweden where dialogue and transparency are key elements of society. And it is also true for the new Member States in the East. The exceptions to this general rule are Romania and Spain where support is relatively lower.

Europeans would be even more supportive of nuclear if they could be convinced of the solutions that are in the making. If the public can be persuaded that there is a safe and permanent solution for radioactive waste, 62% would approve of this source of energy.

In the most recent poll of 2009, the citizens continue to see more risks in nuclear than benefits. 51% compared to 53% three years ago say that the risks of nuclear outweigh its benefits. 35% compared to 33% see higher benefits than risks. Looking at the future use of nuclear, support is up. The share of people who want to maintain or increase nuclear's position in the energy mix went up from 48% to 56%. In Spain 42% support this view, whereas 49% would prefer to reduce its share.

All in all, the Europeans accept that nuclear contributes to secure supplies of energy, stable prices and mitigating climate change. Two in three think that nuclear makes us less dependent on fuel imports such as gas and oil. Every second European believes that nuclear ensures more competitive and more stable energy prices. 46% share the view that nuclear helps to limit climate change.

What are then the concrete concerns of the public? 59% of the Europeans believe that a plant can be run safely. Roughly, half think that the national regulator does its job, that legislation sufficiently ensures safety and trust the operators. Only 40% believe that radioactive waste can be disposed of in a safe manner, 39% consider that nuclear materials are protected against misuse and only 30% think that plants are sufficiently secured against terrorist attacks.

Trust is the key in communication and in nuclear in particular as it tells

¹This article contains the personal views of the author and does not engage, in any way, the European Commission.

²http://ec.europa.eu/public_opinion/index_en.htm; The following Special Surveys have been used for this article: 324 Europeans and nuclear safety, 322 Europeans' attitudes towards climate change, 297 Attitudes towards radioactive waste, 271 Europeans and nuclear safety.

you who can credibly communicate nuclear issues. 46% of our citizens consider scientists as the most trusted source, followed by regulators, international organisations and journalists.

There are a few lessons that the nuclear sector can learn from these polls:

- First of all, the nuclear sector should take more efforts to move from a culture of secrecy to a culture of transparency.
- Secondly, communicating on nuclear should be as professional as operating a plant. Arguments should be based on facts; they must be objective and credible.
- And thirdly, moving forward on the issues of concern and, in particular on waste, is a must.

These are issues that the nuclear sector has largely in its hands.

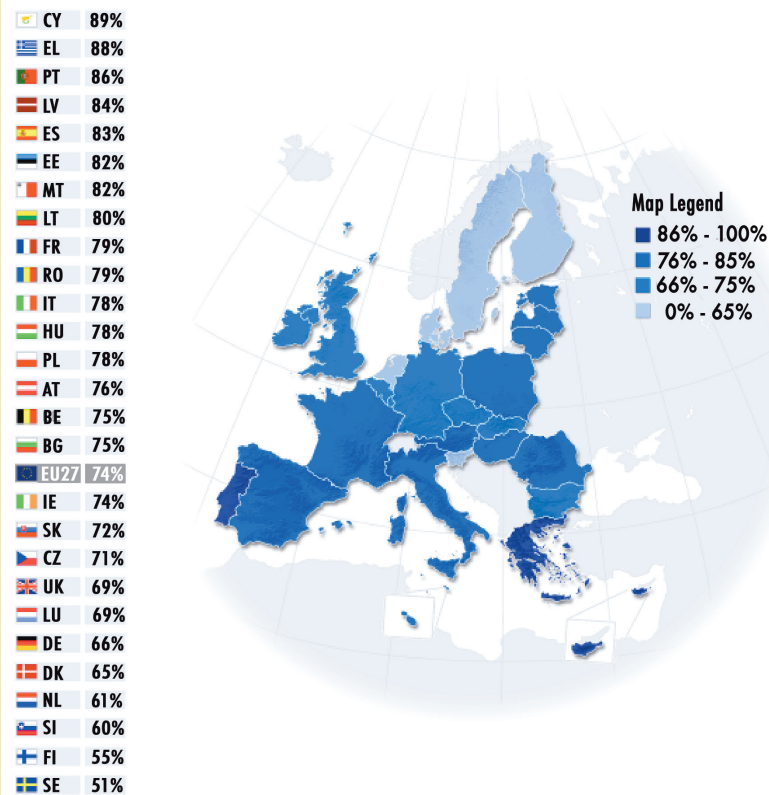
SITUATION IN SPAIN

The data above showed that the Spanish citizens are less in favour of nuclear than the European Union as a whole. On the positive side, support for nuclear has gone up between 2005 and 2008 from 16 to 24%, which in fact is an increase of 50%.

