OUTCOMES OF GOVERNMENT SPENDING AUDIT

Headline Statement

- As a result of its Government Spending Audit (Audit), the Government will improve quality of spending by redirecting uncommitted funding from previous Budget measures. In the 2022-23 October Budget, savings from the Industry, Science and Resources Portfolio are presented in various measures in *Budget Paper No. 2*.

Key Points

Government Spending Audit – Industry and Science Portfolio – efficiencies

- Through the Audit, savings of **$506.4 million** have been identified in the Industry and Science Portfolio, including:
    - **$303.7 million** from the partial reversal of the 2022-23 March Budget measure *Boosting the Modern Manufacturing Strategy and Addressing Critical Supply Chain Vulnerabilities*, including:
        - Reversing uncommitted funding in the Modern Manufacturing Initiative (**$250 million**)
        - Not proceeding with a third round of the Manufacturing Modernisation Fund (**$53.7 million**)
    - **$197.7 million** from redirecting uncommitted funding from the Entrepreneurs' Programme to deliver on the Government's election commitment
    - **$5.0 million** from ceasing the Thermochemical Conversion Technology Trial Facility component of the 2019-20 Budget measure *Thermochemical Conversion Technology Trial Facility*.
- This funding will offset the Government's election commitments, including the establishment of the $15 billion National Reconstruction Fund, and will also be redirected to fund other Industry and Science programs that realign expenditure to support Government priorities.

Improving Commonwealth Spending in the 2022-23 October Budget

- As part of the Audit, the Government has also redirected the following funding into new initiatives:
    - The **$4.7 million** Women in Manufacturing Initiative (published under the 2022-23 March Budget cross-portfolio measure, *Women in Leadership*) has been redirected to support women in STEM, under the *Supporting Talent and Leadership in Australian Science and Technology* measure. This redirected funding will support additional

community and industry-led projects in the oversubscribed Women in STEM and Entrepreneurship program – taking the Government's total new commitments to support Women in STEM initiatives in the 2022-23 October Budget to $5.8 million. It will also provide funding for the Women in STEM Ambassador's office to conduct research to support an independent review into diversity in STEM.

- **$5.2 million** for Manufacturing Investment Plans from the 2022–23 March Budget measure titled *Boosting the Modern Manufacturing Strategy and Addressing Critical Supply Chain Vulnerabilities* to contribute to the establishment of the National Reconstruction Fund.

- **$2.9 million** from the 2022-23 March Budget measure, *Advancing Science, Technology, Engineering and Maths*, will be reprioritised to improve the provision of important science and technology advice to the Australian Government and to support the delivery of the 2022 Prime Minister's Prizes for Science. This is also published under the *Supporting Talent and Leadership in Australian Science and Technology* measure.

Note: Detailed questions relating to the savings and the new measures funded by redirecting funding from previous Budget measures (i.e. existing measures that have been reframed) should be directed to responsible policy divisions.

Supporting Australia's Resources

- The Audit identified Resources Portfolio savings of **$100.3 million** from the 2022-23 March Budget Measure *Critical Minerals Strategy – Implementation*. This funding had been allocated to the Critical Minerals Accelerator Initiative.

- As part of the Audit, the Government has also redirected funding into new resources initiatives.

  - Funding for the **$99.8 million** Critical Minerals Development Program, and the **$50.5 million** Australian Critical Minerals Research and Development Hub has been met by redirecting funding from the 2022-23 March Budget measure *Critical Minerals Strategy – Implementation*.

  - **$10.0 million** from the 2022-23 March Budget measure *Energy and Emissions Reduction* has been redirected to support research and development to advance new commercially viable projects for methane abatement in the resources sector.

- The savings and redirections are published under the *Supporting Australia's Resources* measure.

Supporting the Supply of Australian Gas

- The cost of the *Supporting the Supply of Australian Gas* measure will be partially met by savings from no longer proceeding with the **$30.0 million** Optimise and Discover Program.

s 22

- This funding will be redirected to fund critical work to support the supply of Australian gas, including:
  - **$40.9 million** over 8 years from 2022–23 to implement reforms to the Australian Domestic Gas Security Mechanism.
  - **$24.8 million** over 8 years from 2023–24 to extend the 2019–20 MYEFO measure s22

Government Spending Audit – Foreign Affairs and Trade – efficiencies

- Through Audit consideration of Foreign Affairs and Trade Programs, savings of **$25.6 million** have been identified in the Industry, Science and Resources Portfolio from the 2022-23 March Budget measure *Comprehensive Strategic Partnership with India – additional initiatives*.
- This includes:
  - s22
  - Reversal of the Australia - India Trade and Standards Conformance Enabling Program initiative, with a saving of **$10.1 million** from the Department of Industry, Science and Resources.
  - Reversal of the Liquefied Natural Gas (LNG) Partnership for South Asia, with a saving of **$4.2 million** over the forward estimates from the Department of Industry, Science and Resources.
  - Reduction in funding for the Australia – India Global Mining Challenge Program, with a saving of **$0.5 million** from the Department of Industry, Science and Resources.
- This funding will be redirected to fund other initiatives across the Foreign Affairs Portfolio.
- The Industry, Science and Resources Portfolio will continue to support engagement activities between Australia and India, including in resources, critical minerals, science cooperation, technological innovation and space collaboration.

An Ambitious and Enduring APS Reform Plan

- Across government, agencies have contributed savings to offset the Government's Australian Public Service Reforms. The Industry, Science and Resources Portfolio has contributed a saving of **$2.0 million** to offset these reforms.

s22

Savings from External Labour, Advertising, Travel and Legal Expenses

- Across government, agencies have contributed savings from external labour, and savings from advertising, travel and legal expenses to contribute to Budget Repair. The Industry, Science and Resources Portfolio has contributed a saving of **$30.7 million** for this measure.

s22

Background

The department's process to undertake the Audit

- The Audit was carried out through extensive consultation across the department, s22
- s22
- The department collated financial and qualitative data on these programs from the responsible policy areas, verified them against the s22 , and reviewed the results to identify any opportunities for more efficient and effective spending.

Note: Strategic Policy Division can speak to the department's Audit process. s22

SB22-000168

SQUARE KILOMETRE ARRAY (SKA) – INDIGENOUS LAND USE AGREEMENT

Headline Statement

- The s22 and Square Kilometre Array Indigenous Land Use Agreement (ILUA) is finalised.

Key Points

- ILUA negotiations were held in good faith between the Commonwealth, CSIRO and the Wajarri Yamaji. Negotiations commenced in October 2016 and concluded on 9 August 2022.

- By 15 September 2022, the ILUA was signed by the s 22 the Commonwealth, s 22 (the Parties).

- The ILUA provides the s22 with substantial intergenerational financial and non-financial benefits and ensures ongoing protection and management of Aboriginal Cultural Heritage (**EC22-001575** refers).

- A comprehensive Cultural Heritage Management Plan has been appended to the ILUA to further protect s22 heritage and to comply with the new *Aboriginal Cultural Heritage Act (2021)* (WA).

- The ILUA underwent a one month registration period by the s22 This period provided an opportunity for Parties to lodge an objection to the registration of the ILUA.

- s22

Policy Commitments

- Australian Government funding commitments in 2015 through the National Innovation and Science Agenda and the 2021-22 Federal Budget.

- Australia signed the Host Country Agreement in November 2021 committing the Commonwealth to negotiate an ILUA and provide site access.

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INDEPENDENT REVIEW INTO DIVERSITY IN STEM

Headline Statement

- The Government is committed to widening the pathway of talent available to the science, technology, engineering and mathematics (STEM) sectors.

Key Points

- The Government has announced an independent review of existing women in STEM initiatives and policies.
- The review will consider whether and how existing Government programs and policies are working and where they can be reformed to support and improve diversity in Australian STEM education and careers.
- The review will inform future efforts to expand these initiatives to include other traditionally under-represented groups.
- This will include examining cultural and structural barriers that limit the participation and retention in STEM.
- The review will be led by an independent panel of experts from Australia's STEM community. It is expected to make recommendations on measures to attract, promote and retain diverse groups into the Australian STEM workforce to maximise innovation, creativity, leadership and competitiveness.
- The terms of reference for the review and the membership of the panel are currently being finalised, with further announcements to be made by the Government in due course.
- The review will be completed within 12 months.

Policy Commitments

- The review is one of the outcomes of the September Jobs and Skills Summit, focusing on maximising the jobs and opportunities in our industries and communities.
- The review will also be designed to support the Government's commitment to see 1.2 million tech-related jobs by 2030.

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Background

- On 6 September 2022, the Minister for Industry and Science announced an independent review to determine how existing programs and policies can be reformed and expanded to support greater diversity in Australia's STEM sector.
- The review will be supported by a small taskforce in the department.
- It will evaluate the nine women in STEM programs currently administered by the department:
  - Australian Government Women in STEM Ambassador
  - Elevate: Boosting the Next Generation of Women in STEM
  - Girls in STEM Toolkit
  - Champions of Change Coalition (previously Male Champions of Change) (STEM)
  - National Awareness Raising Initiative (Future You)
  - Science in Australia Gender Equity
  - STEM Equity Monitor
  - Superstars of STEM
  - Women in STEM and Entrepreneurship grants.
- The review will also consider other programs within the Industry and Science portfolio that aim to boost participation of under-represented groups in STEM-related sectors, where relevant.
- The panel may also consider other evidence-based information, including from other equity in STEM initiatives, relevant to the review. This may include annual reports, evaluations, or specially prepared information submitted as part of the consultation process.
- The review will identify and engage with a breadth of stakeholders through consultation with stakeholders, including industry, academia, education, state and territory governments, community organisations, as well as individuals in or who have left the STEM pipeline.
- Consultation will be accessible and include an online public submission process, as well as in-person and virtual consultation events at dates and locations to be determined. It is expected that a consultation discussion paper will be developed to drive the stakeholder engagement process.

REVITALISED NATIONAL SCIENCE AND RESEARCH PRIORITIES

Headline Statement

- The Government will refresh the National Science and Research Priorities and National Science Statement.

Key Points

- On 27 September, the Government announced that it will refresh the National Science and Research Priorities and the National Science Statement to establish a unified sense of purpose for Australia's science and research communities to address the country's most pressing national challenges.
- Renewing these two key policy documents will help embed science in Government decision making, and ensure our efforts and investments are better aligned with Australia's comparative advantages and strategic interests.
- Minister Husic has asked Australia's Chief Scientist, s22 , to lead a national conversation that will inform the revitalisation process.
- This work will complement other related reviews and initiatives, such as the review of women in STEM programs, the review of the s22 and the development of a Universities Accord.
- Work on the revitalised Priorities and Statement will be finalised within 12 months.

Policy Commitments

- The Government has identified three initial priorities that could form part of a refreshed set of priorities:
  - Supporting stronger action on climate change
  - Elevating and investing in First Nations perspectives on science, technology and innovation.
  - Harnessing the potential of emerging technologies and scientific research in pursuit of not only economic growth, but improving Australian wellbeing.

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Background

- The revitalised National Science and Research Priorities and the renewed National Science Statement will be delivered by a dedicated taskforce established within the Department of Industry, Science and Resources.
- Extensive consultation will be undertaken with science, research and industry stakeholders.
- States and territories, and international partners will also be engaged.
- There will also be a public consultation process to ensure that all Australians have an opportunity to contribute.
- Further information on consultation opportunities will be announced shortly, with formal consultation planned from late 2022 / early 2023.

LIST OF CRITICAL TECHNOLOGIES IN THE NATIONAL INTEREST – CONSULTATION FOR 2022 LIST

Headline Statement

- The Department has concluded consultation to inform the development of the *2022 List of Critical Technologies in the National Interest* and is now working with Minister Husic on next steps.

Key Points

- Critical technologies are current and emerging technologies with the capacity to significantly enhance or pose risk to our national interest, which includes our economic prosperity, national security, and social cohesion.
  - The *2021 List of Critical Technologies in the National Interest* identifies technologies that are vital to Australia's interests today or have the potential to become critical for Australia within the next decade.
- On 22 August 2022, Minister Husic opened a six-week Consultation period, led by the Department, to seek public comments and feedback on developing the *2022 List of Critical Technologies in the National Interest* (the 2022 List)[1].
- Consultations closed on 30 September 2022 although a limited number of extensions for written submissions until 7 October 2022 were given. A total of 205 submissions were received.
- There was one Ministerial roundtable (26 attendees), and 15 open roundtables attended by 195 participants comprising:
  - 35 from Commonwealth and State governments,
  - 45 from academia (from 30 research organisations),
  - 97 from industry (from 84 organisations), and
  - 18 general stakeholders.

[1] https://www.minister.industry.gov.au/ministers/husic/media-releases/backing-australias-critical-technologies

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- The Critical Technologies Hub is now reviewing the recommendations and feedback received from the consultation process and working with Minister Husic on the next steps to refine and publish the List.

Background

- Under the Administrative Arrangements Order made on 23 June 2022, the Department of Industry, Science and Resources is responsible for "Critical technology policy development and coordination of information and communications technology industry development".

- This includes whole-of-government policy responsibility for critical technologies, as managed by the Critical Technologies Hub in the Department. The Hub s22 and moved to DISR in recent machinery of government changes.

<u>The 2021 List of Critical Technologies in the National Interest</u>

- As part of the Action Plan for Critical Technologies, the former government publicly launched a *2021 List of Critical Technologies in the National Interest* (the 2021 List).

