



Opening statement – Dr Larry Marshall, CSIRO  
Senate Estimates, June 2021

Thank you Chair.

I've talked about CSIRO's preparation and response to crisis, whether that be bushfires, pandemic, or recession.

COVID-19 is not behind us yet, and we won't take our eyes off that ball, but we are starting to see a light at the end of the tunnel as vaccines roll out. Our attention must now also be on how Australia recovers confidently and strongly.

CSIRO will lead a National Artificial Intelligence Centre to grow a powerful AI Network to give Australia a competitive advantage. AI is already transforming industries and creating new ones, but the key is in harnessing its power for purpose.

We can use AI to predict droughts and floods, to out-think bushfires, stabilise our energy grid as we add renewables, accelerate genetic breeding from crops, and accelerate vaccine development.

CSIRO will help Australian businesses use AI to accelerate their growth, and our prosperity.

Commercialisation is crucial to ensuring that this technology and others are taken up by business to grow our economy. It is why CSIRO was formed 100 years ago to be the bridge between research and industry.

Last week, CSIRO and our partners launched our Hydrogen Industry mission, the first to take flight from the program of missions we announced last year to secure Australia's wealth and resilience.

The research mission will help drive down the cost of hydrogen production to under \$2 per kilogram, making the fuel more affordable and helping to position Australia to lead the world in exporting hydrogen by 2030.

Over the next five years, more than 100 projects worth \$68 million have been planned with our partners across industry, which started with a \$20 million investment from Fortescue in 2018 to commercialise our hydrogen membrane research. This was the key we needed to unlock market activation, and spur a thriving clean hydrogen export industry for Australia.

We are working with industry on similar activations right across the energy sector, because the world is undergoing a shift towards low emissions, and our exports must reflect this if we are to continue our economic growth.

We know there is no 'one size fits all' solution, so CSIRO invests in commercialisation in many forms – our ON Accelerator mined Australia's university system to find the gold of new ideas, our Lindfield Collaboration Hub and Lab 22 provide the engineering expertise to turn great inventions into even greater products, and Main Sequence Ventures, now with \$500 million of capital, supplies the funding.

We create new products for existing companies and sometimes even create whole new companies. Instead of science as a solution looking for a problem, we bring industry in to co-invest and co-design solutions with us that have greater impact and that get to market faster. We call this 'Venture Science', and it is just one of the game changers we've led for hundreds of Australian SMEs and the more than 60 new companies we have helped to create.

This is also the model we are applying to our program of missions, which we are co-developing with industry for both economic and societal benefit.

Just as science has led through crisis, your National Science Agency is helping lead Australia to a bold, technology-led recovery. We will build back better, and more innovatively, by helping Australian businesses access the power of great Australian science.

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