The Eurobarometers show, among others, three differences that may contribute to this result:

- Climate change is of a slightly lower concern to the Spanish citizens;
- The Spaniards fear nuclear more than the average European, and
- The knowledge of energy and nuclear issues is a bit more limited.

Climate change, one of the drivers of renewed interest in nuclear across the continent, is considered by fewer Spaniards as one of the most serious problems currently facing the world as a whole. Shortly before the Copenhagen summit, 40% of the Spaniards shared that view compared to 47% at EU level, 75% in Sweden, 57% in France and Germany, but ahead of the 32% in Italy.



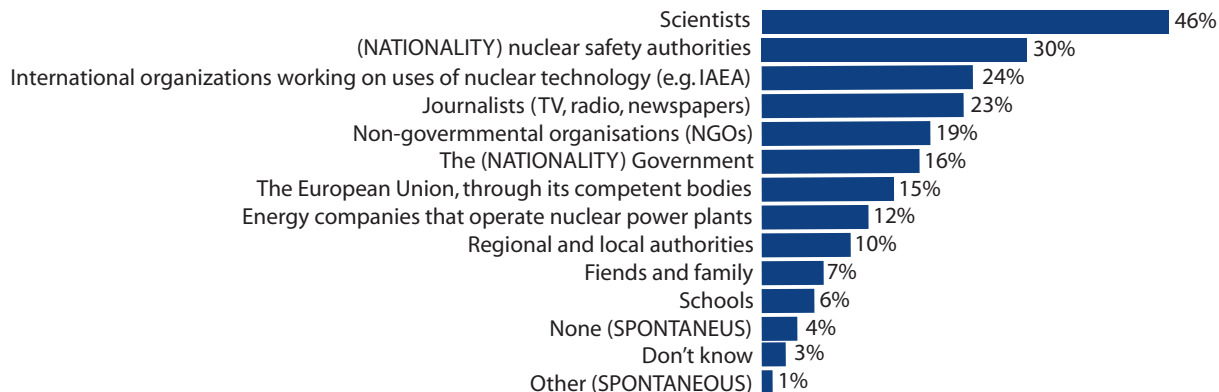
Question: How informed do you think you are about the safety of nuclear power plants?
Answers: Not very well informed+Not at all informed.

Six in ten think that the risks of nuclear outweigh its benefits. This is the highest share we see in any Member State with a nuclear programme. When asked whether reactors are a risk to them and their family, 73% of Spaniards confirm this risk compared to 52% in Europe. This is topped only by Greece, where eight in ten fear this risk.

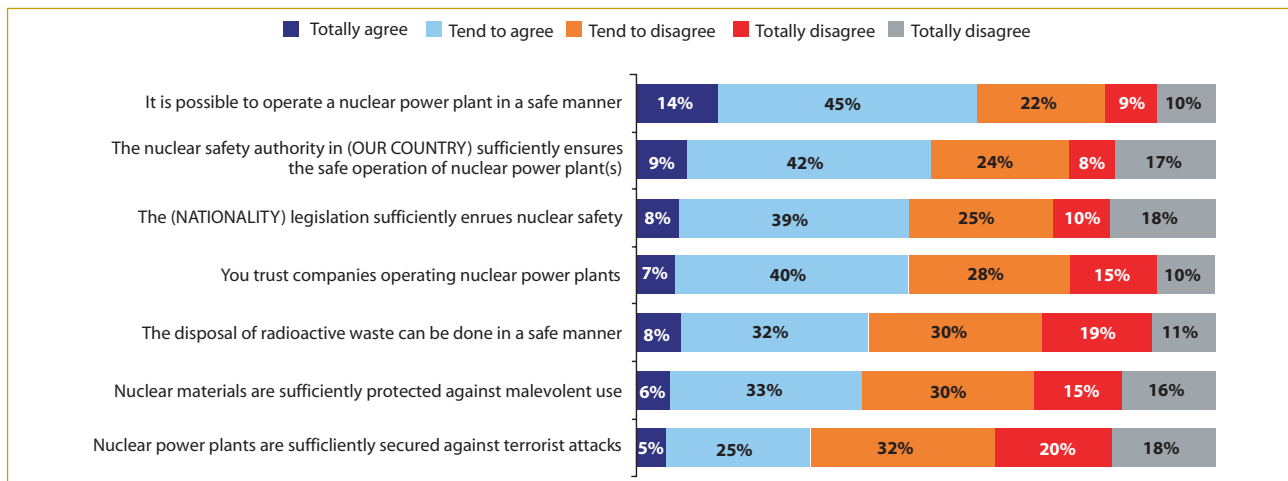
In addition, the Spanish public does not feel informed. 83% of the Spanish citizens declared themselves as not very well informed or not at all informed about the safety of nuclear plants, compared to 74% as European average or, for example, 51% of the Swedes.