- s22

- The 2021 List identified 63 technologies that the previous Government believed were critical for Australia's national interest today or within the next ten years. These technologies have the capacity to be used in many different ways, with many having implications for defence and security, but often also broader applications.

- The inaugural List itself did not imply any recommended or prohibited actions.

- Inclusion of a technology on the List also did not imply guaranteed prioritisation or that there was a real or perceived risk to national security from that technology.

- The purpose of the 2021 List was to signal areas of focus. The List does not cover instances of technological convergence, which are also likely to be critical.

If asked: *Do other nations have lists?*

- Yes – however, many of these are from a national security perspective rather than a national interest (i.e. economic prosperity, national security and social cohesion).

- The Critical Technologies Hub considered other international lists in the development of Australia's list.

- In February 2022, the US released a Critical and Emerging Technologies List Update, which contains 19 emerging technology areas and 103 technologies.

- There is considerable overlap between the US' and the Australia's 2021 List of technology areas, and that differences mainly reflect differences between US and Australian sovereign capability and local priorities.

SB22-000174

DIGITAL AND TECH SKILLS COMPACT

Headline Statement

- The Australian Government is working with industry, unions and across the training and education system to develop practical and scalable solutions to meet Australia's digital and tech skills challenge.

Key Points

- The Australian Government announced at the Jobs and Skills Summit (the Summit) that it would implement a Digital and Tech Skills Compact (the Compact) with business and unions.
  - The Compact is a commitment to work together to meet our shared digital and tech skills challenge.
  - As announced, a particular focus of this work is on developing a model 'Digital Apprenticeship' scheme, to support workers to "earn while they learn" in entry level tech roles.
- Following the Minister for Industry and Science s22 jointly announced the establishment of a Working Group to take this work forward.
  - Unions, employers and education and training providers have been invited to nominate representatives to the Working Group.
- Although there is an initial focus on 'earn while you learn models' the Working Group will also provide advice on other matters relating to Australia's digital and tech skills challenge to support the *Employment White Paper* process.

Policy Commitments

- The Compact, and the working group being established to take it forward, are an example of the concrete steps that Government is taking to deliver on its commitment to reach 1.2 million tech-related jobs in Australia by 2030.

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Background

- The Government has committed to reaching 1.2 million tech-related jobs by 2030. Key to achieving this goal is ensuring that Australians have the skills necessary to fill these jobs.
    - Meeting the digital skills challenge will require the coordinated action of Governments at all levels, industry, training providers and unions.
    - It will also require a multi-pronged approach including increasing the pipeline of talent through the training system, supporting more mid-career transitions and increasing skilled migration to meet the broad demands.
- Developing a 'digital apprenticeship' was one of the recommendations in the Digital Employment Forum's report *Getting to 1.2 Million: Our Roadmap to Create a Thriving Australian Tech Workforce* which was launched by Minister Husic at Parliament House on 2 August 2022.
    - s22
- There are many examples of 'apprenticeship-type' models being used to deliver digital skills by companies and in some cases by state and territory governments.
    - A key challenge of the Working Group will be to draw in the lessons from these existing programs and develop model that is capable of being scaled up (rather that committing to another bespoke and limited pilot program).
- The Working Group will operate for a period of six months initially focusing on the development of a Digital Apprenticeship model, with a possible extension of up to 12 months, consistent with the time period for the *Employment White Paper* development.
- The announcement at the Summit made clear that if any 'apprenticeship' program was implemented as a consequence of the Compact then:
    - companies that sign up to the Compact would be expected to commit to employing a proportion of their new employees through any such scheme; and
    - any scheme would include equity targets for those traditionally under-represented in digital and tech fields.

AI, QUANTUM AND ROBOTICS

Headline Statement

- Technologies such as artificial intelligence (AI), quantum and robotics are central to building our industrial capability, making things smarter, competing globally, fostering an inclusive economy and providing good, secure jobs.

Key Points

Quantum

- Australia has an established strength in quantum technologies, earning Australia a reputation as an international leader. By 2045, quantum technologies could generate nearly $6 billion in revenue and over 19,000 jobs.
- To ensure Australia remains a global leader, a National Quantum Strategy is being developed under the leadership of Australia's Chief Scientist, s22 AO PSM. The strategy will outline the Government's vision for the quantum industry, and is expected to be delivered by the end of the year.
- In September 2022 the National Quantum Advisory Committee was established to help develop Australia's National Quantum Strategy. The committee met for the first time on 6 October 2022.
- A consultation paper on the proposed framework for the Strategy was opened for feedback from 5 October to 5 November 2022. This paper builds on insights from our previous Issues Paper and four roundtables led by s22
- The Federal Budget includes:
  - $28m to the National Quantum Strategy to support industry growth and strategy implementation over 2022-23 to 2025-26.
  - $4.8m for Support for Quantum Researchers and Academic Partnerships over 2022-23 to 2025-26. This will involve the provision of up to 20 PhDs to support quantum research.
- The Portfolio Budget Statement also includes an 'Australian Quantum Ecosystem' item, with funding allocated for the 2022-23 financial year. This figure is commercially sensitive and is marked not for publication.

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Robotics

- Robotics has the potential to provide significant social, economic and environmental benefits to Australia. Australia already has strong research expertise and growing local capability to produce and adopt innovative robotic solutions. By 2030, the global robotics market is expected to grow to between $160 and $260 billion, up from $25 billion in 2021.

- In August 2022, the Minister for Industry and Science announced the development of a National Robotics Strategy, expected to be published by March 2023. It will set out a vision for the robotics sector, address challenges across the domestic robotics and automation ecosystem, and articulate its potential role in the Government's agenda for the economy, jobs and skills.

- An advisory committee will support this work, consisting of up to five Australian experts representing industry, academia, and ethical and community interests. The committee is currently being established.

- Targeted consultation is underway with a range of stakeholders. A discussion paper seeking views on the strategy is expected to be released by the end of the year, supported by a series of workshops around Australia.

Artificial intelligence (AI)

- AI and automation technologies have been forecast to add between $1 and $4 trillion to our economy over the next 15 years. The Government is committed to Australia being a maker of AI technologies and ensuring we harness the potential benefits for our economy and society.

- The 2022-23 Budget provides $113.3 million for AI programs over the next four years. The $15 million in funding for artificial intelligence programs that was not spent in 2021-22 is not available for future years.

- s22

- Programs announced under the former government's AI Action Plan have been reviewed as part of this process. Now that the Audit is complete the Minister is able to proceed with those programs.

- This includes the AI and Digital Capability Centres program, and round one of the Catalysing the AI Opportunity in our Regions program which opened to applications in the first half of this year.

- Next steps on these programs are subject to ministerial decision, taking into account the outcomes of the Audit, the Government's policy priorities, availability of funds and the Commonwealth Grant Rules and Guidelines.

ECONOMIC OVERVIEW AND JOBS BY INDUSTRY

Headline Statement

- Australia's GDP rose by 0.9% in the June quarter 2022 and 3.6% through the year.
- National income is being boosted by a record level of the terms of trade, with DISR's latest *Resources and Energy Quarterly* forecasting Australia's resource and energy export earnings to reach a new record of $450 billion in 2022–23.
- The labour market remains tight with the unemployment rate at 3.5% in September 2022, and recent job advertisement data remaining strong. Job vacancies also remained high in August, with almost one vacancy per unemployed person.
- Headline inflation in Australia was 7.3% in the September quarter, s22
- s22

Key Points

Mining

- Mining output rose in the June quarter 2022 (up 0.2%) but fell through the year (down 0.7%). Mining employment increased by 1.8% in the quarter and by 11.3% through the year (based on ABS Labour Accounts). Company gross operating profits rose in the sector by 14.3% in the June quarter, with total profits in the sector now exceeding the company gross operating profits in the rest of the market sector combined. However, there was a significant fall in Mining investment in the quarter (down by 6.0%).
- Business conditions (s 22 survey) fell in the sector in September (down 26 points) but remained above long-time average. Confidence rose slightly to around the long-time average.

Manufacturing

- Manufacturing output fell in the June quarter (down 1.1%) but increased through the year (up 0.6%). Manufacturing employment decreased by 1.1% in the June quarter, but in annual terms, sector employment increased by 5.8%.
- Manufacturing business conditions and confidence fell slightly in September but remained well above long-time average. The Ai Group Performance of Manufacturing Index (PMI) fell into slightly contractionary territory in October (at 49.6 points), the third month of broadly stable conditions following positive results since February 2022. The employment sub-index remains in contraction, reflecting declining production alongside ongoing labour shortages. Input prices continue to grow, but at lower levels than previous months.

Construction

- Construction output fell in the June quarter (down 0.4%) but increased through the year (up 2.2%). Construction employment increased by 2.8% in the June quarter and by 4.9% in annual terms.

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- Performance of Construction Index (PCI) indicated contraction in October for the fifth consecutive month. Demand side pressures, including rising interest rates and economic uncertainty, have been dampening new orders. Supply-side constraints and labour shortages continue to inhibit activity, but there are signs of supply pressures easing for materials.

Tech

- DISR estimates that there were around 864,000 tech-sector jobs in 2021, or around 6.6% of total employment. The Government has committed to supporting 1.2 million tech sector jobs by 2030.
  - s22

Table 1: Gross value added by industry (Australian National Accounts June 2022)

	Current ($B)*	Quarterly change	Annual change	Change since Dec 2019 quarter	Per-covid long term growth 2010 - 2019
		Per cent	Per cent	Per cent	Per cent
Agriculture, forestry and fishing	68 8	1.6	11.0	57.2	-0.7
Mining	313 5	0.2	-0.7	-4.1	5.8
Manufacturing	125.1	-1.1	0.6	3.1	-0.7
Electricity, gas, water and waste services	45 2	4.1	5.3	3.1	0 9
Construction	157 8	-0.4	2.2	2.5	2.1
Wholesale trade	83.6	-2.2	-0.5	8.0	2 5
Retail trade	86.7	0.4	4.5	11.1	2 5
Accommodation and food services	38 8	10.7	7.0	0.7	2.1
Transport, postal and warehousing	91 8	7.5	13.1	0.9	2 2
Information media and telecommunications	51 0	1.6	8.7	13.3	4 2
Financial and insurance services	166.6	0.9	2.6	6.6	2.5
Rental, hiring and real estate services	61 0	1.0	1.3	4.4	4 0
Professional, scientific and technical services	164 2	1.3	10.5	12.6	4.4
Administrative and support services	74 9	2.8	8.3	0.3	3 5
Public administration and safety	116.1	-0.5	2.2	7.1	2.3
Education and training	105 5	0.4	1.7	3.2	1.9
Health care and social assistance	172.6	2.5	5.4	12.3	4.5
Arts and recreation services	14 3	3.6	11.1	6.5	2.7
Other services	31.6	1.9	3.2	2.1	2 0
GDP	2296.6	0.9	3.6	5.5	2.6

Source: ABS cat. no. 5206, Australian National Accounts, quarterly
Notes: *Figures in current prices. Percent change and growth rates based on chain volume series - showing change in real term. Yearly totals are calculated by taking the sum of four quarters. All figures are seasonally adjusted.

Table 2: Employment by industry (ABS Labour Accounts June 2022)

	Employed (,000)	Quarterly change	Annual change	Change since Dec 2019 quarter	Pre-covid long term annual growth trend 2010-2019
	Thousands	Per cent	Per cent	Per cent	Per cent
Agriculture, forestry and fishing	426.1	0.7	1.6	-9.9	-0.4
Mining	206.0	1.8	11.3	7.2	2.7
Manufacturing	923.1	-1.1	5.8	-6.0	-1.1
Electricity, gas, water and waste services	134.5	3.9	6.7	1.5	1.2
Construction	1,221.0	2.8	4.9	6.0	1.5
Wholesale trade	566.6	1.8	-3.2	-1.8	0.4
Retail trade	1,426.5	0.4	0.9	8.5	0.5
Accommodation and food services	1,270.3	6.3	12.0	0.0	1.8
Transport, postal and warehousing	689.4	2.8	3.2	6.1	1.6
Information media and telecommunications	190.9	6.4	5.8	-4.5	0.2
Financial and insurance services	473.4	2.6	-2.5	15.6	1.7
Rental, hiring and real estate services	300.4	1.2	4.8	10.6	1.7
Professional, scientific and technical services	1,272.7	5.3	8.5	13.0	2.9
Administrative and support services	1,023.6	1.5	5.8	-0.9	3.0
Public administration and safety	742.7	-1.8	-0.8	2.3	1.4
Education and training	1,050.7	-0.1	1.7	3.6	2.4
Health care and social assistance	1,963.0	0.1	-0.3	14.2	4.3
Arts and recreation services	320.8	10.7	19.2	-9.8	2.1
Other services	546.0	4.9	3.2	5.5	1.7
Total employment (Sept-22 month)	*13,590.8*	*0.0*	*5.4*	*4.8*	*0.9*
Tech sector (2021 estimate)	*864.0*				

Source: ABS cat. no. 6150, Labour Account industry summary table by industry division - seasonally adjusted, quarterly (industry employment is main jobs only).
Note: Total employment is from the more recent monthly ABS Labour Force release, therefore the sum of industries does not add to the total employment figure shown. Industry employment is from the ABS Labour Accounts, with is the most complete source of industry employment data, and includes additional data sources such as business surveys and administrative data.

BUY AUSTRALIAN PLAN

Headline Statement

- Maximising opportunities through the Government's purchasing power will increase the nation's supply chain resilience, encourage innovation, and improve broader economic outcomes.

