

# EDITORIAL



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## THE SPANISH NUCLEAR SECTOR: A FRONT-LINE INDUSTRY

The Spanish nuclear industry is, day after day, achieving excellent results at the international level.

In this editorial, we will review the capabilities of the nuclear industry, which is understood to include engineering firms, construction and erection, fuel manufacturing and equipment manufacturing companies, and plant operation service, equipment inspection, quality and training and waste management firms. More than 70% of its business is currently focused on export and it is present in nuclear projects in more than 40 countries.

The Spanish nuclear sector is a world reference and is present in international exhibitions, which it attends on a coordinated basis and, on many occasions, with the support of ICEX España Exportación e Inversiones, a nationwide public enterprise whose mission is to promote the internationalization of Spanish companies. For instance, this year five Spanish companies were present in the China Nuclear Industry trade fair held in Beijing, another ten companies took part in the 2016 World Nuclear Exhibition in Paris that had 10,000 visitors, and six companies from our country's nuclear sector participated in the Spanish Nuclear Conference held in Tokyo, Japan.

In Spain, equipment manufacturing has evolved on the basis of the already existing industry, to which new capabilities have gradually been added. This includes the manufacturing of main equipment and turbine generators, and also cranes, valves, piping, boilers and accessories, heat exchangers, fuel handling and storage equipment and a large number of components subject to strict quality assurance systems.

Spanish engineering and service firms supply solutions and provide services to practically all the types of nuclear reactors in operation, and they provide support to the construction management of new power plants and the operation and maintenance of operating plants in both Spain and other countries.

On the other hand, we have a significant participation in project ITER. Spain ranks third in contracting in a highly competitive market, which gives an idea of the high technological level of our companies. Some 40 companies currently work on this project, with contracts worth more than 630 million EUR.

With regard to fuel manufacturing, an internationalization process began more than 20 years ago. In recent years more

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spanish nuclear  
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than 70% of total production has been for the export of fuel assemblies to nuclear power plants in Belgium, France and Sweden.

In the area of radioactive waste management in Spain, in addition to the national activities and research and development in the field of wastes, the industry takes part in a multitude of projects providing technical assistance to Eastern European and Latin American countries to improve and adapt their waste management systems.

One of the main characteristics of the nuclear sector is the focus on research and development, in which an average 2% of total income is invested; this is double and in some cases quadruple the investment made by other important sectors in the country. On the other hand, innovation is a fundamental part of the sector companies, where in some cases up to 30% of the projects are related to R&D activities.

However, in spite of this powerful nuclear sector, if we analyze the future of electricity generation with nuclear power in Spain, in the short term the political uncertainty and the effect of fiscal measures stand in the way of optimism. Even so, it must be acknowledged that we have an excellent technology and very good internationally recognized, highly qualified professionals and that we generate more than



20% of the country's electricity, thereby contributing 2,800 million EUR a year to the Spanish GDP and 60% emission-free electricity generation. All this gives an idea of the important role played by nuclear power and the need to count on this energy for decarbonization of the planet.

The Spanish Nuclear Society considers that it is essential to follow the lead of important countries in this field, where nuclear energy plays an important role and is part of a balanced, sustainable energy mix in which, together with the renewable energies, it contributes to environmental conservation.

In any case, the SNE believes that we should be optimistic about what is happening in the world.

The developing countries are going to use nuclear energy because of its competitiveness, contribution to securing the supply and environmentally friendly nature. The Arab, Latin American, African and Asia-Pacific countries that already have projects thus join the European countries such as United Kingdom, France and Finland that have decisively committed to and support nuclear energy. The Spanish Nuclear Society is convinced that, as economic conditions improve, more and more countries will continue along this path of both new plant construction and long-term operation of the existing plants under safe, reliable conditions.

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