

Please note: the substantive content of the 2026 NRI Roadmap Survey begins at Question 20 (with prior questions dealing with administrative and other information).

As such all submissions that are published include the responses submitted from Question 20 onwards only.

Q20.

Part 2: Research themes

2.1 NRI comprises the assets, facilities and associated expertise to support leading-edge research and innovation in Australia and is accessible to publicly and privately funded users across Australia and internationally. We are seeking your input on possible directions for future national-level investment - i.e., where the requirements are of such scale and importance that national-level collaboration and coordination are essential.

The [2021 Roadmap](#) used a challenge framework to support NRI planning and investment. With this in mind, consider likely future research trends in the next 5 - 10 years, and with respect to one or more of the 8 challenge areas identified in the 2021 Roadmap as listed below:

- describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or not at sufficient scale and
- describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.

Do not limit your commentary to NCRIS funded capabilities.

Q21.

Resources Technology and Critical Minerals Processing

Q22.

Food and Beverage

Q23.
Medical Products

Q24.
Defence

Q25.
Recycling and Clean Energy

I have tried many times to get an enormously important, innovative, extremely clean energy initiative supported by the Australian Government--so far with success. We have developed techniques to obtain syngas, biofuel, avgas and other energy-providing chemicals by processing sustainably harvested spinifex grass which covers 23% of Australia. Currently it is regarded as a pest by rural/regional Australia and an extreme fire hazard. We have determined that it has the energy equivalent of brown coal, can be harvested easily and will regrow in 6 years. Our calculations indicate that 1% of the NT's spinifex harvested a year could provide all the energy the whole Territory needs. Similarly, 4% of WA's spinifex harvested annually would provide all the energy the whole state would require for a year. It would provide export industries for combustible fuels, jobs for R/R Australia including First Nations peoples, strategies for controlling bushfires throughout central Australia, strategies for providing stock feeds for agriculture, strategies for providing resins to bond chipboard which currently is being bonded with glues that give off carcinogenic fumes into people's homes, etcetera. This is a no-brainer initiative which we have scoped, trialed and now just need funding to develop a pilot plant as proof of concept. Does anyone care?

Q26.
Space

Q27.
Environment and Climate

Because of the irrational way EOIs are assessed since 2024, a critical research project hasn't been able to obtain ARC funding. Our bid, to use the fossil record of the Riversleigh World Heritage Area fossil deposits, which have been described by Sir David Attenborough as one of the four most important fossil deposits in the world, to document what happened in the middle Miocene when global temperatures rose 2 degrees C, hasn't been able to be developed. This is despite the critical need going forward to anticipate and take steps to mitigate changes in Australia's globally unique biota as temperatures continue to rise. Without this understanding, we are headed blind into a future that could have been anticipated if this important research could be funded. Instead of being assessed in the EOI process by peers in these research areas, we were assessed by mathematicians who clearly did not understand the vital importance of what we are able to do--IF we can fairly apply for ARC research funding. The process of using EOIs to decide who should be able to apply for ARC funding is seriously flawed and as a result the critical information we can provide to assist in developing strategic plans to minimise climate change damage to Australia's biota will not be available to help.

Q28.

Frontier Technologies and Modern Manufacturing

Q29.

2.2 The 2024 statement of National Science and Research Priorities (NSRPs) includes outcomes linked to each priority to assist in identifying critical research needed in the next 5 to 10 years.

Consider the priority statements and, with respect to one or more of the 5 priority areas as listed below:

- describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or
- not at sufficient scale and describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.

Do not limit your commentary to NCRIS funded capabilities, and where relevant, refer to the underpinning outcomes and research identified in the NSRPs document.

Q30.

Transitioning to a net zero future

Please see my comments in relation to Clean Energy in the previous section.

Q31.

Supporting healthy and thriving communities

Q32.

Elevating Aboriginal and Torres Strait Islanders knowledge systems

Q33.

Protecting and restoring Australia's environment

Please see my comments in the previous section in relation to our inability to break through the flawed EOI process for ARC grant applications to develop Australia's capacity to better anticipate and hence better manage the consequences of climate change.

Q34.

Building a secure and resilient nation

Please see my comments in the previous section about both of these issues.

Q35.

2.3 The case for a new NRI capability, or enhancements to existing capabilities, typically emerges through advocacy from research communities clustering around rigorously identified needs and goals. Such a concept could respond to a requirement for novel or expanded capacity within a domain, or across domains, and must be such that it could only be made available with national-level investment.

If you have identified such a requirement, briefly describe the need, the proposed infrastructure capability, the medium-term goals, impacted research communities, and the timeframe over which you advocate its establishment. Your response can include links to relevant existing reports.

I have. Both initiatives, which are both critically important for Australia, are briefly described in the previous sections of this survey--in relation to ARC funding needed to develop far better ways to anticipate and hence mitigate against negative outcomes from climate change; and in relation to Federal funding needed to develop THE most efficient way to generate sustainable energy on the continent. I can't return to them to copy them again here.

Q36.

Part 3: Industry perspectives

This section is seeking input specifically from industry-based respondents. Other respondents can skip this section.

Recommendation 6 of the [2021 Roadmap](#) related to improvements in industry engagement with NRI. To complement work on this topic that has occurred since then, we are seeking additional advice on NRI requirements as perceived by current or potential industry-based users.

Q37.

3.1 Have you (or your organisation) interacted with or used Australia's NRI?

☐ Yes

☐ No

Q38.

3.2 If so, please briefly outline the NRI capabilities you (or your organisation) have interacted with or used. Do not limit your response to NCRIS capabilities.

This question was not displayed to the respondent.

Q39.

3.3 Please indicate your (one or more) primary reasons for interacting with NRI:

This question was not displayed to the respondent.

Q40.

3.4 If you answered no, please indicate your (one or more) primary reasons:

This question was not displayed to the respondent.

Q41.

Part 4: Other comments

4.1 Please elaborate on any of your above responses or add any other comments relevant to the development of the 2026 Roadmap. Your response can include reference or links to existing reports that you recommend be considered during the 2026 Roadmap development process.

I would be happy to fully explain both of the vitally important initiatives noted in previous sections of this survey that should be part of the 2026 Roadmap for Australia. At the moment I'm stunned that these important initiatives haven't been given a chance to assist in improving Australia's future.