Key Points

- Commonwealth procurement is a strong economic lever that can drive the economic recovery from COVID, develop our industries and secure Australian jobs into the future.
- The 10-point Buy Australian Plan outlines the Government's commitment to maximise opportunities for businesses to participate in Commonwealth procurement and contracts.
- An integral part of the Plan is the establishment of a Future Made in Australia Office (the Office) in the Department of Finance (Finance). The Office provides a coordinated approach to implementing the Plan across Government. The Department of Industry, Science and Resources (DISR) works together with the Office in the delivery of the Buy Australian Plan.
- The Office will also use the Commonwealth Procurement Rules to actively support local industry to take advantage of government purchasing opportunities and ensure that Australian businesses have the opportunity to be involved in major infrastructure projects.
- DISR and s 22 will engage with industry to enable greater involvement in government procurement by small and medium enterprises, with a particular focus on regional businesses and workers, First Nations businesses and workers, and encouraging women into the workplace.
- The Plan is complementary to the National Reconstruction Fund, which provides a financing vehicle to drive investment in projects that will broaden Australia's economy and boost economic development.

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If asked about the Future Made in Australia Office:

- My department works closely with the Office on the implementation of the Buy Australian Plan.
- You can visit their website at www.finance.gov.au/business/buyaustralianplan
- It also links to the DISR AIP webpage at www.industry.gov.au/major-projects-and-procurement/australian-industry-participation

If asked about timeframes for delivery:

- The delivery of the Buy Australian Plan is overseen by a Deputy Secretaries Steering Committee comprising representatives from key departments and agencies, co-chaired by DISR and Finance.
- The government will shortly commence consultation with key stakeholders on delivering key elements of the Buy Australian Plan.
- The aim of the consultation is to identify opportunities for national collaboration that would contribute to and inform the role public sector procurement plays in the economy
- It will also inform the development of an action plan for reform with timelines and priorities to be agreed by government.

If asked about governance:

- The delivery of the Buy Australian Plan is overseen by a Deputy Secretaries Steering Committee comprising representatives from key departments and agencies, co-chaired by DISR and Finance.
- The Steering Committee will also support the Buy Australian Plan Ministerial Roundtable, co-chaired by the Minister for Finance and Minister for Industry, which will include participants from industry.

If asked about the introduction of a Buy Australian Act:

- The Deputy Secretary Steering Committee, co-chaired by DISR and Finance, will lead the cohesive and coordinated delivery of the Plan.
- It will consider how the plan should be implemented, including the need and application of any freestanding Legislative Act or Instrument.

CLIMATE CHANGE POLICY

Headline Statement

- The department is supporting the development of the Government's climate change policies that will impact the heavy manufacturing and resources sectors, including reform of the Safeguard Mechanism.

Key Points

- The global transition to a lower emissions economy will be a significant driver of change to Australia's economy.
- The department is supporting the development of the Government's climate change policies that will drive transition of the heavy manufacturing and resources sectors, including reform of the Safeguard Mechanism.
- The department is working across government s22 Towards Net Zero Mission to look at ways that regions reliant on carbon-intensive industries can make the most of the new opportunities.
- The department made a public submission to the Senate Inquiry into the Climate Change Bill 2022, which legislates Australia's reduction target of 43%.

Safeguard Mechanism

- Well-designed changes to the Safeguard Mechanism will further incentivise heavy manufacturing and resources companies to take action.
- Around 61 per cent of emissions covered by the Safeguard Mechanism come from resources projects and around 25 per cent come from heavy manufacturing. Many of these facilities operate in regional Australia and are significant local employers.
- s22
- s22

Contact Officer:
Name: s22
Division: Industry Growth
Telephone: s22

- Industry stakeholders raised matters during the consultation, including:
  a. Availability and timing of emissions reduction technologies; and
  b. Ensuring international competitiveness of Safeguard facilities will not be adversely impacted.
- The department continues to work with s22 to deliver the reforms.

Policy Commitments

- Powering Australia, the Government's plan to meet climate targets, includes:
  - Rewiring the Nation: $20 billion to rebuild and modernise the grid s22
  - National Reconstruction Fund (NRF): $15 billion to diversify and transform Australia's economy and industry:
    - with up to $3 billion of NRF finance earmarked for investment in things like green metals, renewables manufacturing, and developing low emissions technology; and
    - up to $1 billion earmarked support further value-adding in Australia's critical minerals processing industry. (DISR lead).
  - Powering the Regions Fund: supporting industry to decarbonise, develop new clean energy industries, support workforce development and purchase ACCUs on behalf of the Commonwealth s22
  - National Electric Vehicle Strategy: improving uptake, affordability and choice of electric vehicles s22
  - Safeguard Mechanism: reducing Safeguard Mechanism baselines on a broad trajectory to net zero by 2050 s22

Background

- The Safeguard Mechanism covers facilities that emit over 100,000 tonnes CO2-e each year (primarily resource and heavy industry facilities). The reforms (due to commence from 1 July 2023) aim to strengthen the Safeguard Mechanism so that it incentivises emissions reductions consistent with Australia's emissions reduction targets.
- Baselines will be revised for each facility in close consultation with industry within a broad trajectory towards net zero by 2050. The Government will carefully consider the available and emerging technologies in each sector when setting new baselines. Tailored treatment will also be provided for emissions intensive trade exposed industries (EITEs).

INDUSTRY GROWTH CENTRES

Headline Statement

- There is no new funding for the Industry Growth Centres (IGCs) and they are working through options to secure alternative sources. Government has committed to deliver a new Powering Australia Growth Centre and options for this are in train under development of the Australian Made Battery Plan.
- The 2020 Initial Impact Evaluation of the IGC Initiative will be released shortly.

Key Points

Industry Growth Centre Initiative Transition

- Direct funding for IGCs ceased 30 June 2022, with all IGCs transitioning to self-sustainable funding models. IGCs have until 30 June 2024 to spend their remaining existing funds, supporting a smooth transition.
- The department is in regular contact with the IGCs to provide support and advice. The department identifies where IGCs might access funding and assist with activities in our portfolio and others.
- This includes where IGCs can provide sector expertise, conduct research or deliver programs and projects.
- The value of the transition planning is that each IGC is narrowing its focus to where it can add value and deliver impact. This is distinctive for each IGC.
- *If asked if the plans are public:* Transition plans contain information of a commercial in confidence nature. Potential public release is a matter for government in consultation with the IGCs.
- *If asked will Government provide new funding for IGCs in the future:* Government will work through its priorities for the 2023-24 Budget process. Its focus is on its commitment to establish a Powering Australia Growth Centre.

Policy Commitments

Powering Australia Industry Growth Centre

- As an election commitment, the Government has committed $14 million to establish a Powering Australia Industry Growth Centre, building on the successes of the Industry Growth Centre Initiative.

- The success of the Growth Centres shows they have the potential to be effective catalysers and mentors for green tech initiatives. The Government will consider the best way to establish this growth centre and how it can provide the leadership, advice, and service needed for success.

- This entity is to work with states and territories, experts and industry, including businesses, to convert Australia's competitive advantages in renewables into local jobs and investment in technologies such as batteries. It will also focus on commercialisation, international market access, management and workforce skills, and opportunities for regulatory reform.

Initial Impact Evaluation

- The department commissioned s22 to undertake an Initial Impact Evaluation of the Industry Growth Centres IGC Initiative (IGCI) in 2020. The evaluation was completed in December 2021.

- As foreshadowed, the evaluation report will be made public shortly (reference: Minister Husic's address to the Australian Information Industry Association Tech & Sustainability Conference, 14 September 2022).

Background

- Over the program life, $318.9 million was invested in IGCs. See table below for details.

GROWTH CENTRE	COMMERCIALISATION FUND	OPERATIONAL FUNDS	AD-HOC GRANTS	PROJECT FUNDS	TRANSITION ACTIVITIES	TOTAL
s22						
TOTALS	30.00	164.00	13.09	93.00	18.80	318.89

s22

SB22-000163

RAIL MANUFACTURING AND LOCAL INDUSTRY DEVELOPMENT

Headline Statement

- The Australian Government is backing local manufacturing and rebuilding Australia's industrial base through its plan for A Future Made in Australia. This includes stimulating the domestic rail industry through the National Rail Manufacturing Plan and supporting the development of local industries.

Key Points

Rail Manufacturing

- The Government is providing $14.2 million over 4 years from 2022–23 to implement the **National Rail Manufacturing Plan**, which is part of the Government's A Future Made in Australia commitment.
- Implementation includes:
  - Establishing the Office of National Rail Industry Coordination in the department by end 2022 to lead a coordinated approach to address the challenges faced by the rail manufacturing sector.
  - Appointing a Rail Supplier Advocate in early 2023 to champion initiatives that foster interstate and overseas trade and commerce opportunities for Australian rail manufacturers.
  - Establishing a Rail Industry Innovation Council in early 2023 to provide strategic advice and play a key role in building connections and collaborating with other innovation initiatives and organisations.
  - Undertaking an audit of the adequacy, capacity and condition of passenger trains across Australia, to be completed in the first half of 2023.
  - Developing a National Rail Procurement and Manufacturing Strategy to enhance productivity and support local industry participation.
- The Plan will be implemented in consultation with s 22 , state and territory governments, rail peak bodies, rail transport operators, rail unions and rolling stock manufacturers.

If asked: how will the Rail Supplier Advocate be selected?

- The department will advise the Minister for Industry and Science on the non-statutory appointment of a Rail Supplier Advocate.

If asked: who will be on the Rail Industry Innovation Council?

- The Rail Industry Innovation Council will consist of up to 10 members and a chairperson, with members drawn from industry peak bodies, manufacturers, unions and research organisations.
- The department is consulting with stakeholders to identify suitable candidates, and will advise the Minister for Industry and Science on potential appointments.

Local Industry Development

<u>Local Industry Grants</u>

- $111.2 million will be delivered over 4 years under **8 targeted industry grants** to recipients around Australia.
- The grants will stimulate local industry and regional economic growth and support the Government's plan for A Future Made in Australia.
- Grants will support supply chain resilience in medical technologies, metal refining, publication paper and food supply.
- The department is working to deliver these commitments, in consultation with grant recipients.

If asked: how grant recipients were identified:

- The grant recipients were identified in the Government's election commitments. They align with the Government's priorities and are of strategic importance to support and develop local manufacturing capabilities.

If asked: about the impacts the grants will have:

- Most of the grant recipients are based in regional communities in Tasmania, Queensland and New South Wales. Many are major employers in their region.
- Many of the announced grant recipients have indicated that funding for plant and equipment upgrades will reduce emissions or enable them to recycle goods. The completion of these projects will help protect existing jobs and support the creation of new jobs, directly and indirectly.

SUPPLY CHAIN RESILIENCE

Headline Statement

- COVID-19, China's lockdowns and the ongoing impacts of Russia's invasion of Ukraine are affecting supply chains around the world. The Government has been, as a priority, taking action to monitor and tackle risks to our critical supply chains.

Key Points

- Australia's supply chains have generally performed well in times of crisis - served by free and open markets, a global rules-based order, and commercial incentives for industry to manage their supply chain risks. However, recent disruptions have challenged the reliability and efficiency of normal trade.
- While industry is primarily responsible for managing their supply chain risks, there are circumstances that require Government intervention, particularly where there may be significant impacts to society or the economy.
- The Minister for Industry and Science leads whole-of-government coordination to identify and manage critical vulnerabilities in Australia's supply chains.

Policy Commitments

- **The Office of Supply Chain Resilience (OSCR)**, s22 transferred to the Department of Industry, Science and Resources (DISR) on 1 July 2022.
- OSCR focuses on critical supply chain vulnerabilities that could impact Australia's national interest, which includes our: health, safety or wellbeing; economic stability and viability; national security; and shared strategic interests with key international partners.
- OSCR continues to **monitor risks** to our ongoing access to essential goods and services, including for: personal protective equipment (PPE); critical pharmaceuticals; agricultural chemicals; semiconductors; telecommunications equipment; and water treatment chemicals. These vulnerable and critical products were identified in previous analysis, including the Productivity Commission's 2021 report on Vulnerable Supply Chains.
- OSCR **engages regularly with industry** to help us understand current and emerging supply chain risks. These business insights can provide important early warning signs of disruptions to critical supply chains.
  - OSCR chairs a monthly Supply Chain Roundtable with key industry stakeholders and conducts deep dives on key topics where trade data shows a potential emerging supply chain risk.

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Last updated: 20/10/2022 9:08:00 AM

- We **work across government** to monitor key supply chains and to support respective departments to manage risks within their portfolio responsibilities.
- Where there is a clear risk to the supply of a critical good, we co-ordinate across government and industry to escalate and respond to disruptions.
  - We recently engaged with relevant industry bodies to assess timber pallet shortages; co-convened a National Coordination Mechanism with s 22 and continue to collaborate with stakeholders to implement practical solutions to improve availability of pallets.
  - We also engaged industry on implications resulting from China's COVID-19 lockdowns and associated port closures in 2022.
- In particular, the $15 billion National Reconstruction Fund will provide a mechanism to identify and finance targeted investments that build strategic industry capability and strengthen our most at-risk supply chains.
  - Two key NRF priority areas include: value-add in resources ($1 billion to expand Australia's mining science technology capability and ensuring a greater share of the raw materials extracted in Australia are processed here) and enabling capabilities ($1 billion to build strategic industry capability in critical technologies).

