

## Selected achievements

**2018:** The Safety, Health and Environment National Authority (SHENA) is established.

**2018:** The Radiation Protection Order, currently known as Radiation Protection Act, Chapter 228 (RPA), is adopted by the Government of Brunei Darussalam.

**2016–2018:** Significant milestones are reached at the Pantai Jerudong Specialist Centre (PJSC), including the first radiotherapy treatment, the first nuclear medicine procedure, and commissioning the only cyclotron on Borneo Island.

## National priorities

- Radiation safety and security
- Human health and nutrition
- Food and agriculture
- Management of water resources and the environment
- Sustainable energy development

## Main areas of IAEA support

- Human health
- Nuclear applications and radiation safety

## Project successes

### Human health

Since 2016, the IAEA has been collaborating with the Brunei Cancer Centre to strengthen its radiotherapy and nuclear medicine departments. Today, 98 per cent of the country's cancer patients receive local treatment.

The IAEA provided support for the procurement of two linear accelerators (LINACs) and dosimetry equipment in June 2016. It also helped establish clinical and QA/QC protocols and procedures and radiation safety measures. Finally, an awareness-raising programme was put in place for healthcare staff and members of the public.



The IAEA provided the Brunei Cancer Centre with a gallium-68 generator and related equipment to produce radiopharmaceuticals for the diagnosis and treatment of prostate and neuroendocrine tumours. (Photo: Brunei Cancer Centre)

In 2019, the IAEA provided a Ga-68 generator, enabling clinical imaging services to commence in February 2020.

Ongoing support ensures comprehensive cancer care can be provided locally and reduces the need for patients to travel overseas to receive treatment.

### Infrastructure for radiation safety

With IAEA support, Brunei Darussalam has improved the capabilities of its Safety, Health, and Environment National Authority (SHENA) to react to potential crises: capacities in radiation emergency preparedness were built and personal radiation detectors were provided, enabling a swift response.

Regulatory staff also received crucial training via fellowships, expert missions and scientific visits.

To meet the increasing needs and demand for personal dosimetry measurements and strengthen national capacity in radiation safety, Brunei Darussalam has been establishing a personal dosimetry laboratory with IAEA support.

The support provided by the IAEA included specialist equipment and capacity building through fellowships, scientific visits and expert support.



The IAEA supported four expert missions to the Brunei Cancer Centre in the Brunei-Muara District, including on-site training for nuclear medicine specialists. (Photo: Brunei Cancer Centre)

IAEA support received in the 21st century

