Chapter 3

Industry, Innovation and Science portfolio

- 3.1 This chapter summarises certain key areas of interest raised during the committee's consideration of additional estimates for the 2017–18 financial year for the Industry, Innovation and Science portfolio. This chapter of the report follows the order of proceedings and is an indicative, not exhaustive, account of issues examined.
- 3.2 On 1 March 2018, the committee heard evidence from Senator the Hon. Michaelia Cash, Minister for Jobs and Innovation, and Senator the Hon. Matthew Canavan, Minister for Resources and Northern Australia, along with officers from the Department of Industry, Innovation and Science (the Department) and agencies including:
- Australian Nuclear Science and Technology Organisation;
- Anti-Dumping Commission;
- Commonwealth Scientific and Industrial Research Organisation;
- Office of Innovation and Science Australia; and
- Northern Australia Infrastructure Facility.
- 3.3 Senators present over the course of the day's hearing included Senator Hume (Chair), Senator Ketter (Deputy Chair), Senators Bushby, Carr, Colbeck, Georgiou, Hanson, Leyonhjelm, Lines, Ian Macdonald, McAllister, O'Neill, Patrick, Rhiannon, Steele-John, Watt, and Williams.

Australian Nuclear Science and Technology Organisation

3.4 Dr Adi Paterson, the Chief Executive Officer (CEO) of the Australian Nuclear Science and Technology Organisation (ANSTO) made a brief opening statement to the committee highlighting that Australia has become a member of the Generation IV International Forum which will allow Australia to contribute to the development of future energy technologies. Dr Paterson noted that this would be an opportunity for Australia to share its expertise in nuclear research and technology and 'would further our non-proliferation and nuclear safety objectives as a nation'. ¹

Nuclear waste storage

3.5 The committee discussed the storage of low-level and intermediate-level nuclear waste in Australia with ANSTO. Dr Paterson explained to the committee that there is nuclear waste in a number of different locations around Australia, including at Lucas Heights, but also at universities and hospitals, and with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and the Department of Defence. He emphasised that importance of developing a holistic approach to managing the nuclear waste, commenting that:

¹ Proof Estimates Hansard, 1 March 2018, p. 44.

from a national perspective and from ANSTO being a governmental agency, we take the view that we must help and support all actors in understanding their waste holdings and work with them to get a comprehensive but singular approach to all Commonwealth and national wastes in the form of a national waste repository for low-level waste and a store for intermediate-level waste.²

Synchrotron

3.6 The committee also discussed ANSTO's synchrotron. Dr Paterson noted its use in the area of medical science, in particular for heart valve replacements:

Heart valve replacement continues to develop. Often with those who benefit from heart surgery, if they have a very long period of survivability, those heart valves start to wear out a little bit, so the next generation of heart valves will be made with different, more resilient, materials, and they'll also be lighter. That puts less stress on the heart as the heart operates. Dr Katie Sizeland, who is one of our young beamline scientists, has been working in this field and utilising the facilities at the synchrotron to qualify these next-generation materials. The benefit for society out of this is that the patients will have reduced recovery times, the surgery becomes less invasive and, because the surgery is less invasive and the recovery times are shorter, the overall burden on the health system is reduced.³

Anti-Dumping Commission

- 3.7 The committee commenced its session with the Anti-Dumping Commission (the commission) by congratulating the Commissioner Mr Dale Seymour on his reappointment for a further three years.⁴
- 3.8 Mr Seymour noted that in July 2018, the commission will have been in operation for 5 years and noted that the 'antidumping system in Australia is wholly demand driven'. Mr Seymour emphasised that the commission's continuing demand for investigations into dumping is:

...a reflection of the pressure that Australian domestic manufacturers face and their belief that they may have been materially injured through dumping that motivates them to make application to me for investigations, and then for final decision by the minister.⁵

Steel industry

3.9 The committee noted the Economics References Committee's recent report into the Australian Steel Industry, noting that two of its recommendations would require action from the commission. Mr Seymour pointed to the government response

² Proof Estimates Hansard, 1 March 2018, p. 45.

³ *Proof Estimates Hansard*, 1 March 2018, p. 47.

⁴ Proof Estimates Hansard, 1 March 2018, p. 54.

⁵ *Proof Estimates Hansard*, 1 March 2018, pp. 54–55.

to the report and also noted that one of the main issues remains an oversupply of steel from China.⁶

3.10 The committee also discussed the tariff arrangements that the US government was examining. Mr Seymour commented that:

Certainly, the view domestically from Australian steelmakers and aluminium manufacturers is that any material change to tariff or quota arrangements into the US for those products will pose a risk for other markets, of which we will certainly be one.⁷

Commonwealth Scientific and Industrial Research Organisation

Restructure

3.11 The committee heard from the CSIRO about its upcoming restructure. Dr Larry Marshall, the CEO of CSIRO, advised the committee that:

We're creating four new positions. One is called 'People', which will be responsible for taking care of our people. There'll be a position called 'Growth', which will be responsible for the growth of our impact, the growth of our science and the growth of our capabilities. There'll be a chief scientist role, to ensure that the voice of every CSIRO scientist is present at the executive team during every meeting. And we'll bring the CEO of Data61 onto the executive team to reflect the importance of data and digital technology and the fact that it is transforming, literally, every part of our economy and every part of CSIRO.⁸

3.12 Dr Marshall also clarified that the new Chief Scientist would be the voice of science on the executive team, and would not be attached to any particular area within CSIRO.