[Refer further questions on NRF to Manufacturing Head of Division – s 22 *]*

- Given Australia's significant reliance on international trade, **coordinated international actions** are key to mitigating the risk of major disruptions to global supply chains.
- Together with s 22 we are working bilaterally and through multilateral forums to build secure, transparent and resilient global supply chains.
- We are working with s22 on establishing a crisis response mechanism to share information and cooperate on regional supply chain risks and disruptions.
  - On 18 September 2022, the Prime Minister and the Prime Minister of Singapore, His Excellency s 22 , welcomed the establishment of the bilateral Supply Chains Working Group.
- We are working with the s22 on a joint supply chain resilience initiative which provides capability building support to interested countries.
- The **Indo-Pacific Economic Framework** (IPEF) also provides an opportunity to advance collaborative actions that increase investment in critical sectors and build resilient supply chains in the region.
- We are **working with Quad partners** to strengthen regional supply chains, particularly for clean energy and critical and emerging technology.
  - In May 2022, Quad leaders committed to leverage our complementary strengths to realise a diverse and competitive market for semiconductors.

s22

RESIDENTIAL ENERGY EFFICIENCY

Headline Statement

- The 2022 edition of the National Construction Code (NCC) lifts the energy efficiency standards of Australian homes, putting us a step closer to net zero buildings and a decarbonised economy.

Key Points

- NCC 2022 is delivering a new modern homes agenda—making homes more comfortable, sustainable and supportive for people throughout their lives.
- The minimum level of thermal performance will increase to the equivalent of 7 stars under the Nationwide House Energy Rating Scheme (NatHERS).
- A new annual energy use budget has been introduced for the first time, which applies to heaters and air-conditioners, hot water, lighting, swimming pool pumps, and on-site renewables such as rooftop solar.
- These measures have clear benefits for households. Energy efficient houses are more comfortable to live in – cheaper to heat in winter and cool in summer. This means lower energy bills and lower household emissions.
- These reforms will save the economy over $2 billion—taking account of the energy benefits, carbon benefits, and health benefits. This will see more than 14 million tonnes in greenhouse gas emissions reductions.
- The additional cost to construction is small – the analysis showed it would only add about $2,200 per dwelling. This will have no major effect on affordability.
- That same analysis showed these additional costs are outweighed by the direct benefits to households – saving $3,000 per dwelling over the life of the building.

Policy Commitments

- NCC 2022 represents a significant support to the Government's commitment to reduce greenhouse gas emissions by 43% by 2030 and transition to net zero emissions by 2050.
- NCC 2022 will also improves the readiness of new apartment buildings to include EV charging—supporting the National Electric Vehicle Strategy.

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Background

- Market demand for more energy efficient homes lead to the Australian Building Codes Board (ABCB) developing enhanced thermal performance and energy usage requirements in the 2022 edition of the National Construction Code (NCC 2022).
- Residential buildings are currently responsible for 7.69% of energy use, 29% of electricity use, and 11% of greenhouse gas emissions in Australia.
- The changes were agreed by Commonwealth, State and Territory Building Ministers on 26 August 2022. In reaching their decision, Building Ministers acknowledged the:
  - extensive input from building industry and advocacy stakeholders, and
  - regulation impact analysis prepared by the ABCB.

Household Benefits

- NCC 2022 means new homes will be constructed to be more comfortable all year round, requiring less energy for heating and cooling, and alleviate heat and cold stress.
- The new requirements mean over the average life the building, households will save $2,700 in energy bills for new houses and $670 for new apartments.
  - The total savings for the average Australian household is expected to be $3,000—when accounting for the energy benefits, carbon benefits, and health benefits
  - New households can also expect energy bill savings of $185 per annum.
- Total household savings exceeds the small additional cost to construction of $2,200 per dwelling, especially as the benefits extend for the life of the building.
- The new requirements also vary based on the local climate. For example, households in cooler climates can lower heat loss in winter through better glazing, while lighter coloured roofs will help reflect summer heat for homes in warmer climates.
- NCC 2022 also contains provisions for the future installation of Distributed Energy Resources (DER)—such as solar photovoltaics (PV)—and Electric Vehicle (EV) charging equipment.

Economy Wide Benefits

- Changes in residential energy use will support the transformation and reliability of the energy grid—reducing peak demand, especially during the height of summer and winter.
  - Reduced energy consumption reduces the peak load on energy networks
  - Improved outcomes for the grid with deferred investment in energy generation and network capacity
  - Improving resilience of households and energy grids to extreme weather events and risk of power outages.
- Taking account of the energy benefits, carbon benefits, and health benefits the total savings from these reforms is over $2 billion.

NATIONAL RECONSTRUCTION FUND

Headline Statement

- The Government is establishing the National Reconstruction Fund (NRF), a $15 billion financing vehicle that will diversify and transform Australia's industry to secure future prosperity and drive sustainable economic growth.

Key Points

- A strong and diverse economy is key to the Government's plan to create more secure, well-paid jobs for all Australians.
- The NRF will drive investment in 7 industry priority areas, focussing on value adding and capability development to leverage Australia's natural and competitive strengths. These priority areas are:
  - Value-add in resources; value-add in the agriculture, forestry and fisheries sectors; transport; medical science; renewables and low emission technologies; defence capability; and enabling capabilities.
- NRF legislation will be introduced to Parliament as soon as possible.
- The Government is consulting with key industry and government stakeholders to ensure the NRF is appropriately designed, targeted and delivered.

Policy Commitments

- The 2022-23 October Budget provides funding required to establish the NRF. Ongoing funding will be considered following consultation on NRF design.
- The NRF will be a corporate Commonwealth entity established by legislation and governed by a statutory board.
- The board will make independent investment decisions guided by an Investment Mandate issued by the Minister for Industry and Science, and s 22 . The Investment Mandate will be settled in the 2023-24 Budget context, following consultation with industry.
- The NRF will operate commercially and target a positive rate of return at the portfolio level. The NRF will have a broad power to invest using equity and debt instruments, including guarantees.

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Last updated: 20/10/2022 4:01:00 PM

Background

Policy context

- Persistent barriers, highlighted by the pandemic and global trade tensions, have inhibited the growth and international competitiveness of Australian industry.

- The NRF will focus on driving investment in projects that will rebuild Australia's industrial capability and in the process promote well paid, sustainable jobs of the future.

- The NRF will form part of an ecosystem of government initiatives. These include:
  - Buy Australian Plan
  - Powering Australia Plan, including the Powering the Regions Fund and the safeguard mechanism
  - National Energy Transformation Partnership
  - Defence Industry Development Strategy
  - a range of initiatives to support early-stage research and development

Legislation and Investment Mandate

- Development on the NRF legislation and Investment Mandate is underway. s22

- Introducing the NRF legislation to Parliament quickly with enable the Government to get the NRF up and running as soon as practicable.

NRF Board appointments

- The Board will be comprised of members with commercial, finance and/or industry expertise. They will be made as statutory appointments by the Minister for Industry and Science and s22

Earmarked financing levels

- The Government has earmarked $8 billion in NRF funding, including:
  - Support for the *Powering Australia* plan: up to $3 billion
  - Medical Manufacturing: $1.5 billion
  - Value adding in Resources: $1 billion
  - Critical Technologies: $1 billion
  - Advanced Manufacturing: $1 billion
  - Agriculture, Forestry, Fisheries, Food and Fibre: $500 million

Eligibility

- In the context of the NRF's focus on rebuilding Australia's industrial capability, eligible initiatives will need to be solely or mainly Australian based. Further eligibility criteria will be announced following consultation.

Co-Investment Plans

- Co-investment plans will be developed in consultation with industry to outline investment opportunities in the priority areas and to identify actions for Government and industry to build Australia's industrial capabilities. The plans are expected to be released by the end of 2023.

AUSTRALIAN MADE BATTERY PLAN

Overview

- The Government is delivering the Australian Made Battery Plan ('the Plan') to create jobs and regional development by manufacturing batteries end-to-end onshore. Under the Plan, the Government will:
  - Publish Australia's first National Battery Strategy ('the Strategy') to guide governments and industry towards a shared vision of end-to-end battery manufacturing;
  - Partner with the s22 to create a Battery Manufacturing Precinct ('the Precinct'), supported by up to $100 million in Commonwealth equity funding; and
  - Implement a Powering Australia Industry Growth Centre ('the Centre') focussing on commercialisation, international market access, management and workforce skills, and opportunities for regulatory reform.
- Together, the measures under the Plan will send a strong message to investors, researchers, industry and overseas partners that the Australian Government recognises the economic and strategic importance of Australian made batteries.

Key Points

- s22

  [1]

  - Australia produces over half of the world's EV battery minerals. Australia has opportunity to add value to those minerals by refining and making active materials.
  - Given strong demand in Australia for energy storage and niche applications for batteries, there are likely opportunities in end-to-end energy storage system manufacturing, and batteries for Australian heavy vehicle and mining equipment.
- Work on implementing the Plan is underway. The Department is meeting with key stakeholders and states and territories to inform the Plan. The Department is working closely with the s 22 on developing the Precinct.
- Formal consultation processes will start shortly, this is an opportunity to create a shared vision that guides future investment and activity in the battery industry, building on existing work underway across Australia.

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Contact Officer:
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Last updated: 26/10/2022 12:28:00 PM

Background – If Asked

What role can Australia play in the battery value chain?

- Australia already produces over half of the world's battery minerals, and currently ranks as the largest producer of lithium and 3rd largest producer of cobalt.2

- Australia can produce materials and batteries with high environmental, social and governance (ESG) standards, with good trade relationships to secure offtake agreements for products.

- Australia can build on its strong R&D in this field, with Australia filing the 2nd most battery related patents (after the s 22) from 2001-18.[3]

Why is battery manufacturing in Australia important?

- Battery manufacturing is not only a significant economic opportunity – but an environmental imperative. Batteries are essential to achieving the net-zero by 2050 target, and will be central to the transformation of the global energy system and transport sector.

- Australia's integration into the global battery supply chain will provide diversification in the market for regional partners and key allies. Further, the Australian Government backed investments can send a signal to the world that Australia is an attractive investment opportunity to support the global energy transition.

What types of batteries will Australia manufacture and what will they be used for?

- Australia will draw on its natural strengths, with the exploration of battery chemistries being in line with Australia's critical minerals availability and manufacturing capacity.

- Battery chemistries are highly diverse and will change with technological developments. The Plan will accommodate a broad suite of current, and future battery chemistries to maximise future economic potential. For example the mineral and manufacturing requirements for lithium-ion batteries, flow batteries, lead acid batteries are quite diverse.

Why is the Battery Manufacturing Precinct set to be built in Queensland?

- Queensland has vast reserves of the critical minerals needed to meet growing global demand. This includes: globally significant resources of vanadium, cobalt and graphite required for batteries. Further, Queensland has key critical minerals required for developing electric vehicles, solar PV and wind turbine technologies.

- To maximise a whole of Australia value chain, all states and territories will play a pivotal role in the battery industry of the future. Opportunities exist across jurisdictions to provide research and development, critical minerals, manufacturing, servicing or end of life processing to grow Australia's battery industry.

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MANUFACTURING GRANTS

Headline Statement

- The government is proceeding with the previously announced Modern Manufacturing Initiative (MMI) and Supply Chain Resilience Initiative (SCRI) grants.

Key Points

- On 26 August 2022, Minister Husic announced negotiations for the Modern Manufacturing Initiative grants announced by the former government would commence.
- For manufacturing grants announced by the former government in 2022, the department provided information and advice to the Minister on the assessment process that was undertaken.
- The $1.28 billion MMI program, delivered by the previous government, provided grants to Australian manufacturers.
- The announcement on budget night relating to the $250 million of uncommitted funding under the MMI will be returned to consolidated revenue to support Budget repair.
- The department is working closely with successful recipients to progress grant agreements and make payments to businesses.
- All successful recipients already announced under the MMI program will retain their grant funding.
- The government has undertaken the audit of wasteful spending to consider where funding needs to be reprioritised. Any Questions relating to funding announced by the former government on MMI with a regional focus, should be redirected to s22
- The MMI program provides $1.28 billion in grant funding across the three streams; Integration, Translation and Collaboration.

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Last updated: 20/10/2022 4:46:00 PM

– For the MMI Collaboration Stream 17 successful projects were announced on a rolling basis from 1 March 2022, totalling $828.25 million in grant funding with a total project value of $3.35 billion.

– For MMI Integration and Translation Round 2, there were 51 successful projects, totalling $294.77 million in grant funding with a total project value of $1.05 billion.

– For SCRI Round 2, 18 successful projects were announced together, totalling $27.39 million in grant funding with a total project value of $80.26 million.

Policy Commitments

- The Government is committed to negotiating grant agreements with the announced recipients of the MMI and SCRI programs.

Background

- The three streams under the Modern Manufacturing Initiative provided funding to the following sectors: resource technology and critical mineral processing, recycling and clean energy, food and beverage, medical products, space and defence.

Manufacturing Collaboration Stream:

- The Manufacturing Collaboration Stream Guidelines were published on 30 June 2021. Applications were able to be lodged from 11 August 2021 to 9 September 2021.
- 17 successful projects were announced on a rolling basis from 1 March 2022, totalling $828.25 million in grant funding with a total project value of $3.35 billion.
- 64 applications seeking grants totalling $3.64 billion for projects worth $14.01 billion were unsuccessful.
- Funding for the MMI Collaboration stream was increased by $28.25 million through a Movement of Funds from the Supply Chain Resilience Initiative.
- The former Prime Minister was the decision maker for MMI Collaboration Stream grants, with recommendations made by the former Minister. This process was outlined in the Grant Opportunity Guidelines.
- All unsuccessful applicants were offered feedback.

