

STRONG ECONOMY. STRONGER FUTURE.

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Misha Schubert

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Dear Ms Schubert

Thank you for the opportunity to provide the views of the Coalition on important issues facing your members. A response to your questions is attached.

The last two years have been tough for our country.

Despite the setbacks, Australia's economic recovery is leading the world.

Unemployment is at 4%, the equal lowest in 48 years. And the recent Budget included the biggest turnaround in our finances in over 70 years.

There's much more to be done. To build a stronger future, our plan will:

- 1. Deliver more jobs and working towards unemployment below 4%.
- 2. Deliver tax relief for workers and small businesses.
- 3. Invest in roads, rail, water infrastructure and renewable energy technology.
- 4. Make record investments in health and other essential services.
- 5. Invest in stronger defence, security and borders.

This election provides a clear choice, with real consequences for Australia.

The alternative at this election is Anthony Albanese and Labor. Labor would weaken our economy and put Australia's recovery at risk. Now is not the time to change course.

Thank you for communicating our response to your members.

Yours sincerely,

Andrew Hirst

Federal Director





MORRISON GOVERNMENT RESPONSE TO SCIENCE AND TECHNOLOGY AUSTRALIA

Make Australia a global STEM superpower by growing R&D investment to lift Australia into the top ten OECD countries (relative to the size of the economy).

In these times of global uncertainty, the Morrison Government believes that science and technology play an increasingly important role in making Australia more resilient, more competitive and more able to deliver jobs for Australians.

Australian scientists are at the forefront of research in fields including health, medicine, agriculture, mining, space and the environment at Australia's public research agencies, including the CSIRO and Geoscience Australia.

The Morrison Government has invested more than \$93 billion in the science, research and innovation sectors — more than \$12 billion in science and technology over the last two years alone — to support hundreds of thousands of highly-skilled Australian jobs to keep Australia strong and secure our economic future.

The Morrison Government increased CSIRO funding by more than 30 per cent over the decade to \$946 million, representing a 19.2 per cent increase in the last five years.

Invest in a \$2.4 billion Research Translation Fund to drive income-generating commercialisation of Australian research and create thousands of new jobs.

Craft a comprehensive plan across Government to coordinate R&D strategic investment, policy and roles to seize competitive strategic advantage for Australia.

The Morrison Government has announced a \$2.2 billion University Research Commercialisation Action plan, developed in collaboration with leaders from academia, business and start-ups.

The Action Plan is a substantial reform package comprising a set of integrated programs:

- The new \$1.6 billion ten-year investment in Australia's Economic Accelerator a stage-gated competitive funding program that takes great Australian research down the innovation pipeline to generate new products, new companies and importantly, new jobs.
- \$296 million to support 1800 new industry PhDs and 800 new industry fellowships fundamentally reshaping the research workforce and giving more opportunities to Australia's research entrepreneurs, innovators and problem-solvers.
- \$362 million for the Trailblazer Universities program to create commercialisation leaders in areas of national priority.
- \$150 million to expand CSIRO's Main Sequence Ventures, catalysing more venture capital investment in early-stage commercialisation projects and providing a pathway to market scale.

The Morrison Government has announced the first three successful Trailblazer Universities:

• \$50 million to create a new business and research partnership with Western Australia's Curtin University, focusing on the critical mineral supply chain.

- \$50 million to create a new business and research partnership with the University of Adelaide to help build new defence technologies and products.
- \$50 million to create a new business and research partnership with the University of New South Wales (UNSW) and the University of Newcastle (UoN) to develop new energy technology in the hunter.

The Morrison Government acknowledges that leaders from Australia's business and research sectors have warmly welcomed the Research Commercialisation Action Plan.

The Business Council of Australia said this was an investment 'in our economic future' that will 'significantly improve Australia's ability to commercialise our best ideas and innovations, scaling them up to create exciting new industries, new exports and new highly-skilled jobs for Australians'.

Science and Technology Australia called the Morrison Government's Action Plan a 'potential game-changer' that will 'level-up Australia's research commercialisation success'.

The Australian Chamber of Commerce and Industry said the Action Plan would 'empower businesses to grow and export our innovations globally'.

Embolden discovery research by boosting investment in the major grant agencies to catapult breakthroughs and secure the science workforce with a bridge to the other side of the pandemic.

The Morrison Government's investment in Cooperative Research Centre (CRC) Project Grants strengthen links between research organisations and industry, supporting SMEs to develop new technologies, products, processes and services.

Importantly, this investment leads to tangible outcomes and improves the competitiveness and productivity of Australian industry.

Since the first round of CRC Projects in 2016, the Government has awarded more than \$408 million in funding to support 189 separate projects. These projects continue to facilitate collaboration between more than 900 partners from industry, research, government and community organisations, and have to date leveraged some \$910 million in partner co-contributions.

The CRC program together with the \$1.6 billion Australia's Economic Accelerator initiative is providing concrete assistance to bridge the so-called 'valley of death' – to de-risk the progression of early-stage research through to prototype and commercial development.

In addition, the Morrison Government's Investment of \$6.3 billion for health and medical research through the 10-year Medical Research Future Fund Investment Plan is a further commitment to address the so-called 'valley of death'.

Tackle the broken system of insecure work tied to competitive research grants especially for Australia's early career scientists – the future of the profession.

The University Research Commercialisation Action Plan includes \$296 million to create 1,800 more industry PhDs and 800 industry fellows to fundamentally reshape the workforce of Australia's universities and career options, encouraging mobility and collaboration between university researchers and industry. This would provide a separate career avenue for researchers which is

outside of 'competitive research grants'. Furthermore, this initiative promotes the value of Australian research entrepreneurs through accelerating greater linkages between Australian industry and Australian university researchers.