Funding for the Great Barrier Reef

3.13 The committee asked the CSIRO about the \$60 million of funding that will be dedicated to work on the Great Barrier Reef. Officers from CSIRO explained that the funding would be split between a number of areas including:

...\$10.4 million to look at COTS management, and that would be working through GBRMPA. There was \$36.6 million to look at the management of sediment and nutrient run-off, ultimately to improve water quality for the reef. There was \$4.9 million for extra field officers to monitor and assist with some of the programs. And then there was \$6 million in funding for the RRAP—the Reef Restoration and Adaptation Program. That is a program that is being done with AIMS, the CSIRO and five other partners—James Cook University, Queensland University of Technology, the University of Queensland, the Great Barrier Reef Foundation and also GBRMPA. That is a scoping design phase study looking at potential

⁶ Proof Estimates Hansard, 1 March 2018, p. 55.

⁷ Proof Estimates Hansard, 1 March 2018, p. 56.

⁸ Proof Estimates Hansard, 1 March 2018, p. 61.

interventions to address impacts on the reef from changes in temperature. That will run for 18 months and it is currently in scope.

3.14 CSIRO summarised that the work to be done on the reef would look to making it more resilient.¹⁰

Ms Glenys Beauchamp PSM

- 3.15 Ms Glenys Beauchamp was the Secretary of the Department of Industry, Innovation and Science until 18 September 2017, when she became the Secretary of the Department of Health.
- 3.16 On 15 February 2018, the Senate agreed to a notice of motion requesting that Ms Beauchamp appear to answer questions at the committee's additional estimates hearing on 1 March 2018.
- 3.17 In answering the committee's questions, Ms Beauchamp confirmed that neither Minister Canavan, nor any staff from his office, had raised the appointment of former Deputy Prime Minister Barnaby Joyce's former media adviser to a departmental role with her.¹¹

Department of Industry, Innovation and Science—Programme 1

Women in STEM

- 3.18 The committee discussed the department's work around promoting women in STEM (Science, Technology, Engineering and Mathematics). Departmental Officers noted that through the National Innovation and Science Agenda (NISA), the government had been actively engaged with supporting all Australians in science, but also specifically women in science. Minister Cash highlighted that increasing the number of women in STEM was a focus of her portfolio.
- 3.19 The committee asked departmental officials about the planned establishment of a Science Women's Advisory Panel, noting its delay.
- 3.20 Departmental officers informed the committee that former Minister Sinodinos had announced the advisory round table in February 2017, and plans were underway to holding the first meeting table before he went on leave. Subsequently, the establishment of the panel was postponed. 12

⁹ *Proof Estimates Hansard*, 1 March 2018, p. 61.

¹⁰ Proof Estimates Hansard, 1 March 2018, p. 61.

¹¹ Proof Estimates Hansard, 1 March 2018, p. 105.

¹² Proof Estimates Hansard, 1 March 2018, p. 92.

- 3.21 The forum will provide high level advice on how existing and future industry, innovation and science policies and programs could be amended or designed to optimise the participation of women.¹³
- 3.22 The Science Women's Advisory Roundtable has since been announced and had its first meeting on 13 March 2018. 14

Department of Industry, Innovation and Science—Programme 2

Advanced Manufacturing Fund

- 3.23 The Advanced Manufacturing Fund (AMF) is a government initiative to boost innovation, skills and employment in advanced manufacturing. The \$100 million of funding for the AMF is divided across its five measures:
- Stimulating advanced manufacturing research projects (SAMRP);
- Innovation Labs initiative:
- Automotive Engineering Graduate Program;
- Removing tariffs on prototype imports for motor vehicle design and service; and
- Advanced Manufacturing Growth Fund. ¹⁵
- 3.24 The committee sought information on each of the AMF's five programs. In particular, the committee was interested in the SAMRP noting that it has been given \$24 million over two years. The department explained that the \$24 million is a composite of two elements. The \$20 million was a supplement to the Cooperative Research Centre (CRC) Program, for CRC projects in advanced manufacturing, as a separate petition. The remaining \$4 million is to support small scale and pilot research projects. The support small scale and pilot research projects.

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Ministers and Assistance Ministers for the Department of Industry, Innovation and Science, 'Senator the Hon Michaelia Cash: Minister for Jobs and Innovation', http://www.minister.industry.gov.au/ministers/cash/media-releases/advisory-group-help-advance-women-industry-innovation-and-science (accessed 22 March 2018).