Manufacturing Translation and Integration Streams Round 2:

- Round 2 of the Manufacturing Translation and Integration Streams (in the Modern Manufacturing Initiative) opened for applications in two tranches.
  - Applications for Space, Medical Products and Resources Technology and Critical Minerals Processing opened on 13 December 2021.
  - Applications for Food and Beverage, Recycling and Clean Energy and Defence opened on 17 December 2021. All closed for applications on 14 January 2022.
- There were 51 successful projects, with 50 announced on a rolling basis from 21 April 2022, totalling $294.77 million in grant funding with a total value of $1.05 billion.
- 370 applications seeking grants totalling $1.8 billion for projects worth $6.1 billion were unsuccessful.

- Funding for Round 2 of the MMI Integration and Translation Streams was increased by $14.77 million through a Movement of Funds from the Supply Chain Resilience Initiative.
- The former Minister was the decision maker for the grants.

Supply Chain Resilience Initiative Round 2:

- Round 2 of the Supply Chain Resilience Initiative closed on 17 January 2022. Up to $50 million of funding was available and could provide up to 50 per cent of eligible project expenditure.
- Round 2 of this initiative funded projects in semiconductors and water treatment chemicals product categories.
- 18 successful projects were announced together, totalling $27.39 million in grant funding with a total project value of $80.26 million.
- The former Minister was the decision maker for the grants.

SB22-000171

AUDIT OF DELIVERY PARTNERS FOR THE ENTREPRENEURS' PROGRAMME (MINISTER VERSION)

Headline Statement

- On 24 June 2022 the Australian National Audit Office (ANAO) tabled a performance audit of the procurement of delivery partners for the Entrepreneurs' Programme (EP).

Key Points

The ANAO made 10 recommendations; the department agreed to all of these.
2 recommendations progressed to close.
8 recommendations on track.

- The audit examined whether the design and conduct of the procurement process for delivery partners for EP in late 2019, complied with the Commonwealth Procurement Rules, and whether the contracts are being appropriately managed.
  - request for tender opened 27 September 2019 and closed 27 November 2019.
- The audit exposed capability and cultural issues across the department, particularly in relation to procurement, probity, and a breach of the Commonwealth Procurement Rules (CPRs).
- The department accepts that its approach to this procurement was deficient in significant respects and fell short of the appropriate standards of transparency, consistency and fairness.
- The department also accepts that its management of these contracts required improvement; this work has been expedited and implemented.
- The department has agreed to all of the recommendations and has expedited a program of work to meet the recommendations.
- The department is focused on ensuring compliance with Commonwealth Procurement Rules.

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Last updated: 20/10/2022 2:27:00 PM

Overall approach

The department is improving its procurement and assurance processes, including addressing the recommendations in the ANAO report, as follows:

- established a Program and Probity Review Taskforce, led by a senior executive, to review Departmental procurement and assurance practices, establish a centralised procurement governance team and manage enterprise procurement governance.
- probity training for all SES, AusIndustry and Business Grants Hub staff (outlined below).
- enhancing procurement, contract management and probity guidance and policies.

***If asked:* Claims for compensation; Contract Management; Debriefs for unsuccessful tenderers; or, JCPAA inquiry**

- Refer to the Secretary and officers of the department

DELAYS TO GRANT PROGRAMS

Key Points

- The outcomes of a number of grant programs were announced by the previous Government prior to the 2022 Federal election. Not all grant agreements under these programs were executed prior to the Caretaker period commencing.
- Since the change of Government, implementation of these programs was effectively paused to enable the Government to review existing programs, consistent with their election commitment to conduct an audit of spending.
- The Government established the Government Spending Audit to identify opportunities to improve the quality of spending and reprioritise existing funding towards higher priority initiatives and Budget repair.
- The outcomes of the Audit are published in Budget Paper No. 2, *Budget Measures October 2022-23*, with saving measures and the redirection of spending resulting from the Audit identified.
- With the outcomes of the Audit now known, we will work flexibly with grantees to execute grant agreements to deliver their projects for remaining programs in line with the Government's decisions.

Commitments

- The Government has stated it will honour existing executed grant agreements.
- Grant programs will continue to feature as key investment mechanism for the Commonwealth, as highlighted in the measures announced in the October Budget.
- While there has been a pause for some grant programs, significant progress has been made on major Industry Portfolio grant programs including:
  - The Modern Manufacturing Initiative (MMI) Integration, Translation and Collaboration Streams are all progressing with the department currently negotiating a total of 68 grant agreements, with a total value of $1.12 billion.
  - The Supply Chain Resilience Initiative (SCRI) is progressing with 18 grant agreements under negotiation, valued at $27.4 million.

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Division: AusIndustry
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  - Under the Critical Minerals Development Program (formerly the Critical Minerals Accelerator Initiative), the department is negotiating six grant agreements valued at $49.7 million.

- The Business Grants Hub is also delivering grant opportunities on behalf of other departments and Ministers, including:

s22

Background

- The former Department of Industry, Science, Energy and Resources paused all grant program implementation for the during the caretaker period, consistent with Section 5 of the Caretaker Conventions.

- Following the caretaker period, the majority of paused programs continued to remain on pause pending the outcomes of the Government Spending Audit.

  - A small number of grant programs were given approval by the Industry Minister as well as either s22 to proceed in advance of the outcomes being determined.

- Now outcomes of the Audit are known, we will proceed with implementing the grant programs approved by the Government in the October Budget.

SPACE – KEY ISSUES

Headline Statement

- Space capability is critical to Australia's economic and security interests, both in space and on Earth.

Key Points

House of Representatives Inquiry

- The House of Representatives Standing Committee on Industry, Innovation, Science and Resources tabled its report – *The Now Frontier: Developing Australia's space industry* – on 2 December 2021.
    - The Government has committed to provide a formal response this year.

National Space Program for Earth Observation (NSPEO)

- The NSPEO will design, build, launch and operate four specialist land imaging satellites, enabling improvements to the quality and interoperability of Earth observation (EO) data from international providers, which we rely on for critical services such as land use and environmental monitoring.
    - The Australian Space Agency (the Agency) leads the program which includes s22 as key partners.
- There have been media reports raising concerns over perceived delays to the release of major tenders for NSPEO.
- The Government has gone line-by-line through all spending commitments of the previous government, including the NSPEO.

Review of 22-23 Budget Measures

- The Government is continuing to carefully consider uncommitted funds associated with all programs, including the National Space Program for Earth Observation, to ensure they align with national priorities and deliver value for the economy and all Australians..
- There have been no changes to funding for space programs in this Budget.

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Last updated: 28/10/2022 12:32:00 PM

- The Agency is responsible for delivering five initiatives in the space sector:
  - The **NSPEO** – an investment over 18 years to design, build, and operate four new satellites for Earth observation.
  - The **Moon to Mars** program, enabling Australian companies to deliver products and services into global space supply chains, including for projects managed by NASA.
  - Initiatives to **fast track access to space** including procuring launch tickets for Australian industry and researchers, and support the development of space ports.
  - The **International Space Investment** program, unlocking international space opportunities for Australian companies.
  - The **Space Infrastructure Fund**, supporting projects to address gaps in Australian space infrastructure.

Debris Monitoring

- The Agency has coordinated the recovery of three space debris objects found in the Snowy Mountains region. The objects are remnants from a s22 , re-entering the Earth's atmosphere on 9 July 2022. There may be other objects not reported.
  - Two days after initial reports, and following the Australian Government Debris Re-Entry Plan 2017, the Agency inspected three debris objects, with the support of local landowners and police, s22 A fourth object was later reported [and is expected to be collected by the Agency prior to Senate Estimates].
  - On 26 August 2022, the Australian Government formally notified s22 by diplomatic cable, in compliance with Australia's treaty obligations under the Rescue Agreement.
  - The Agency is working with s22 to return several samples to the s 22 for further analysis and obtain learnings from the event, including improving re-entry forecasting. The remainder will be placed on display or destroyed.

Policy Commitments - nil

Background

- The Australian space industry, with combined revenues over $4 billion, drives economic growth by providing access to new markets, attracting and retaining high-skilled jobs, diversifying and advancing our manufacturing base, and unlocking emerging technologies.
- Many technologies developed for the space sector have spillover applications across the economy. The space sector also provides an avenue for closer international collaboration with partners and allies.
- Space is becoming increasingly competitive and congested as countries compete for space technologies and assured access to space. With almost 5,000 satellites orbiting Earth, Australia needs to take a more active role in the space domain to mitigate risks of orbital debris and disruptive acts and build national resilience to maintain our way of life.

SB22-000211

FLOOD IMPACTS

Headline Statement

- AusIndustry informs, coordinates, and delivers support for businesses through disaster recovery and resilience, s22

Key Points

- AusIndustry provides immediate assistance to businesses after a disaster, connecting them with support and services available across jurisdictions.
- Regional Managers have a track record of gearing-up and assisting their regions during times of crisis.
  - They work with affected businesses and stakeholders, and provide important intelligence to the department, supporting whole-of-government efforts.
- AusIndustry has 12 Regional Managers across the current flood affected areas of Queensland, NSW, Victoria and Tasmania.
- They connect business to support on offer from s22
- While the true impacts of the *current* flooding are still being realised, examples of Regional Manager responses to other flooding events this year include:
  - s22
    - : s22
  - s22
    - : s22

Contact Officer:
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Division: AusIndustry Division
Telephone: s22
Last updated: 2/11/2022 6:22:00 PM

- AusIndustry also provides immediate on-the-ground assistance to businesses after a disaster through the Strengthening Business initiative.
- This initiative is currently supporting businesses in 63 LGAs across Queensland, New South Wales, Victoria and South Australia, with a footprint of 45 facilitators.
- In preparation for disaster events, facilitators will check in with their clients, triaging and preparing them for the immediate response.
  - This can include relocating operations, machinery, equipment and/or stock, or reverting to online operations where possible.
- Facilitators will work with businesses on requirements of relevant grant funding, so they better understand grant criteria and what circumstances apply.
- Facilitators will also develop a roadmap for recovery for business, helping them build resilient operational and business management practices.
  - This prepares them to deal with the external events that continue to overwhelm communities and regions.
  - To date, the initiative has worked with over 1100 businesses.
- In the acute phase of a natural disaster, it is traditionally challenging for many areas of government to have visibility of business impacts.
  - AusIndustry's networks gather business intelligence to share across government, to inform policy development and decision making.
  - AusIndustry's weekly Flood Impacts Report is shared with almost 350 stakeholders across government.

Policy Commitments

- s22
- In addition:
  - s22
  - s22
- Any questions should be directed to the s22 portfolio.

PROCUREMENT AND GRANTS PROCESSES

Key Points

- The *Public Governance, Performance and Accountability Act 2013* governs the management of public resources by the Commonwealth and Commonwealth entities, including grants and procurements.

Procurement

- Procurement encompasses the whole process of acquiring goods and services.
- Procurements are the means by which departments seek to meet policy objectives through the acquisition of goods and services for the Commonwealth's own use or for the use of third parties.
- Most procurements are for the ordinary and well-recognised functions of government and do not require separate legislative authority apart from an appropriation in an Appropriation Act.
- However, spending relating to a procurement may require separate legislative authority where it is not for the ordinary and well-recognised functions of government.
- The Commonwealth Procurement Rules (CPRs) establish the policy framework for procurements.
- The decision to enter into a procurement is usually made by departments.

