

# National Science and Research Priorities revitalisation

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## Feedback on draft priorities, 6 April 2023

The [Australian Academy of the Humanities](#) thanks the Department of Industry and the Chief Scientist for the opportunity to contribute advice on the revitalisation of the National Science and Research Priorities.

We are the national body for the humanities in Australia, championing the contribution humanities, arts and culture make to national life. Our work aims to ensure ethical, historical and cultural perspectives inform the way Australia plans for and responds to challenges and opportunities. As one of Australia's five learned Academies we are a unique resource for Government.

Acknowledging that the Department's 'conversation starter' is a first step in the process to revitalise the National Science and Research Priorities, we raise two threshold issues for consideration. We understand that the next stage of consultation will focus on refining and scoping potential priorities, but before that, we seek clarity on the **scope of the exercise** and its **intended outcomes**.

1. There needs to be a clear and unequivocal statement about what is in scope.

Does this exercise encompass 'whole of research' or is it more narrowly focused on science and technology? We have been advised by the Office of the Chief Scientist that the intent is to take a 'whole of research' approach, but the discussion paper refers only to science. For example, the paper refers to: "vision and direction for science in Australia", "align efforts and investments in science", "vibrant and energised science system", the "role of science in addressing" Australia's biggest challenges and opportunities.

Signalling matters. Does 'science' mean 'research' or is this a reference to STEM disciplines? This distinction has a material effect on the fitness for purpose of the priorities and how and where they should be implemented.

If the purpose is to establish 'research' priorities for Australia, our deep concern is that the framing of the national research priorities as a science exercise will de-prioritise vital humanities (and social sciences) research and lead to underfunding (of both research and infrastructure).

2. We also seek clarity on the intended implementation and outcomes of the exercise. How will these priorities drive and guide research effort and investment in Australia? How will they integrate with other government priorities?

While short to medium term priorities should set the agenda for strategic programs, this must be balanced by resourcing for longer-term fundamental research. Proposals to allocate high fixed proportions of program expenditure against specific sets of priorities (for example, the previous Government's Manufacturing Priorities) are likely to have unintended consequences.

Our strong preference is that the Government take a holistic, whole-of-sector approach to identifying key **national priorities for research – and not only science** – that harnesses all the strengths of our research community across the disciplines to address the grand challenges Australia faces over the next decade and beyond. There is an opportunity in this process for the Government to highlight the importance of genuinely multidisciplinary research for addressing key areas of priority. These challenges include:

- the climate change and biodiversity crises that demands urgent socioeconomic and cultural transformations;
- new knowledge creation and trust in an era of misinformation and polarisation, which requires a human-centred research approach, to balance technology-led research and development;
- geopolitical tensions and the need for strong, respectful regional relationships; and
- increasing social and generational inequality that threatens human wellbeing, democratic discourse and social stability.

The Academy of the Humanities has recently led a Rapid Research Information Report on generative Artificial Intelligence – a genuine multidisciplinary project in which we have partnered with the Academy of Technology and Engineering. The expertise of the humanities on AI development in Australia is central in its own right (not just in support of the science and technology) to the development of tractable solutions and inclusive uptake across a range of sectors. Yet our research priorities are not currently framed to signal or support the national capabilities and infrastructure needed to facilitate a humanities-led approach.

The principles listed in the paper are sound, but we would also urge the Government to take a capability lens to the development of the priorities. What is the state of our national capability in priority areas? Two reports recently released by the Australian Council of Learned Academies have highlighted gaps in humanities, arts and social sciences research – in AI and in Energy research.<sup>1</sup>

The Academy of the Humanities has recently completed a major new report on [Australia's China Knowledge Capability](#), which has identified an urgent need to lift Australia's national capability on China.<sup>2</sup> The model we have used to map strategic national capability could as easily apply to India and Indonesia. Again, there is no signalling of the importance of these priority areas in the current research priority exercise. The China Knowledge Capability Report in particular, highlights the absence of a strategic and nationally coordinated approach to the development of sovereign capability and research translation.

We recommend that if the priorities are narrowly bound, as per the 2015 exercise, then they should be attributed as; science or STEM priorities for Australia, **i.e. remove the 'and research'** because they are not whole-of-research priorities **and should only apply to science programs in government**, thus leaving room for appropriate recognition, prioritisation and investment in non-science research priorities through other national research programs and initiatives.

We would be happy to convene further expert input into this process.

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<sup>1</sup> On priorities for energy research, see p.25 <https://acola.org/wp-content/uploads/2021/06/acola-2021-australian-energy-transition-plan.pdf>; and on AI – recommendation 5 (“Successful development and implementation of AI will require a broad range of new skills and enhanced capabilities that span the humanities, arts and social sciences (HASS) and science, technology, engineering and mathematics (STEM) disciplines”, <https://acola.org/hs4-artificial-intelligence-australia/>

<sup>2</sup> <https://humanities.org.au/our-work/projects/australias-china-knowledge-capability/>