

Romania

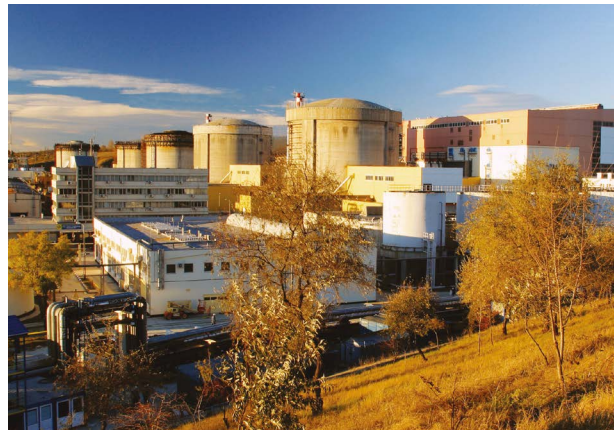
IAEA Member State since April 1957

Selected achievements

2023: The Cernavoda Unit 1 refurbishment project for engineering, technology and component modernization is processed.

2002: Decommissioning of the VVR-S research reactor is conducted.

2015–2023: 16 national radiotherapy centers are upgraded with modern diagnosis and treatment equipment within the framework of Romania's collaboration with the IAEA and the World Bank.



Cernavoda nuclear power plant. (Photo: Nuclearelectrica)

National priorities

- Nuclear safety and security
- Food and agriculture
- Human health and nutrition
- Energy and industry
- Nuclear capabilities

Main areas of IAEA support

- Governmental and regulatory infrastructure
- Radioactive waste management and decommissioning
- Radiation oncology and medical physics
- Radioisotopes and radiation technology
- Capacity building and nuclear knowledge management
- Food safety

Project successes

Human health

The Romanian Ministry of Health advanced Romania's cancer care capabilities with IAEA support.

The IAEA facilitated the procurement and installation of modern radiotherapy equipment through a Health Sector Reform Project for 12 national centres, significantly reducing patient waiting times from 60 days to under 2 weeks.

The IAEA also provided extensive training for clinical staff in line with European standards.

Today, the upgraded infrastructure enables advanced treatment techniques, marking a substantial leap in the national fight against cancer and setting the stage for ongoing developments.

Nuclear energy

In 1996, Romania completed the construction of Cernavoda nuclear power plant Unit 1 and launched commercial operations.

In 2017, the decision was made to refurbish Unit 1, aiming to extend its operating lifetime by at least 25 years. Supported by the IAEA, the ongoing refurbishment project has involved replacing calandria tubes, steam generators and control systems.

This has ensured the continued operation of the power plant, contributing to Romania's energy security and sustainability.

Research reactor

The VVR-S research reactor located at the Magurele site near Bucharest was operational for forty years (until 1997) in support of nuclear physics research and radioisotope production.

In 2002, the decision to decommission was made and the IAEA advised on safe dismantling and decontamination. The implementation of the decommissioning plan was finalized, and its building and site released from regulatory control.

The radioactive waste resulting from decommissioning is managed using a radioactive waste treatment plant on-site and the National Repository for Radioactive Waste at Baita Bihor.



A team of medical specialists working in one of the 12 national centres providing cancer treatment in Romania thanks to support and training provided by the IAEA. (Photo: IAEA)

Participation in the major initiatives

- ZODIAC

Date of imPACT Review(s)

2012

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