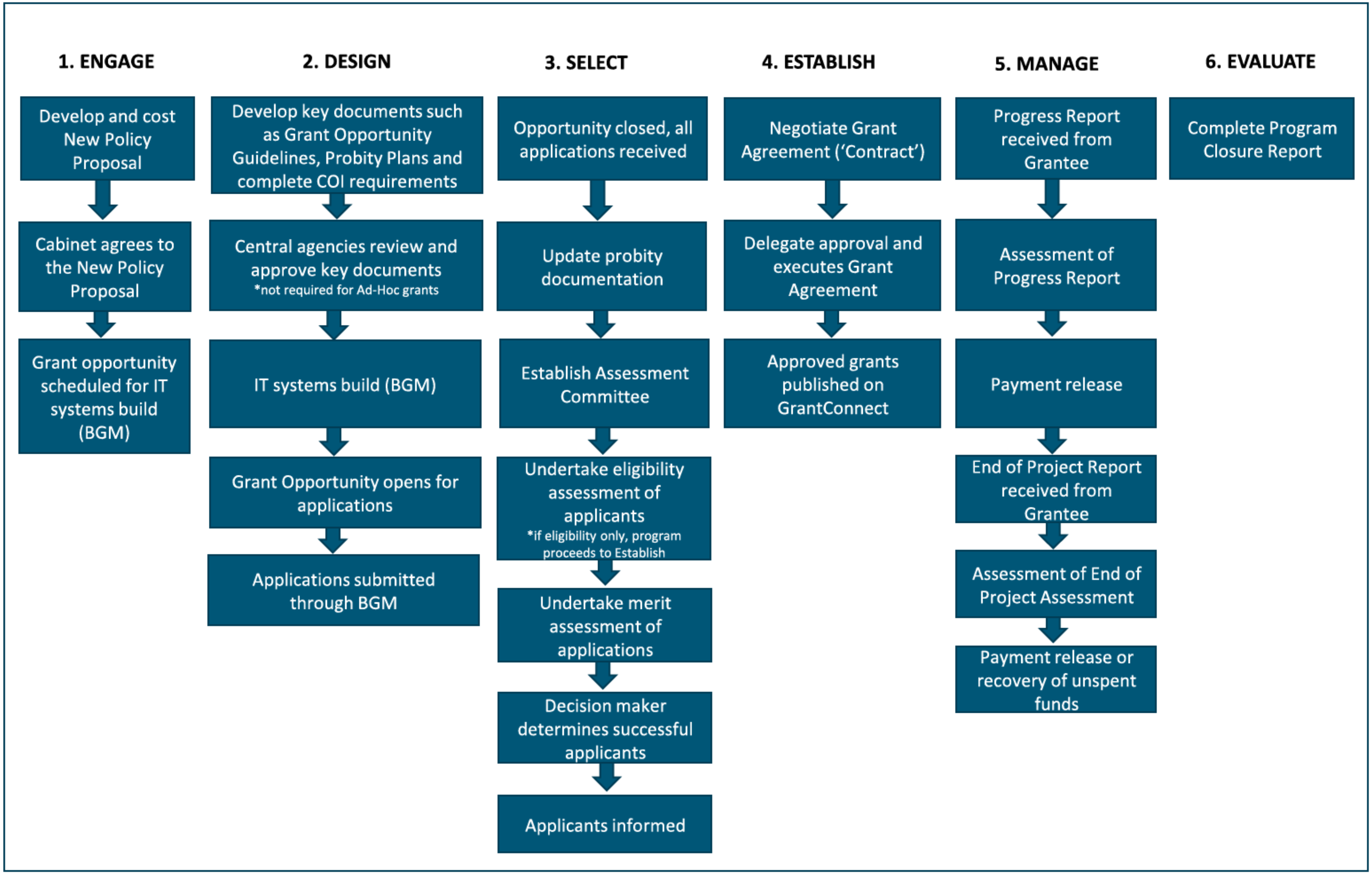
Grant delivery

- A grant advances goverment policy objectives through the provision of financial assistance. Grants are intended to help achieve policy outcomes while assisting or investing in a grantee to meet their objectives.
- Grants are administered in accordance with the Commonwealth Grant Rules and Guidelines (CGRGs). The CGRGs establish the overarching Commonwealth grants policy framework.
- The CGRGs contain a small number of requirements that apply to Ministers. These include decision-making and reporting requirements, in addition to the

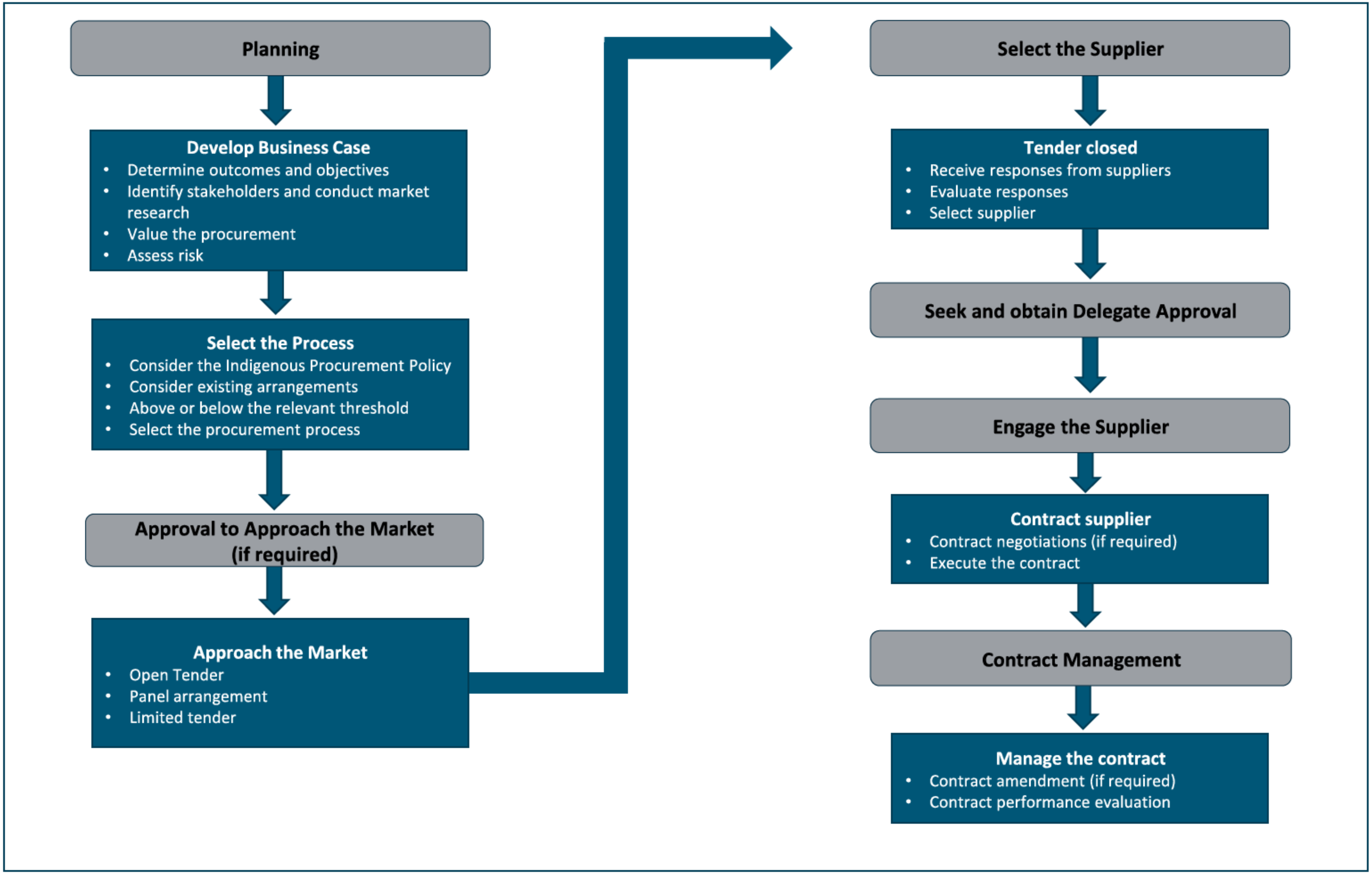
legislative requirements that apply where a Minister approves proposed expenditure.

- Legislative authority is needed for entering into arrangements and spending for grants that are not categorised as falling within the ordinary and well-recognised functions of government.
- The legislative authority will either be in separate legislation or in a grant or program listed in Schedule 1AA or Schedule 1AB to the *Financial Framework (Supplementary Powers) Regulations 1997*.
- The decision to enter into a grant opportunity is usually made by Government.

DISR Grant Program initiation and delivery



DISR Procurement Process



ENERGY PRICE ISSUES

Headline Statement

- Rising energy prices (both electricity and gas) are impacting Australian manufacturers and industries, particularly those that are energy intensive, exposed to spot markets and may not be able to pass on costs.

Key Points

- The increase in international energy prices together with the fall in domestic coal generation and the ramp-up in gas demand have resulted in substantial increases in domestic electricity and gas prices (particularly in the spot markets).
- In the 2022-23 October Budget, s22

  The October Budget also noted domestic wholesale gas prices remain more than double their average prior to Russia's invasion of Ukraine. Retail gas prices are expected to increase up to 20 per cent in both 2022–23 and 2023–24.
- Wholesale gas prices are also expected to increase significantly, but by less than retail gas prices, as major gas retailers are somewhat insulated from spot prices, either through long-term contracts or investment in gas supplies.
- The spot market represents only around 20 per cent of gas market trade, while 80 per cent is under fixed contracts. While most businesses have fixed price gas supply contracts (typically 1 to 3 years), price pressures are more widespread as new contracts are renegotiated at higher prices. A similar scenario exists in the electricity market.
- s22
- The Government will continue to work with industry and explore outcomes for both gas users and producers and respect our international obligations while addressing domestic needs.

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Last updated: 3/11/2022 12:26:00 PM

Policy Commitments

- The Government is committed to ensuring Australian households and businesses have access to reliable, affordable energy. Funding of up to $65.7 million is supporting measures to improve domestic gas supply and includes:
  - s22

s22

- These measures build on work the Government has already started. For example the new Heads of Agreement (HoA) between the Australian Government and East Coast LNG Exporters will ensure gas supply amid a forecast risk of a domestic gas supply shortage next year.

Background

Measures to modernise gas and electricity market

s22

- **A Stronger ADGSM "Gas Trigger" to Protect Supply:** The Australian Government will reform the Australian Domestic Gas Security Mechanism (ADGSM) to give the Minister for Resources greater flexibility to protect domestic gas supplies. Under the reforms, the Minister for Resources will receive expert advice each quarter and will be able to start the process to activate the ADGSM if there is a risk of domestic gas supply shortages.
- Changes to the mechanism will deliver much more flexibility and will mean decisions to activate the ADGSM can be made every quarter ahead of peak seasonal demand periods, rather than only once a year under the old regulations. The Government will consult with industry in the coming months on the detailed design, ahead of planned commencement in mid-2023. The Budget will invest $10.8 million over the forward estimates to implement reforms to the ADGSM, such as operating tradable export permits.

Reviewing and strengthening the voluntary Code of Conduct

- s22

Gas Prices

- The average east coast spot price on 01 November 2022 was $22.51/GJ.
- The monthly average spot price for October 2022 was $19.57/GJ which was 139 per cent higher than the October 2021 average price of $8.19/GJ.

Electricity Prices

- The high electricity prices currently felt across the east coast are driven by:
  - Sustained international circumstances increasing prices for coal and gas resources:
    - The war in Ukraine and related sanctions on Russia.
    - Increased global demand associated with the COVID -19 recovery.

- Domestic events:
  - Unplanned coal-fired power outages (In the two months before 8 June 2022, an average of around 31 per cent of coal capacity was unavailable in the NEM).
  - Coal supply issues due to recent flooding, rail disruptions and workforce issues.
  - Lower renewables output due to La Niña weather patterns causing too much or too little wind for wind generators and reduced solar output.
  - Cold weather leading to higher demand.
- Wholesale electricity prices recently increased to the degree that several automatic interventions were triggered, s22
- These events have triggered compensation payments for generators (some of which are not yet finalised), which will be billed to retailers on a pro-rated energy volume basis and passed through to customers.
- Volume-weighted wholesale electricity prices across the National Electricity Market (NEM) in 2022 to date[1] have averaged from $173/MWh in Tasmania to $251/MWh in Queensland. Overall, year-to-date electricity prices in the NEM are at 282 per cent of the average price for the same period last year.
- While most small businesses will not buy electricity directly from the wholesale market, higher costs for electricity retailers are now flowing through to their offerings for customers.

[1] As of 0:00 17 October 2022

PETROLEUM AND GHG ACREAGE RELEASE

Headline Statement

- How does the release of acreage for offshore exploration, including petroleum and greenhouse gas sequestration, fit with the government's commitment to net zero by 2050?

Key Points

- The resources sector is a critical part of the solution to meeting the net zero challenge.
- The key to Australia's transition to a clean energy future will be balance. Natural gas is an ally of renewable energy and will support the addition of more intermittent energy resources.
- Australia's gas exports also play a pivotal role in supporting global energy security, supplying our trading partners with reliable lower emissions energy to assist in meeting their emissions reductions targets.
- Ongoing investment opportunities need to be available for industry to meet current and future supply demands – and that comes in the form of exploration.
- A shortfall of domestic gas would likely see Australians face even higher prices, disruptions in supply and unplanned outages. Ensuring ongoing projects to supply the domestic gas market provides protection and security for Australia.

Petroleum Acreage Release

- The 2022 offshore petroleum acreage release was released following stakeholder and public consultation.
  - The release of ten areas was announced on 24 August 2022. All areas are located in known petroleum provinces, close to existing projects and infrastructure.
- Whilst the world addresses a global energy crisis and increasing domestic and global demand for gas, stopping new developments in Australia would further inflate prices, cost jobs and reduce export earnings and Government revenue.

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Last updated: 19/10/2022 2:46:00 PM

Greenhouse Gas Storage Acreage Release

- CCUS presents an opportunity to decarbonise Australia's energy exports, in particular gas processing, LNG activities and potentially hydrogen, supporting our ability to act as an exporter of low-carbon intensity energy in our region.
  - CCUS also has the potential to support carbon removal from the atmosphere through negative emissions technologies like Direct Air Capture and Bio Energy with Carbon Capture and Storage.
- The Government's Offshore Greenhouse Gas Storage Acreage Release supports a critical pathway to reducing emissions from energy-intensive industries.
  - Awards of greenhouse gas assessment permits have been made following the 2021 Release. The granting of these permits will enable industry to explore for potential storage sites.

Background

Offshore Greenhouse Gas Storage Acreage Release

- The Australian Government has conducted three GHG acreage releases (2009, 2014 and 2021).
- The releases in 2009 and 2014 resulted in GHG Assessment Permits being granted to the s22

Offshore Petroleum Exploration Acreage Release

- The petroleum exploration acreage release has traditionally been an annual process. It has been run annually for over 25 years.
- There has been previous critical media coverage regarding the decision to release an area in close proximity to the Twelve Apostles, offshore Victoria. This area did not receive a bid and has since reverted back to vacant acreage.

ADGSM/HOA

Headline Statement

- The Australian Government has entered a new Heads of Agreement (HoA) with the east coast LNG exporters and announced reforms to the Australian Domestic Gas Security Mechanism (ADGSM).

