

Argentina

IAEA Member State since October 1957

Selected achievements

2024: The National Atomic Energy Commission is designated as Latin America's first Rays of Hope Anchor Centre.

2017: Isotope techniques improve water resource management and support land planning and remediation.

Since 2015: Nuclear medicine and radiotherapy services are improved with the launch of the Nuclear Medicine National Plan and ongoing efforts since then to expand access country-wide.

2015: The Atucha II Nuclear Power Plant achieves criticality with 100 per cent of rated power.

National priorities

- Nuclear medicine and radiotherapy
- Production of radioisotopes and radiopharmaceuticals
- Radiation technology for industrial applications
- Insect pest control
- Nuclear power plant lifetime management
- Uranium mining and exploration
- Management of radioactive waste

Main areas of IAEA support

- Small modular reactor construction
- National Nuclear Medicine and Radiotherapy Plan implementation, including proton therapy
- Production of radioisotopes
- Ageing management of nuclear power plants and research reactors
- Strengthening national radiation safety infrastructure through innovative technologies
- Capacity building



One of the many groups of young professionals trained in radiation protection and nuclear safety by Argentina's Nuclear Regulatory Authority (ARN) (Photo: ARN)

Project successes

Nuclear knowledge development and management

Collaboration with the IAEA has resulted in major advancements in fields such as nuclear energy and the fuel cycle, and the application of nuclear technology in environmental protection and the health and industrial sectors.

For example, at the Balseiro Institute, an interactive simulator was used to train regional participants on research reactor transients; staff at the Sabato Institute acquired crucial knowledge on materials science and technology; and the Dan Benison Institute delivered training specialised in advanced applications of nuclear technology.

In 2018 and again in 2022, the National Atomic Energy Commission (CNEA) was designated as an IAEA Collaborating Centre. The Nuclear Regulatory Authority (ARN) is the regional training centre in Latin America and the Caribbean for nuclear, radiation, transport and waste safety. Throughout the 21st century, 670 professionals from the region completed regular postgraduate training courses to build capacity in radiation protection and nuclear safety.

Water and the environment

With IAEA support, nuclear and isotopic techniques were introduced for water resource management and land planning in Argentina, helping to remediate mining sites with environmental liabilities.

For example, in 2017 Argentina successfully completed the environmental restoration of a uranium mining site in Malargüe, Mendoza Province — a first for Argentina and the region.

Other studies carried out in Los Gigantes, Cordoba and in the Uspallata-Yalguaraz basins, Mendoza, provided information on water age, transit time, groundwater-surface water interactions and dam leakages — paving the way for new activities in the region such as agriculture, mining and tourism.

In addition, Argentina established a stable isotope laboratory at CNEA equipped with advanced tools for comprehensive water resource management.

Health and nutrition

In 2015, Argentina launched a nationwide initiative to expand and improve access to nuclear medicine and radiotherapy services with IAEA support in the form of specialized equipment and training.

The first Latin American proton therapy centre of the southern hemisphere is currently under construction in Argentina. Proton therapy is a highly innovative form of cancer treatment which is particularly effective for treating certain types of cancers, including childhood cancer.

Argentina's pivotal role in building radiation medicine capacity and expertise in the region was recognized in 2024 when the National Atomic Energy Commission was designated as Latin America's first Rays of Hope Anchor Centre.

Participation in the major initiatives

- Atoms4Food
- Atoms4NetZero
- NUTEC Plastics
- Rays of Hope
- ZODIAC

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