Ministers and Assistance Ministers for the Department of Industry, Innovation and Science, 'Senator the Hon Michaelia Cash: Minister for Jobs and Innovation', http://www.minister.industry.gov.au/ministers/cash/media-releases/advisory-group-help-advance-women-industry-innovation-and-science (accessed 22 March 2018).

¹⁵ Department of Industry, Innovation and Science, 'Increased investment in advanced manufacturing', https://industry.gov.au/industry/IndustrySectors/Advanced-Manufacturing/Pages/Increased-investment-in-advanced-manufacturing.aspx (accessed 22 March 2018).

¹⁶ Proof Estimates Hansard, 1 March 2018, p. 105.

¹⁷ Department of Industry, Innovation and Science, 'Increased investment in advanced manufacturing', https://industry.gov.au/industry/IndustrySectors/Advanced-Manufacturing/Pages/Increased-investment-in-advanced-manufacturing.aspx (accessed 22 March 2018).

3.25 The committee was also interested in the Innovation Labs initiative, which will be funded \$10 million over two years. The committee noted that new facilities were planned for Victoria and South Australia. The department noted that there is currently a consultation process underway which is looking at:

a need for accompanying services for business when they go on approach and use physical labs, such that they are able to have their business plan and have their forward-looking plan accompanied by how they can take and use that infrastructure back into their business. ¹⁸

National Offshore Petroleum Titles Administrator

3.26 The committee discussed the case of Woodside Petroleum, an Australian oil and gas company, with the National Offshore Petroleum Titles Administrator (NOPTA). The company had committed to an eight-hole drilling program in 2016, however, after drilling three holes and not finding the resources they had hoped for, they stopped exploration. The committee inquired about whether there were any penalties to be imposed for this action. Departmental officials commented that:

There is no penalty as such, unless of course the titleholder is non-compliant with the work program. There are options available to titleholders in the event that they don't wish to continue the program or they've completed their work program for a particular year and, for whatever reason they may choose, they may elect to seek to surrender the title, in which case there is an option for them to enter into what is known as 'good standing arrangements'. That is where there is a commitment for payment—this is a contract between the Commonwealth and the titleholder—and the good standing arrangements can be discharged in a number of ways. ¹⁹

3.27 The committee also raised the issue of the east coast market gas crisis, noting that the North-West shelf had the potential gas reserves to alleviate a significant amount of pressure from the east coast market. Minister Canavan agreed that the North-West Shelf was indeed a significant source of natural gas, however, also pointed out that there is not currently the infrastructure to transport the gas from the west to the east coast of Australia. The Minister assured the committee that the government is currently taking action to alleviate the gas crisis. ²⁰

Northern Australia Infrastructure Facility

- 3.28 The committee asked the Northern Australia Infrastructure Facility (NAIF) about its project approval processes. In particular, the committee wanted to understand how NAIF approval interacts with other legislation.
- 3.29 The CEO of the NAIF, Ms Laurie Walker confirmed that as per the NAIF's investment mandate, that the NAIF can approve a project for funding but cannot

¹⁸ Proof Estimates Hansard, 1 March 2018, p. 106.

¹⁹ Proof Estimates Hansard, 1 March 2018, p. 111.

²⁰ Proof Estimates Hansard, 1 March 2018, p. 112.

actually provide the funds until the project has met all of the other necessary regulatory approvals.²¹

- 3.30 The committee also discussed a review of the NAIF that was undertaken by Mr Tony Shepherd, an Australian businessman who has worked both in the public service and in private companies, and has experience in infrastructure development. The committee noted that Mr Shepherd also conducted the government's Commission of Audit in 2014. Departmental officials confirmed that Mr Shepherd was selected through a direct tender process, meaning that no other candidates were considered to conduct the review.
- 3.31 The review focused on the NAIF's investment mandate and the broader governance of NAIF and its relationship with states and territories.
- 3.32 Minister Canavan noted that the completed review was with the government, but that no decisions had so far been made in response to the report.

Other topics raised

- 3.33 The committee discussed a wide range of topics during the hearing with the Industry, Innovation and Science portfolio. The above reporting of discussions is not complete. Other topics discussed by the committee included:
- Possible privatisation of the National Measurement Institute
- ANSTO's production of the Phosphorous 32 isotope used in pancreatic cancer treatment
- Nuclear Energy technology
- Deep Space Communication Complex
- Enterprise Agreement 2017–2020
- Bleaching of the Great Barrier Reef
- STEM in Schools
- Research & Development intensity threshold
- Australia 2030: Prosperity through Innovation report
- Innovation Australia Board
- Women in STEM
- Establishment of the Women's advisory panel
- Cladding—Australian Building Codes Board
- National Innovation and Science Agenda—video games report
- Radioactive waste management at Kimba
- NOPTA's 'use it or lose it review' for sites on the North-West Shelf

²¹ Proof Estimates Hansard, 1 March 2018, p. 118.

- Possible nuclear waste site in NSW
- Australia's coal exports
- Onslow Marine Support Base
- Rookwood Weir
- NAIF—Conflicts-of-interest
- NAIF—Issue around Active vs Inactive inquiry and the Aurizon project

Senator Jane Hume Chair