Australian Government

ANSTO

Nuclear Medicine Manufacturing Facility

April 2025

Science. Ingenuity. Sustainability.

Acknowledgement of Dharawal Country

We celebrate and acknowledge the Traditional Owners and custodians of this land, the Dharawal people.

We pay our respects to their elders, past and present and we embrace their continued connections to this land.

ANSTO

ANSTO – Introduction

A leader in nuclear science and technology

Operating safely for over 70 years

Managing over $1.5 billion in scientific infrastructure

Approximately 1,350 skilled employees

ANSTO's Lucas Heights campus.

TWO LOCATIONS

ANSTO

OUR **VISION**

Nuclear science and technology for the benefit of all Australians

OUR **MISSION**

To deliver knowledge, value and trust through the application of nuclear science, technology and engineering

OUR **STRATEGIC OBJECTIVES**

1. **Deliver on Australia's priorities for the benefit of people, industry and the environment** through nuclear excellence in research and the use of national infrastructure
2. **Improve the health of Australians by supporting access to current and future nuclear technologies** for diagnostic, therapeutic and innovative treatments for current and emerging diseases
3. **Australia's source of nuclear expertise, advice and services** to governments, academia, industry, and community
4. **Lead the development of a nuclear capable workforce** aligned with government policy objectives

OUR **VALUES**

Curiosity | Leadership | Excellence | Working together | Trust + Respect | Safe. Secure. Sustainable

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ANSTO's Mandate

Nuclear Medicine

Other Products, Services, Advice

Landmark Infrastructure Operations

Research

Capital Programs

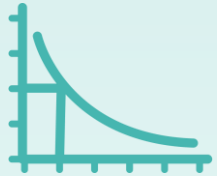
ANSTO

Nuclear medicine production

ANSTO produces 80% of Australia's nuclear medicine

Every Australian is likely to benefit from nuclear medicine and, on average, will have at least two nuclear medicine procedures in their lifetime

On average, ANSTO's radioisotopes provide 10,000 - 12,000 nuclear medicine procedures benefiting Australians each week



The unique short half-life of nuclear medicines makes timely supply a critical factor

ANSTO

Background

2016

A Feasibility Study was prepared in 2016 assessing the life of the existing facility.

2022

The ANSTO Board approved a detailed Business Case which was submitted to Government in December 2022.

2023

Public announcement of the project by the Minister on 26 September 2023.

2024

The Parliamentary Works Committee recommended the project to the House of Representatives on 14 May 2024.

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Objectives

Build upon Australia's sovereign capability to manufacture nuclear medicines for medical treatment of Australian citizens.

Ensure Australia has a secure, local supply of nuclear medicine to improve patient outcomes.

Deliver safe and reliable production of life-saving nuclear medicines.

Future-proof nuclear medicine production by embracing new and advanced technologies.

Economic growth and job creation in the STEM workforce.

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Product manufacturing

Technetium
(Tc-99m)

Used to investigate various conditions affecting the brain, lungs, bones, kidneys, heart, and other organs.

Lutetium
(Lu-177)

Used in targeted radionuclide therapy for treating neuroendocrine tumours and prostate cancer.

Iodine
(I-131)

Used primarily for treating overactive thyroid conditions (hyperthyroidism) and certain thyroid cancers.

Future-proofing

- Aseptic suites
- Generator / medical device development suite
- Multi-product development suite

The facility will be designed to embed safety in all aspects and future-proof nuclear medicine production by embracing new and advanced technologies.

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Factors considered in site selection

Site Characteristics

- Meteorology
- Hydrology
- Geology and Soils
- Seismology
- Security
- Minimisation of Material Movements
- Skilled and Competent Workforce
- Nearby Facilities
- Utilities
- Transport Routes
- Access to Air Transport
- Futureproofing

Conclusion

The Nuclear Medicine Manufacturing Facility will ensure the Australian public can obtain the public health care benefits from nuclear medicine.

Australia should continue to be a safe and reliable domestic and international supplier of nuclear medicine products into the future.

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Thank you

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