

## 1. Location and capability of nuclear facilities

Two nuclear reactors generate about 10% of Argentina's electricity. Since the 1950s, Argentina has pursued nuclear energy and technological development programs. The country was suspected of achieving a high capability of producing material, in order to produce nuclear weapons. With the fall of the military regime in the 1980s and implementation of nuclear confidence-building agreements with the countries long-time nuclear competitor Brazil, Argentina began the transition into non-proliferation, bringing the nuclear program under civilian support. The first commercial nuclear power reactor has operated since 1974, and today Argentinean electricity is largely privatized. <http://www.uic.com.au/nip96.htm>

In August 2006, the government announced a \$3.5 billion US strategic plan for the country's nuclear power sector. This involves completing Atucha-2 (construction started in 1981 but was suspended in 1994 with only 80% of the work complete, due to lack of funds) and extending the life of Atucha-1 and Embalse. Extending the life of the Embalse CANDU-6 type plant by 25 years in partnership with Atomic Energy of Canada Ltd is expected to cost \$400 million. Completing Atucha-2 by 2010 is expected to cost US\$ 600 million, including 600 tonnes of heavy water for \$400 million.

<http://www.uic.com.au/nip96.htm>; <http://www.world-nuclear.org/info/inf96.html>

<http://www.ceip.org/programs/npp/nppargn.htm>; [http://www.nti.org/e\\_research/profiles/Argentina/index.html](http://www.nti.org/e_research/profiles/Argentina/index.html)

### Power Reactors

Operational: 2 (Atucha-1; EMBALSE)

Under Construction: 1 (Atucha-2)

<http://www.iaea.org/programmes/a2/index.html>

### Research Reactors

Operational: 5 (RA-0; -1; -3; -4; & -6)

Shut Down: 2 (RA-2; RA-8)

Decommissioned: 0

Under Construction: 0

Planned: 0

<http://www.iaea.org/worldatom/rrdb/>

### Uranium Enrichment Plants

The construction of Pilcaniyeu was initiated in 1978 by the military junta. In 2000 the enrichment plant was the first plant in the world using gaseous diffusion technology to be placed under IAEA safeguards. Enrichment services are currently imported from the USA. In August 2006, Argentina's Atomic Energy Commission announced that it wanted to recommission the enrichment plant, using its own Sigma advanced diffusion enrichment technology, which is said to be competitive. It proposed to restart enrichment on a pilot scale in 2007. The main reason is to keep Argentina within the circle of countries recognised as having the right to operate enrichment plants.

<http://www.uic.com.au/nip96.htm>; <http://www.ceip.org/programs/npp/nppargn.htm>

<http://www.globalsecurity.org/wmd/world/argentina/pilcaniyeu.htm>

### Uranium Mines

#### *Active and Proposed*

Sierra Pintada/San Rafael Mine (Mendoza)

San Rafael Mill (Mendoza)

Cerro Solo (Chubut)

<http://www.antenna.nl/wise/uranium/uosam.html>Uranium Mines

#### *Decommissioned*

Don Otto (Salta)

Schlagintweit (Cordoba)

La Estela (San Luis)

Dr. Baulies (Mendoza)

Huemul (Mendoza)

Los Adobes (Chubut)

Los Colorados (La Rioja)

<http://www.antenna.nl/wise/uranium/uddsam.html#AR>

## Reprocessing Facilities

In the late 1960s the Ezeiza facility was built to extract plutonium from spent reactor fuel. The facility was closed in 1973, and in 1978, construction of a second reprocessing facility at Ezeiza with a higher capacity began. Economic constraints and political pressure from the US put an end to the project in 1990.

<http://www.ceip.org/programs/npp/nppargn.htm>; <http://www.antenna.nl/wise/uranium/efac.html>

<http://npc.sarov.ru/english/digest/22001/appendix8.html>

## 2. Fissile Material Holdings

**Separated Civil Plutonium:** 2.4 tons (end 2003)

[http://www.isis-online.org/global\\_stocks/end2003/plutonium\\_watch2005.pdf](http://www.isis-online.org/global_stocks/end2003/plutonium_watch2005.pdf)

**Highly Enriched Uranium:** 0.012 tons (end of 2003)

Supplier- US

[http://www.isis-online.org/global\\_stocks/end2003/civil\\_heu\\_watch2005.pdf](http://www.isis-online.org/global_stocks/end2003/civil_heu_watch2005.pdf)

### Radioactive waste disposal

*Low- and intermediate-level waste:* Low- and intermediate-level wastes, including spent fuel from the research reactors, are handled at Ezeiza.