Key Points

- Global gas prices are at historic highs after the gradual suspension of gas flows to Europe from Russia.
- International prices are forecast to remain well above long-run averages for the remainder of 2022 and all of 2023.
- This is translating into pressure on major global energy exporters like Australia to increase exports and is putting pressure on Australia's domestic prices.
- Supply and demand on Australia's east coast domestic gas market were already tightly balanced prior to the global events of 2022.
- In response to these challenges, the Government:
  - entered a new HoA;
  - reviewed the ADGSM, with reforms to commence from 1 July 2023; and
  - s22

Heads of Agreement

- The Minister for Resources negotiated a new HoA with Australia's east coast LNG exporters this year.
- The new HoA improves on the commitments made in previous agreements by:
  - Committing to the principle that domestic gas customers will not pay more for the LNG exporters' gas than international customers;

- Enhancing accountability through additional reporting requirements and quarterly compliance reviews by the Minister for Resources;
- Defining key terms, such as 'competitive market terms', 'uncontracted gas', 'reasonable notice' and 'supply term';
- Referencing the LNG netback price as a benchmark price; and
- Enhancing transparency through expanded publication requirements.

- The new HoA came into effect on 29 September 2022, and will remain in effect until 1 January 2026.
- A copy of the HoA is available on the Department's website.

ADGSM Reforms

- The Australian Government has concluded its review of the ADGSM, and announced reforms, including:
  - changes to the activation process, allowing the Minister to consider activation on a quarterly basis;
  - protection for long-term foundational contracts;
  - LNG exporters in a shortfall market to have equal responsibility for supplying additional gas to the domestic market; and
  - allowing LNG exporters to trade export permits.
- The Department will consult the LNG industry on the implementation of the reforms, which will come into effect next year following the necessary regulatory changes.

If asked: Did the department consider introducing price based activation into the ADGSM?

- Yes. s22 the disadvantages of price-based activation outweigh its advantages.

Is asked: Why wasn't the ADGSM triggered for 2023?

- s22
- The Minister for Resources secured commitments from east coast LNG producers to supply an additional 157 PJ of gas to the domestic market.
- This satisfied the Minister the shortfall forecast for 2023 would not eventuate.

UPDATE ON THE IMPLEMENTATION OF THE POSITIONING AUSTRALIA PROGRAM

Headline Statement

- Geoscience Australia is delivering world-class satellite positioning capability in Australia through delivery of a Satellite Based Augmentation System (SBAS), known as SouthPAN, and the National Positioning Infrastructure Capability (NPIC). As an integrated program, the Positioning Australia capability represents ongoing Government investment of on average $83.6m per year (comprising $71.8m for SouthPAN and $11.7m for NPIC, respectively).

- Geoscience Australia cannot comment on details of the SouthPAN satellite geostationary payload procurement due to probity constraints.

Key Points

- Geoscience Australia is implementing positioning data accurate from as little as 10 centimetres in every corner of Australia and offshore, and 3 to 5 centimetres in areas of mobile phone coverage. Positioning accuracy prior to this investment was around 5 to 10 metres. This program has delivered:
  - s22
  - made live early Open Services across Australian and New Zealand delivered by SouthPAN on 26 September 2022. Industry and community can now access the benefits of accurate and reliable positioning services to increase safety, improve productivity and drive innovation. It can immediately integrate with existing equipment or products to create or enhance positioning service offerings to end-users.
  - commenced procurement for SouthPAN's navigation transponder hosted on a satellite in Geostationary Earth Orbit. Tender closed on 6 June 2022.
  - delivered a unified national network of positioning infrastructure (~675 stations), through expansion of the existing Commonwealth owned network and formalised agreements with 10 government and commercial network operators. The data streams from these stations are openly accessible via secure digital platforms to government, business and academic services.

Contact Officer:
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- released open-source software positioning toolkit: Ginan. Ginan provides software tools able to analyse positioning data and provide real-time products that increase positioning accuracy for industry applications from metres to centimetres.

Background

- SouthPAN's SBAS is a system of space and ground infrastructure that augments the positioning signals provided by GPS and other global navigation satellite systems to significantly improve accuracy and reliability. SouthPAN overcomes gaps in mobile and radio communications by delivering data to users via satellite, including in remote and rural Australia.

- NPIC is a network of reference station infrastructure to track, verify and optimise data for precise positioning across Australia. NPIC coordinates existing industry and state, territory and local government infrastructure to reduce coverage gaps in areas with mobile phone coverage. New reference stations are being constructed to infill coverage gaps.

- In the 2018-19 Budget, the government committed ongoing funding including $160.9 million over the first four years to deliver better satellite positioning to regional Australia through SouthPAN, and a further $64 million over the first four years to deliver better positioning to Australian businesses through NPIC.

- An additional $521.8 million over 20 years was announced in MYEFO 2021-22 to deliver SouthPAN, increasing the Australian government contribution to $1.44 billion over the next 20 years (2021-22 to 2040-41). The previous contribution over the same period was $915 million.

- Additional funding was required as initial budget estimates included uncertainty in fixed costs and costs associated with Australia's unique service area and space weather conditions. These costs became more certain by 2020-21.

Key Milestone	Due date
SouthPAN: 10 cm accuracy of positioning service across Australia and its maritime zones	• Safety-of-life services expected in 2028. • Procurement for the first satellite geostationary payload is underway.
NPIC: 3-5 cm accuracy of positioning service for areas with mobile phone coverage	• A unified network supports 3-5 cm accurate positioning in areas of mobile phone coverage. • Upgrade and expansion of the Commonwealth owned and operated stations (~200 stations) underway and with delivery by June 2023.
Ginan: Open-source tools and software to support use of positioning, navigation and timing (PNT) services	• Ginan 1.0 is operational and deployed as part of NPIC. • Additional features and products will be progressively added.

GEOSCIENCE AUSTRALIA PRECOMPETITIVE ENERGY (OIL AND GAS) PROGRAM

Headline Statement

- Geoscience Australia's (GA) pre-competitive program underpins its assessment of Australia's offshore and onshore petroleum (oil and gas) prospectivity. There is heightened scrutiny on Government support for development of new oil and gas projects in the context of Australia's now legislated commitment to an emissions reduction target of 43 per cent (on 2005 levels) and net zero emissions by 2050.

Key Points

- The Australian resources sector is driving Australia's strong export revenue and a strong economy. Australia's mineral and energy export earnings are forecast to reach $450 billion in 2022–23, surpassing last year's record of $422 billion[1].

- Petroleum (oil and gas) is a necessary part of our modern life and energy mix.

- Australian households and industry require and expect access to sustainable, reliable, and affordable energy, with natural gas having been identified as an ally of the introduction of renewable energy sources, for Australia and our trading partners – all who have a similar timeline for reducing their emissions to net zero, as Australia.

- Natural gas can be used to boost the reliability of an electricity grid, which is increasingly powered by renewables, which will also need to be supported by the provision of new and the upgraded electricity infrastructure globally and in Australia.

- While the majority of petroleum is used as a source of energy, up to 10 per cent of petroleum is used for non-energy generation and use. Instead, the oil and gas is used as a raw material that is not consumed as fuel or transformed to another fuel is referred to as a petrochemical.

- Petrochemicals are used in the manufacture of thousands of different products including: refinery feedstock, plastics, consumer electronics, detergents,

1 Resrouces Energy Commodities – October 2022

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Last updated: 20/10/2022 3:50:00 PM

cosmetics; furniture, pharmaceuticals, building and construction and sporting equipment.

Energy precompetitive work

- Geoscience Australia collects and provides precompetitive geoscience data and knowledge on Australia's resource (minerals and energy) potential, supporting informed decision-making by governments, industry and the community on the sustainable development of our resources.

- Our precompetitive data, information and science products also provide Australia with a strong global competitive advantage, which supports additional private sector exploration investment, ensuring a pipeline of ongoing energy projects to: (1) supply Australia's domestic energy needs, (2) ensure Australia remains a trusted and reliable global energy supplier, and (3) as a source of petrochemicals for the many different products used in our modern way of life.

- Our onshore energy program is delivering new geoscience data and information regarding Australia's potential for traditional (oil and gas) and non-traditional energy resources (hydrogen production and storage, and carbon capture (use) and storage)

- In Australia's offshore waters, we support the Australian Government's offshore petroleum and greenhouse gas acreage release programs by providing regional-scale precompetitive geological advice and knowledge covering the proposed release areas. In addition, during 2022 Geoscience Australia provided new precompetitive data and information on:

    - The Deep-Water Otway basin, located offshore from South Australia, Tasmania and Victoria, with the objective of providing a better understanding of the regions' conventional gas and oil prospectivity; and
    - Known and developed energy basins on the North-West shelf, Western Australia, to better improve our regional understanding of the petroleum systems.

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Background

- The overarching principle of precompetitive data and knowledge is that it is non-rivalrous and that it comes before private sector investment, not instead of it.
- It addresses market failure by providing a basis for informed decision-making by industry where they would not make those decisions themselves because the (technical) risk is too great – namely under-explored and frontier (greenfield regions).
- Our precompetitive energy program is directed at attracting investment to support exploration and drive discovery and development of Australia's mineral resources (for renewables) and traditional (oil, gas) and non-traditional (hydrogen, carbon capture use and storage) energy resources, both offshore and onshore.
- Precompetitive geoscience data and knowledge can also be used for a broad range of applications, including infrastructure and planning as well as to regulate and inform industry activity.
- For example, Geoscience Australia's precompetitive work is being used:
  - By Government in its considerations regarding domestic infrastructure planning to support Australia's sovereign needs
  - By industry and governments to support a sustainable hydrogen industry in identifying geological storage solutions as well as emerging natural hydrogen prospectivity
  - By industry and governments to identify areas for greenhouse gas storage options
  - To support sustainability of Australia's agriculture industry through the establishment of a new industry; i.e. potash, a key component for the fertiliser used by our farmers, which they have been historically relying on imports; and
  - By governments, farmers and remote communities, including indigenous communities, to secure water supplies.

RESOURCES AND ENERGY OUTLOOK

Headline Statement

- The September 2022 *Resources and Energy Quarterly* (REQ) forecasts Australia's resource and energy export **earnings** to reach **$450 billion in 2022–23**, surpassing last year's record of $422 billion**.** Earnings are then forecast to **fall to $375 billion in 2023–24**.

Key Points

- Australia's resource and energy export earnings have reached record levels, despite a slowdown in global economic growth, driven by high global energy prices, following Russia's invasion of Ukraine, and a strong US dollar.
- **LNG** export earnings are forecast to grow from $70 billion in 2021–22 to $90 billion in 2022–23, despite easing export volumes, driven by high oil-price linked LNG contract prices and record Asian LNG spot prices.
  - Export volume forecasts were compiled before the 29 September Heads of Agreement (HoA) with the East Coast LNG industry. Potential impacts of the HoA on LNG exports will be accounted for in subsequent publications.
- **Thermal coal** export earnings are forecast to grow from $46 billion in 2021–22 to $62 billion in 2022–23, driven by historically highs prices as a result of supply disruptions linked to weather events, COVID-19 and the Russian invasion of Ukraine.
- **Metallurgical coal prices** export earnings are forecast to ease from $66 billion in 2021–22 to $58 billion in 2022–23 amidst a slowdown in global steelmaking.
- **Iron ore** export earnings are forecast to ease from $134 billion in 2021–22 to $119 billion in 2022–23, reflecting moderating prices, more modest growth in global steel output, and rising iron ore supply.
- **Lithium, nickel and copper** are forecast to reach $33 billion in 2022–23, sustained by the surge in demand for Australian minerals needed for low emissions technologies. Lithium earnings are forecast to increase more than 10-fold in just 2 years from $1.1 billion in 2021–22 to $14 billion in 2022–23.

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Last updated: 19/10/2022 4:08:00 PM

Background

- **Commodity price forecasts in the REQ will differ from assumptions made in the Budget.** The REQ aims to provide an up-to-date outlook of the value of Australia's resource energy commodity exports. The Budget notes that a prudent approach is taken to commodity price assumptions, where recent commodity price levels are assumed to be temporary. This ensures that economic and fiscal parameters are grounded in long-term economic fundamentals and are not unduly influenced by short-term volatility.

- **Western sanctions against Russia and Russia's reactions** are reflected, to the extent they can be, in REQ forecasts.

  – **EU bans on Russian oil and on insuring its cargoes** (Dec '22 for crude and Feb '23 for refined products) could cause Russian oil to be stranded. **Russia has rejected the G7 proposal for exemptions to the bans where oil is sold under a price cap**. Given the early stages, the price cap proposal has not been incorporated into the forecasts.

  – **Russia has shut down gas pipelines to the EU**. Russia faces limitations from their existing pipeline infrastructure to redirect flows to other nations in the near term. Shifting EU demand to the LNG market has pushed up spot prices globally. The North East Asian LNG spot price averaged US$47 per mmbtu in the Sept '22 quarter, which compares to the US$9 during 2013–2020.

  – **EU embargo on Russian coal** (started in Aug '22) has led to limited reorientation of flows, with much of the railway-bound Russian coal exports to Europe being stranded. However, Russian exports to Europe did not make up a significant share of global coal trade. In 2021 Russia only exported around 60 mt of coal to Europe.

- **Domestic climate policies:** The September REQ did not take into account the *Safeguard Mechanism*, which gives effect to the Government's emissions reduction targets in the resources sector. We anticipate we will be able to account for this policy in the March 2023 REQ, once further details of the design have been finalised.