Commit to keep funding the national science agencies in the coming term by at least current levels of investment indexed by CPI.

The Morrison Government is investing in Australia's national science agencies as outlined in the 2022-23 Budget (Budget Paper One, page 147).

As announced in the 2022-23 Budget funding for these agencies is set to increase by 2.6 per cent in real terms as a result of supporting investment in "Australia's University Research Commercialisation, commencement of grants paid to universities under Australia's Economic Accelerator, new workforce mobility opportunities through Industry PhDs and Fellowships, and the Trailblazer Universities program".

Develop a comprehensive plan to transition to a net-zero emissions economy and safeguard Australia's unique biodiversity.

Australia is one of a handful of countries to have released an economy wide plan to achieve net zero emissions by 2050 including <u>Australia's Long Term Emissions Reduction Plan</u> and Technology Investment Roadmap.

The Morrison Government's transition plan to net zero is backed by \$22 billion of Government investment (leveraging at least \$88 billion in total public and private investment) in renewables and low emissions technologies.

Under the Morrison Government there has also been significant investment in research and development into low emissions technology. This includes \$1.5 billion to develop the domestic hydrogen industry, new funding of \$1.9 billion in 2020 for Australian Renewable Energy Agency to invest in early-stage technology projects and ongoing government funding for climate and environmental science through universities, CSIRO and the Australian Institute of Marine Science to name a few.

When it comes to protecting and restoring Australia's unique landscapes, the Morrison Government is making significant ongoing investments on top of existing emissions reduction funding. Since 2019, the Morrison Government has committed more than \$6 billion to protect the environment through for native species recovery, habitat restoration, marine conservation, Landcare, environmental science and partnerships with community groups and Traditional Owners.

On the research front this includes stage two funding of \$149 million for four environmental research hubs under Australia's National Environmental Science Program and \$92.7 million to research and deploy world leading reef resilience science and adaptation strategies.

Renew a long-term investment in the nation's vital research infrastructure through the National Collaborative Research Infrastructure Strategy.

The Morrison Government has made record investments in leading research infrastructure.

The Morrison Government has committed \$4 billion from 2017-18 to 2028-29 for cutting-edge infrastructure through the National Collaborative Research Infrastructure Strategy (NCRIS).

As part of that commitment, the Morrison Government launched the new National Research Infrastructure Roadmap in April 2022 and will invest \$900 million over five years on the tools, technology and skills to make Australian research even more globally competitive.

The Infrastructure Roadmap was developed over the past year with the research sector. It recommends continued investment in research infrastructure, including the Australian National Fabrication Facility, Australian Research Data Commons, Bioplatforms Australia and Integrated Marine Observing System.

Craft a plan to tackle a decline in STEM achievement of Australian school students and stop the brain drain of our children out of STEM.

The Morrison Government has a strong commitment to lifting student outcomes, and has refocused the Australian Curriculum on the essentials, including strengthening mathematics to ensure Australian kids are set up to succeed.

That's why the Morrison Government championed changes to NAPLAN that will see additional Science assessment begin in 2024, and existing Science assessments take place earlier, from Term 1 of 2023. This will make sure existing STEM teachers get the information they need early and improve results in this area.

The Morrison Government is providing \$11.5 million to support Questacon to engage young Australians, families and teachers in STEM through continuation of Questacon's high impact travelling programs, exhibitions and activities.

This builds on the \$15.1 million already invested to expand the remote and regional delivery of the Questacon Science Circus program and the Engineering is Elementary program, which supports teacher confidence in teaching STEM.

A re-elected Morrison Government will ensure that there are strong, innovative and proven pathways into teaching, particularly to help reduce out-of-field teaching in STEM subjects.

Make a further commitment to programs to boost diversity and inclusion in STEM to ensure the nation draws on the widest possible pool of talent.

In addition to supporting world leading scientific research here in Australia, the Morrison Government is committed to encouraging more women and girls to choose careers in STEM.

The Morrison Government is investing \$154 million to help to improve gender equity in STEM under the framework of the Advancing Women in STEM Strategy released in 2019, and subsequent Action Plan in 2020.

This framework provides a vision for gender equity in STEM by 2030, and outlines actions to achieve this under three main pillars:

- Enabling STEM potential through education 2030 Outcome Australia's education system, from early education to tertiary, supports the active inclusion of girls and women and enables them to explore their full STEM potential;
- Supporting women in STEM careers 2030 outcome Australian STEM workplaces support
 the active recruitment and retention of women in STEM roles at all levels; and
- Making women in STEM visible 2030 outcome Girls and women see STEM education and careers as viable and interesting paths, and understand the opportunities offered by STEM for their futures.

On 11 February 2022, to coincide with International Day of Women and Girls in Science, the Morrison Government announced a commitment of \$6.7 million to extend:

- Superstars of STEM program that provides media training, mentoring and networking for STEM professionals.
- Women in STEM Ambassador program, which undertakes outreach activities and provides
 leadership and national coordination for women in STEM.
- 'Future You' awareness campaign, led by the current Ambassador Professor Lisa Harvey-Smith, which seeks to break down stereotypes in STEM and showcase study and career opportunities.
- As well as investing \$42 million to co-fund 500 university scholarships with industry, supporting community and industry-led projects through the Women in STEM and Entrepreneurship Grants program while also expanding the work of the Girls in STEM toolkit.