Participants of the poll were presented, in addition, factual statements about nuclear issues and asked whether they think they are true or not. Comparing their replies with reality results in a measure for the level of knowledge of nuclear issues. While about more than every second answer was correct in Europe as a total, this share in Spain was at 42%.

This matters as the polls demonstrate a clear link between knowledge and acceptance of nuclear. Member States with a higher knowledge on nuclear issues tend to accept this source of energy more readily. This certainly displays an area for action in Spain.



Question: Which three of the following would you trust most to give you information about nuclear energy, especially nuclear safety?



Question: What extent do you agree or disagree with each of the following statements? -% EU27.

WHAT IS EUROPE DOING ON NUCLEAR?

The public concerns expressed, as well as the general developments on energy, made the European Union act on nuclear, even more than in the past.

The drastic increases of energy prices, climate change and gas conflicts put energy policy on the agenda of EU leaders and made them agree three years ago to deal with it in a common approach and include energy in the Lisbon Treaty that entered into force on 1 December. The common goal is sustainable, affordable and reliable supply of energy.

Nuclear has a clear role to play in this triangle, above all here in Europe, where nuclear generates a third of electricity and two thirds of low-carbon electricity.

At the political level, the European Union is in the process of defining an integrated energy and climate policy, which takes this role of nuclear into account. In the vision for 2050, energy efficiency is a key element, while the electricity needed should come largely from renewables and nuclear, for Member States that wish to do so, and clean fossils, where CCS still needs to be proven reliable, acceptable and affordable.

Governance for a renewed interest in nuclear

To deal with the renewed interest in nuclear across the European Union and to progress on particular issues, the European Commission, with support of the Member States, established fora beyond the institutions laid down in the Euratom Treaty:

The safety authorities have been assembled in the European nuclear safety regulators group (ENSREG). Research and innovation are the focus of two technical platforms: one on sustainable nuclear energy technologies and a second one on geological disposal. All stakeholders have been invited to the European Nuclear Energy Forum (ENEF), where they discuss, without taboos, the opportunities and risks

of nuclear energy as well as transparency issues.

Focus on the concerns of the public

Europe is the global leader on nuclear – be it on generation with about 145 reactors, be it on other stages of the fuel cycle including the design and construction of reactors. If we want to maintain that position, we fully need to respect the highest standards of safety, security and non-proliferation. And this is a clear political priority of the European Union.

Safety

To this effect, the Commission had proposed as a first step a nuclear safety directive that the Council adopted with the support of all 27 Member States and the European Parliament in June last year. This piece of legislation makes the European Union the first major regional actor to have legally binding safety rules based on the international principles.

In addition, an ENEF working group and the Commission are reviewing the design licensing procedures in Member States. If it is possible and makes sense, the Commission might take this issue further up in the coming years.

Nuclear safety is, of course, also embedded in the Commission's international cooperation. Currently, actions are for example running in Ukraine and Belarus.

Non-proliferation

Making sure that nuclear materials of the civil cycle do not end up in bombs – this was not only the objective of the nuclear security summit hosted in April by the American government, it is also the main goal of the Euratom safeguards system. Inspectors of the European Commission perform roughly 2000 inspections per year all over Europe. The system is unique as it is legally binding and has strong powers against operators, from access to materials

to severe sanctions. This actually makes the safeguards chapter one of the strongest of the whole Euratom Treaty.

Euratom as one of the EU's founding treaties predates the IAEA system – both institutions cooperate closely – today more than ever and way beyond safeguards.

Waste

Activities on waste have multiplied over recent years – both above ground and in some Member States already under ground.

Apart from an ENEF working group that has for example worked out a roadmap to implement geological disposal as guidance to EU Member States starting this process, the Commission has received strong demands to legislate on waste from the public via the Eurobarometers mentioned above, Member States, other EU institutions but also the regulators.

The European Commission, from President Barroso and Commissioner Oettinger to the management and the colleagues in the Directorate-General for Energy, is strongly committed to follow up on this issue. A legal initiative will be presented before the end of the year. The open public consultation for this initiative runs until 31 May on the Commission's website.

CONCLUSION

Public acceptance is one of the key drivers for the further use of nuclear. Gaining the trust needed was not always a priority of many a utility in the past and becomes, therefore, more urgent today – not only for an individual enterprise, but for the sector as a whole.

As nuclear along with energy efficiency and renewables will help to deal with the challenges of energy policy today and tomorrow, the European Commission, as announced in March by President Jose Manuel Barroso, remains committed to establish the frame for the most advanced safety, security and non-proliferation standards. This will allow this sector, in Member States that wish to do so, to exploit nuclear in a safe, sustainable and optimal way. ■