

Saudi Arabia

IAEA Member State since December 1962

Selected achievements

2023: The first Integrated Regulatory Review Service (IRRS) mission finds that the regulatory oversight of radiation safety in the Kingdom is solid, established and progressing.

2019: An Integrated Nuclear Infrastructure Review (INIR) mission on Saudi Arabia's nuclear power infrastructure development identifies good practice in managing competence and staff.

2018: Saudi Arabia approves a comprehensive nuclear and radiological legislation framework, enabling an independent nuclear and radiological regulatory commission to be established.

2017: Saudi Arabia launches the construction of its first nuclear research reactor at the King Abdullah City for Atomic and Renewable Energy.

National priorities

- Energy planning and nuclear power
- Nuclear safety and security
- Industrial applications
- Human health
- Water management and environmental monitoring
- Uranium exploration and investment
- Human resource development

Main areas of IAEA support

- Nuclear power infrastructure development
- Low power research reactor
- Nuclear safety framework establishment
- Independent regulatory body establishment
- Nuclear medicine
- Radiation dose measurement



Rafael Mariano Grossi, IAEA Director General, and HRH Prince Abdulaziz Bin Salman AL-SAUD, Minister of Energy of the Kingdom of Saudi Arabia, sign the JPO Agreement between the International Atomic Energy and the Kingdom of Saudi Arabia at the IAEA 67th General Conference held in Vienna, Austria in September 2023. (Photo: D. Calma / IAEA)

Project successes

Research reactor

Saudi Arabia is constructing its first low power research reactor at the King Abdulaziz City for Science and Technology. The IAEA has been training staff at the facility and providing information on research reactor safety, utilization, and strategic business management. In addition, the IAEA advised on the design of on-site research facilities.

The reactor will support the country's application of nuclear analytical techniques. Examples include neutron radiography and activation analysis as used in the non-destructive testing of industrial and environmental samples.

Human health

Saudi Arabia has been producing sustainable diagnostic and therapeutic radiopharmaceuticals in line with international best practises. This has resulted in improved radiopharmaceutical availability and enhanced nuclear medicine services.

The country has been producing 30 000 radiopharmaceutical doses annually, with numbers set to increase to 50 000 by 2030.

Furthermore, the country aims to locally produce Technetium-99m generators and associated kits in order to meet the growing demands of nuclear medicine departments.

Participation in the major initiatives

- NUTEC Plastics
- ZODIAC



Nuclear and Radiological Regulatory Commission laboratory, Saudi Arabia. (Photo: IAEA)

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

