

# **TERMS OF REFERENCE**

# A 10 Year Science and Technology Plan for Western Australia

#### Purpose

To develop a bold, new 10 Year Science and Technology Plan for Western Australia that enables the State to grasp the outstanding opportunities facing the state by supporting the State's science, research and technology capability and performance through clear vision and long-term strategy.

This new Plan is urgently needed to meet the growing challenges and opportunities facing Western Australia, from climate change and an aging population to the need to diversify the economy and provide for future jobs. It will be a key enabler of the Government's goals around a sustainable, smarter Western Australia by 2035, and underpin delivery of the Government's Diversify WA agenda.

The bold plan will attract investment and prioritise actions in science, research and technologies that will grow the Western Australian economy, create high-paid jobs of the future and radically improve people's lives. It will seek to position the State as a global knowledge, science and technology hub, enabling community, industry and governments to adapt, transform and advance our economies.

#### Context

A strong science and technology capability, underpinned by world class research, research infrastructure, talented people and partnerships, systems and institutions, and legal frameworks, is key to realising the State's goals for economic development, community wellbeing and environmental stewardship.

Science and technology already plays an important role in our community, industry and workforces, shaping our daily lives. Positively, Western Australia is home to some world-class science and research facilities and researchers, and the State's public and private sector has a strong history and capacity for research and development (R&D) and technology leadership.

However, the enormity and urgency of many of our challenges, such as reaching net zero by 2050 and ensuring resilience to climate impact, combined with the fast moving opportunities current technological break-throughs are providing, means we need to be utilising our resources to optimal effect, attracting, and building our capability across fields and sectors. This requires a transformation in how we see, invest in and utilise science and technology.

This push to accelerate research, and scientific and technological developments, is occurring at a global scale, with the *Inflation Reduction Act* in the United States a transformative example. Western Australia has a unique (and time limited) opportunity to use its vast mineral, agriculture and biodiversity advantages and proud scientific capability in life sciences, space, biodiversity and marine environments (to name just a few) to contribute and participate in these significant global undertakings and ensure a positive future for Western Australians.

#### Scope

The Science and Technology Plan will represent a state-wide plan for the next 10 years and cover all sectors and regions in the State. It will cover natural, physical and life sciences, mathematics, engineering and technology-related disciplines, and new, existing and emerging technologies. It will provide a basis to prioritise Government efforts and identify key areas for action, including funding and partnership models, and supportive institutional and policy frameworks.



The Plan will cover:

- All elements of the science and technology ecosystem public and private including education, skills, infrastructure, funding models and partnerships, institutional arrangements, commercialisation opportunities, policy and legislative frameworks.
- An assessment of the top challenges and opportunities faced by the State, now and into the future, that science and research can help address.
- Clear and tangible actions to support the State's science and technology capabilities and performance.

The Plan will outline a fresh vision for science and technology for the State, goals and priority action areas. It will acknowledge First Nation people's contribution to scientific discovery and advances, and seek to further support their engagement and endeavours. It will also address how to ensure that science and technology is safe, ethical and inclusive.

It will consider other State strategies, such as the State's STEM Skills Strategy, Innovation Strategy and WA Health and Medical Research Strategy, but will not seek to duplicate these.

### **Objectives and content**

The 10 Year Science and Technology Plan will:

- 1. Highlight the importance of science and technology and associated R&D for our State, the wellbeing of our communities, our environment and our economy.
- 2. Outline the current state of science, technology and R&D in WA both capability and performance highlighting core strengths.
- 3. Outline WA's vision, goals and priorities for science and technology for the next 10 years:
  - The top challenges/opportunities that science and technology can help with.
  - The key priority areas Government should focus on.
  - How the WA Government can support and improve science and technology activities, capabilities and performance (private and public) across the state.
- 4. Provide a clear action plan to achieve these goals and priorities, giving attention to:
  - Attracting investment by industry.
  - Leveraging existing scientific assets and infrastructure, and developing new assets including common use infrastructure.
  - Building and retaining talent.
  - Establishing connections across regions and sectors to build resilience.
  - Supporting commercialisation of local science and technology research outputs.
  - Delivering results through collaboration and partnerships (domestic and international).
  - Continually improving our approaches and investments, and measuring success.

#### Process

The Department of Jobs, Tourism, Science and Innovation will lead the development of the Plan in conjunction with the State's Chief Scientist and in close consultation with relevant agencies, industry, universities and the research sector.

To assist the Department and the Chief Scientist an Advisory Panel will be formed, along with a cross government agency working group.

For more information please visit JTSI at sciencetechplan@jtsi.wa.gov.au



The development of the Plan will be informed by a range of consultation approaches, including workshops, co-design events and meetings scheduled over 2023.

## Timelines

Public consultation to occur from August to September 2023. Targeted consultation will occur in October 2023 with final consultation being conducted in January 2024.

An interim report will be provided to Government by the end of 2023 and a final report in the first quarter of 2024.