

# SPAIN

## 1. LOCATION AND CAPABILITY OF NUCLEAR FACILITIES

Spain relies primarily on coal and hydroelectric power in meeting its energy needs. Spain developed nuclear energy in the early 1950s; currently nuclear energy contributes nearly 30% of total energy production. Nuclear power reactors in the country required 1,629 tons uranium in 2004. The Ministry of Economy and the Nuclear Safety Council are the main governmental authorities responsible for nuclear energy matters. <http://www.world-nuclear.org/info/reactors.htm>  
[http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/CNPP\\_Webpage/countryprofiles/Spain/Spain2003.htm](http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/CNPP_Webpage/countryprofiles/Spain/Spain2003.htm)

### Power Reactors

Operational: 10

Shut down: 1

Decommissioned:

Planned: 0

<http://www.iaea.or.at/programmes/a2/>

### Research Reactors

Operational: 0

Shut down: 1

Decommissioned: 3

Planned: 0

<http://www.iaea.or.at/worldatom/trddb/>

### Uranium Mines

La Haba (Badajoz)- restoration ongoing

Saelices el Chico (Salamanca)- closed

<http://www.antenna.nl/wise/uranium/uddes.html>

### Fuel Fabrication

Empresa Nacional del Uranio, S.A. (Enusa) owns the fuel fabrication plant Juzbado, which produces nuclear fuel for light water reactors, and has a capacity to produce 300 tons of enriched uranium per year. It also manufactures uranium oxide fuel for water power stations as well as gadolinium oxide fuel rods. <http://www.foronuclear.org/>

## 2. FISSILE MATERIAL HOLDINGS

### Unirradiated Civil Plutonium

In country: 0.1 ton

In other countries: 0.1-1 ton

Total: 0.2-1.1 tons

[http://www.isis-online.org/global\\_stocks/separated\\_civil\\_pu.html](http://www.isis-online.org/global_stocks/separated_civil_pu.html)

### Separated Civil Plutonium

end 2002: 0.2-1 ton

2010-2020 (projected): 1 ton

### Radioactive waste disposal

*Low- and intermediate-level waste:* Low- and intermediate-level waste is stored at the El Cabril disposal facility in Córdoba, operational since 1992. In 2002, a temporary dry storage facility was started at the Trillo nuclear power plant, which houses the spent fuel in metallic casks for transport and temporary storage.

[http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/CNPP\\_Webpage/countryprofiles/Spain/Spain2003.htm](http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/CNPP_Webpage/countryprofiles/Spain/Spain2003.htm)

*High-level waste:* The government is scheduled to make a decision in 2010 about the technology to be used for the final management of spent fuel. In the meantime, the government made decisions to extend the on-site storage capacity of nuclear power plants. [http://www.cowam.com/article.php3?id\\_article=34](http://www.cowam.com/article.php3?id_article=34)

## 3. NUCLEAR ACTIVITIES

### Research Centers

CIEMAT: Research and Development Centre

UNESA: Asociacion Espanola de la Industria Electrica

Asociación de la Industria Navarra

COFIS: Colegio Oficial de Fisicos  
Consejo Superior de Investigaciones Cientí  
CSIC: Inst of Nuclear Fusion  
RedIRIS, Spanish National Research Network  
Laboratori de Radioactivitat Ambiental  
<http://www.radwaste.org/research.htm>

### **Nuclear Cooperation**

Spain participates in the programs of the EU and collaborates with other EU members, including the R&D Framework Program, Community Action Plan, PHARE, TACIS, and Chernobyl Shelter Implementation Plan. Spain is a member of Nuclear Energy Agency (NEA/OECD) and International Atomic Energy Agency (IAEA).

[http://www-pub.iaea.org/MTCDB/publications/PDF/cnpp2003/CNPP\\_Webpage/countryprofiles/Spain/Spain2003.htm](http://www-pub.iaea.org/MTCDB/publications/PDF/cnpp2003/CNPP_Webpage/countryprofiles/Spain/Spain2003.htm)

## **4. INTERNATIONAL NON-PROLIFERATION EFFORTS**

### **Treaties Signed and Ratified, date of deposit**

APM Convention 19 January 1999  
Biological Weapons Convention 20 June 1979  
Certain Conventional Weapons Convention 29 December 1993  
Comprehensive Nuclear Test Ban Treaty, 31 July 1998  
Chemical Weapons Convention 13 January 1993  
Nuclear Non-Proliferation Treaty, 5 November 1987  
Outer Space Treaty, 27 November 1968  
Sea Bed Treaty, 18 May 1972

Spain ratified the IAEA Additional Protocol 30 April 2004.

### **Multilateral Groups**

Conference on Disarmament  
Hague Code of Conduct against Ballistic Missile Proliferation  
Missile Technology Control Regime  
Nuclear Suppliers Group  
Proliferation Security Initiative  
Wassenaar Arrangement  
Zangger Committee

## **5. POSITIONS TAKEN IN INTERNATIONAL FORA ON VARIOUS ISSUES OF NUCLEAR DISARMAMENT**

*Security Council Resolution 1540*: “Disarmament and non-proliferation are closely associated concepts in international practice. Clearly, disarmament can help prevent non-state actors from acquiring weapons of mass destruction, but this resolution is not going to assure that the States that possess WMD will accelerate the fulfillment of their disarmament obligations derived from international treaties, nor that the parties to these Treaties will adhere to them.” - **Statement by Spain in the Open Debate of the Security Council on the draft resolution on non-state actors and weapons of mass destruction (SC resolution 1540), April 22, 2004. (unofficial translation)**

[http://www.reachingcriticalwill.org/political/SC/SC\\_WMD\\_Spain.pdf](http://www.reachingcriticalwill.org/political/SC/SC_WMD_Spain.pdf)

*Nuclear Weapon-Free Zones*: “It is worth restating that my country has always considered Nuclear-Weapon-Free Zones as an important contribution to strengthening international peace and security and that it, therefore, fully shares the goals set by the Treaty of Pelindaba... Nevertheless, Spain, as it stated immediately after the adoption by consensus of this resolution in 1997, 1999 and 2001, does not consider itself bound by the said consensus as far as operative paragraph 3 (to ensure a nuclear-free