*High-level waste:* Spent fuel is stored at each power plant. There is a dry storage at the Embalse plant. <http://www.world-nuclear.org/info/inf96.htm>

## 3. Nuclear Activities

### Nuclear Research Centers

CAB - Centro Atómico Bariloche - Instituto Balseiro

CAC - Centro Atómico Constituyentes

CAE - Centro Atómico Ezeiza

Invap

Pierre Auger Project

Universidad Nacional de Cuyo

<http://www.radwaste.org/research.htm>; <http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/index.htm>

### Nuclear Cooperation

*US:* US designed a research reactor, RA-1, built in 1958 at Constituyentes. The construction of the reactor sparked the Argentina-Brazil nuclear rivalry.

*Germany:* In 1968, Argentina purchased a 320 Mwe reactor from a West German company, Siemens, for the Atucha I nuclear power station. <http://www.ceip.org/programs/npp/nppargn.htm>  
<http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/index.htm>

*Australia:* In 2001, negotiations of a Nuclear Cooperation Agreement between Australia and Argentina began. This agreement would enable the construction of a nuclear reactor in Australia and allow Australia to store its radioactive waste in Argentina. This proposal was met with strong opposition from international and local NGOs; the agreement would be a violation of Argentina's constitution, which forbids the import of nuclear waste. [http://www.foe.org.au/mr/mr\\_21\\_12\\_01.htm](http://www.foe.org.au/mr/mr_21_12_01.htm)

*Egypt:* In 1996, Argentina constructed a nuclear reactor in Egypt with capabilities of producing sufficient fissile material for nuclear weapons production. <http://www.wisconsinproject.org/countries/egypt/nuke.html>

*Egypt, Algeria, Australia:* Argentina has exported nuclear reactors for research and radioisotope production to Egypt, Algeria, and Australia. <http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/index.htm>

*Iran:* In 1993, Argentina supplied Iran with 115.8 kg of 20% enriched uranium fuel.

<http://www.idds.org/acr2003/453e2MEN03.html>

## 4. International Nonproliferation Efforts

### Treaties Signed and Ratified, Date of Deposit

Antarctic Treaty, 23 June 1961  
APM Convention, 14 September 1999  
Biological and Toxin Weapons Convention, 27 November 1979  
Certain Conventional Weapons Convention, 2 December 1981  
Chemical Weapons Convention, 2 October 1993. Nuclear Activities  
Comprehensive Nuclear Test Ban Treaty (CTBT), 4 December 1998  
Convention on Nuclear Safety, 16 July 1997  
Convention on Physical Protection of Nuclear Material, 6 May 1989  
Convention on Supplementary Compensation for Nuclear Damage, 14 November 2000  
Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials, 13 August 2001  
Inter-American Convention on Transparency in Conventional Weapons Acquisitions, 2 March 2004  
Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, 18 June 2001  
Mendoza Commitment, September 1991  
Nuclear Non-Proliferation Treaty, 10 February 1995  
Outer Space Treaty, 26 March 1969  
Seabed Treaty, 21 March 1983  
Treaty of Tlatelolco, 18 January 1994  
Vienna Convention on Civil Liability for Nuclear Damage, November 1977  
Argentina has not yet signed the IAEA Additional Protocol.

### Multilateral Groups:

Australia Group  
Missile Technology Control Regime (MTCR)  
Nuclear Export Guidelines  
Nuclear Suppliers Group  
Wassenaar Agreement  
Zangger Committee

[http://www.nti.org/e\\_research/official\\_docs/inventory/pdfs/mendoza.pdf](http://www.nti.org/e_research/official_docs/inventory/pdfs/mendoza.pdf)

[http://www.iaea.org/Publications/Documents/Conventions/liability\\_status.pdf](http://www.iaea.org/Publications/Documents/Conventions/liability_status.pdf); <http://first.sipri.org/index.php>

## 5. Positions Taken in International Fora on Various Issues of Nuclear Disarmament

*WMD*: “In the field of Weapons of Mass Destruction, we continue actively promoting universality and strengthening of existing disarmament and nonproliferation legally binding instruments, with a view to strengthen the basis of shared security.” - **Statement by Ambassador Cesar Mayoral to the 61st session of the General Assembly First Committee on Disarmament and International Security, New York, 2 October 2006.** <http://www.reachingcriticalwill.org/political/1com/1com06/statements/Argentinaoct2.pdf>

*Security Assurances*: “As far as Argentina is concerned, the use of nuclear weapons in self-defense in response to an attack using conventional weapons cannot be justified under international law, because it is not proportionate to the objective of the defensive action as acknowledged by the United Nations Charter in Article 51, as has repeatedly been stated by the International Court of Justice, which has emphasized the requirement of proportionality as an essential element of self-defence. We urge the nuclear-weapon States to review the interpretative declarations they made on signing the additional protocols to the Treaty of Tlatelolco with a view to their complete withdrawal.” - **Statement by Ambassador Minister Marcelo Valle Fonrouge to the Conference on Disarmament, Geneva, 28 February 2006.** <http://www.reachingcriticalwill.org/political/cd/speeches06/28february.htm#Argentina>