- **International climate policies:** Our quarterly forecasts have a 2-year outlook, except in March where we take a 5-year outlook. Over this time horizon, we only factor policies already in place, unless we know an announced policy is likely to have a material impact during the outlook period. When compared to the s22 , our forecasts would be most akin to their *'Stated Policy Scenario'*, but even their nearest term forecast to 2030 has a longer horizon than our 5-year outlook.

- The ***Resources and Energy Major Projects*** provides information on proposed projects in Australia estimated to be worth more than $50 million. Projects can be at various stages of development: from *'publicly announced'* to *'feasibility'*, *'committed'* and *'completed'*.

  – The list does not constitute a forecast and the report makes it clear that not all projects would necessarily proceed to completion.

  – The latest edition from **December 2021, listed 367 proposed projects**, of which 69 were coal projects (with an estimated combined worth $72 to $82 billion) and 45 were LNG and petroleum projects ($115 to $123 billion). 89 of the total 114 coal and gas projects were at the *publicly announced* or feasibility stages. Of the 25 remaining *committed* and *completed* projects, 17 were expansions.

NORTHERN ENDEAVOUR

Headline Statement

- The decommissioning of the Northern Endeavour Floating Production Storage and Offtake (FPSO) facility, moored between the Laminaria and Corallina oil fields about 550 kilometres northwest of Darwin in the Timor Sea, is progressing as planned.

Key Points

- s22 has been engaged as the Lead Contractor to deliver the decommissioning and disconnection of the Northern Endeavour (Phase 1 works).
- s22
- The Department works with our lead contractor, s22 to ensure appropriate oversight of operations and decommissioning activities.
- Under Phase 1 works, the FPSO is expected to be disconnected from the subsea equipment and towed from the field in late 2023. The wells that the FPSO is connected to will be temporarily plugged ahead of permanent plugging in future Phases.

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Last updated: 2/11/2022 4:33:00 PM

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If pressed for further details:

- I would like to take that question on notice so that I can seek some advice.

Levy to recover costs

- A temporary levy on offshore petroleum production began on 1 July 2021 to recover the costs of decommissioning the Laminaria and Corallina oilfields and associated infrastructure.

Funding: total commitment and expenditure

- Total actual expenditure on the Northern Endeavour Decommissioning as at 31 August 2022 is $302.42 million (GST exc.) which consists of:
  - $20.62 million of Departmental expenditure (including APS salaries); and
  - $281.80 million of Administered expenditure.
- The bulk of this expenditure (approx. $243 million) was on the contract with s22 to maintain and operate the FPSO in non-production mode and conduct preparatory activities to ready the facility for disconnection.
  - Other costs have included insurances, as well as a range of specialist advisors from the oil and gas sector; legal experts; probity experts; procurement experts; project management experts and cost modellers.
- As at 31 August 2022, a total of $394.94 million (GST exc.) in additional Administered and Departmental funding has been committed (but not expended) to the Northern Endeavour Decommissioning program.

- The majority of the committed funding is to service the $325 million (GST exc.) contract with s22
- Other costs include insurances and further contracted expertise.

- This means approximately $697 million (GST exc.) has been committed or expended as at 31 August 2022.

If asked to estimate the total cost to decommission the Northern Endeavour

- The Department does not have a robust estimate of the total cost to decommission the Northern Endeavour, which will ultimately be determined through future planning and procurement activities.
    - While the costs for Phase 1 have been largely determined, cost estimates for future phases are difficult because planning work is still underway.
    - The Department is not aware of reliable cost estimates that can be drawn on.
    - Disclosing cost estimates prior to the planned procurement activities for future phases also risks compromising a competitive procurement process and the Government's ability to maximise value for money.

Safety & Regulation

- Occupational Health and Safety (OHS) in relation to the Northern Endeavour is regulated in the same way as any other offshore facility through the *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009*.

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- The Department is continuing to work closely with s22 to emulate, to the greatest extent possible, the regulation of environmental matters and well integrity under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* and regulations in relation to the Northern Endeavour.

Background

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- In the absence of a commercial or industry-led solution, the former Government acted quickly to ensure the facility was not abandoned; and to take the necessary actions to ensure the safety of workers and the security of the facility, and to minimise risks to the environment.

Energy and Manufacturing

ISSUE: Secure and affordable energy supply is critical to Australian manufacturers. Rising energy prices (both electricity and gas) are impacting Australian manufacturers and industries, particularly those that are energy intensive, exposed to spot markets and may not be able to pass on costs. Energy reforms will need to consider the needs of the energy users and producers and balance the objectives of affordable domestic energy supply while remaining a valued global trading partner.

KEY STATISTICS & FIGURES	
Government funding	$67 million package of reforms through the Budget to modernise energy market regulation, increase the monitoring of gas markets and improve the functioning of the Australian Domestic Gas Security Mechanism.
Program information / statistics/ Industry data	• Gas is an important energy source for the manufacturing sector, accounting for 42 per cent of manufacturing final energy use in 2020-21.[1] • Energy can account for around 30 to 40 per cent of production costs for energy intensive manufacturers, including gas costs for major chemicals and plastics plants and electricity costs for aluminium smelters. • East coast electricity prices averaged $144/MWh in October 2022, which was 177 per cent higher than the October 2021 average price of $52/MWh[2]. • The monthly average east coast gas spot price for October 2022 was $19.57/GJ which was 139 per cent higher than the October 2021 average price of $8.19/GJ[3]. • The October 2022 average east coast spot price was 56 per cent lower than the current s 22 LNG netback price of $44.32/GJ.[4] • Total domestic gas consumption was 1568.2 petajoules in 2020-21.[5] • Manufacturing accounted for 26 per cent (408 petajoules) of total Australian domestic gas use in 2020-21, with 66 petajoules used for non-energy purposes, such as feedstock for chemical production.[6]

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Contact Name: s 22	Contact Number:
Cleared by: s 22	Date: 27/10/2022

	• The proportion of total east coast gas consumption attributed to manufacturing in the eastern states (excluding WA and NT) is 28%[7]. • LNG export volumes reached 83 million tonnes in 2021–22. LNG export earnings doubled from $30 billion in 2020–21 to $70 billion in 2021–22.The total LNG nameplate capacity was 88m tonnes per annum. Of this around ¾ of this is sold on long-term contracts.[8] *(See table at **Attachment B** for further information on energy consumption by sector).*

Handling Advice

***The Oil and Gas Division** has responsibility for overall matters related to gas supply and is best placed to respond to questions related to:*

- *Gas supply*
- *Gas Code of Coduct, ADGSM, HoA, Reservation Policy*

s22 *is best placed to respond to questions related to:*

- *Electricity and Gas Market issues*
- *Energy Market Reforms*

KEY POINTS:

- The increase in international energy prices together with the fall in domestic coal generation and the ramp-up in gas demand have resulted in substantial increases in domestic electricity and gas prices (particularly in the spot markets).

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- The October Budget also noted domestic wholesale gas prices remain more than double their average prior to Russia's invasion of Ukraine. Retail gas prices are expected to increase up to 20 per cent in both 2022–23 and 2023–24.
  - Wholesale gas prices are also expected to increase significantly, but by less than retail gas prices, as major gas retailers are somewhat insulated from spot prices, either through long-term contracts or investment in gas supplies.
  - The spot market represents only around 20 per cent of gas market trade, while 80 per cent is under fixed contracts.
- Recent increases in energy prices, both gas and electricity, are impacting Australian manufacturers, with the extent of the impacts typically determined by the energy intensity of the users and their supply arrangements.

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- While most businesses have fixed price gas supply contracts (typically 1 to 3 years), price pressures are more widespread as new contracts are renegotiated at higher prices. A similar scenario exists in the electricity market.

What is the Government doing?

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- Although there is no quick fix, the Government is taking a range of actions to address energy security, reliability and affordability. The Government is delivering a $65.7 million package of reforms to help modernise energy market regulation. Which includes:
  - $40.9 million to increase the frequency of domestic gas supply assessments s 22 and implement reforms to the Australian Domestic Gas Security Mechanism.
  - $24.8 million to extend the s 22 inquiry into gas supply arrangements in Australia. This extends the 2019–20 MYEFO measure titled s 22 .

s 22

- These measures build on work the Government has already started. For example the new Heads of Agreement (HoA) between the Australian Government and East Coast LNG Exporters will ensure gas supply amid a forecast risk of a domestic gas supply shortage next year.
- The Government will continue to work with industry and explore satisfactory outcomes for both the gas users and producers and respect our international obligations while addressing domestic needs.

ATTACHMENT A

Budget Measures on Gas and Electricity

Increased support for the s 22 **Gas Inquiry**

- s 22 will be allocated $10.4 million over the forward estimates, a 40 per cent increase in funding, dedicated to monitoring the gas market through the ACCC Gas Inquiry, increasing the frequency of domestic gas supply assessments.

Improving Gas Security and Reliability

- Providing $23 million over three years to deliver a package of priority reforms agreed by Energy Ministers, s 22 extended powers to intervene and respond to gas system security concerns and manage volatility.

Protecting Consumer Interests

- s 22 will take on a new compliance and monitoring role to ensure gas companies are acting in the best interests of consumers and support reforms to encourage investment in firm capacity, with $22.8 million provided in the Budget over four years for this increased activity.

A Stronger Australian Domestic Gas Security Mechanism (ADGSM) "Gas Trigger" to Protect Supply

- The Australian Government will reform the ADGSM to give the Minister for Resources greater flexibility to protect domestic gas supplies.
- Changes to the mechanism will deliver much more flexibility and will mean decisions to activate the ADGSM can be made every quarter ahead of peak seasonal demand periods, rather than only once a year under the old regulations.
- The Budget will invest $10.8 million over the forward estimates to implement reforms to the ADGSM, such as operating tradable export credits.

The Review of the Voluntary Code of Conduct

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ATTACHMENT B

Background

- Price spikes in both wholesale gas and electricity markets over the past six months have been driven by international events, coal mines being flooded, significant domestic coal generator outages and cold weather driving an increase in demand. Wholesale prices remain elevated over the medium term.

- Major gas users continue to express concerns around securing affordable gas supply to underpin their investments. Price is central to their concerns and they are calling for price based government intervention.

- Gas price concerns from users in the eastern market are longstanding. They reflect the decline in low cost gas supply from Bass Strait (Victoria) and the Cooper Basin (South Australia and Queensland), the transition to higher cost Queensland coal seam gas with added transport costs south (around $2/GJ to transport form Queensland to Victoria), and the linkage to global markets with the onset of Queensland LNG exports from 2016.

- Australia's East Coast gas market is increasingly sensitive to external shocks due to a tightening supply-demand balance as supply from Bass Strait fields decline. The East Coast has become increasingly reliant on Queensland gas reserves, competing for gas with export markets through the East Coast LNG exporters.
- While the impacts of gas price increases is widespread across manufacturing, the magnitude varies across sectors and businesses. The most exposed sectors are gas intensive manufacturers using gas as both a feedstock and energy source.
    - This typically includes chemicals and plastics manufacturers such as Incitec Pivot, Orica, and Qenos, whereby gas can account for 30 to 40 per cent of their production costs.
    - Cement manufacturers like s 22 and alumina refiners like s 22 are also major gas users.
- Current high global commodity prices, including for fertilisers and metals, provide some protection from energy price shocks to some manufacturers.
- The rising gas prices are particularly relevant for energy intensive manufacturers that are exposed to short term price changes and may be constrained in passing on the costs of higher priced spot gas.
    - For instance, the May 2022 withdrawal of gas retailer s 22 , whose business model facilitated customer purchasing of gas from wholesale spot markets, resulted in acute impacts to its gas intensive SME customers. These customers were exposed to the spot market and constrained in passing on costs.

- The spot market represents only around 20 per cent of gas market trade, while 80 per cent is under fixed contracts at likely much lower prices than spot gas.

- While most businesses have fixed price gas supply contracts (typically 1 to 3 years), price pressures are more widespread as new contracts are renegotiated at higher prices.

Contract gas prices

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Gas spot prices

- The average east coast spot price on 01 November 2022 was $22.51/GJ.
- The monthly average price for October 2022 was $19.57/GJ which was 139 per cent higher than the October 2021 average price of $8.19/GJ.

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- The Gas Supply Guarantee which was activated in response to the threat to system security notice has also ended. Gas supply from Queensland is not currently required as the Iona storage is currently at healthy levels of 12,640 TJ (54% of its capacity).

Electricity prices

- Volume-weighted wholesale electricity prices across the National Electricity Market (NEM) in 2022 to date[9] have averaged from $173/MWh in Tasmania to $251/MWh in Queensland. Overall, year-to-date electricity prices in the NEM are at 282 per cent of the average price for the same period last year.
- While most small businesses will not buy electricity directly from the wholesale market, higher costs for electricity retailers are now flowing through to their offerings for customers.

Calls for Industry Assistance

- Some industry stakeholders, including s 22 have recommended financial support, including for ‘businesses who are coming out of contract or exposed to spot energy prices; unable to pass increased costs on; and sufficiently energy intensive for these cost increases to threaten business continuity.’

[9] As of 0:00 17 October 2022

- Support of this nature could be very costly, difficult to design and unwind, and may cause unintended consequences. It could also create ongoing expectations from energy users that government would underwrite energy costs irrespective of businesses' commercial decision making and risk management practices.

Supporting manufacturers to transition to lower emissions/reduced energy use

- It is envisaged that the National Reconstruction Fund and the Powering Australia plan can play an important role in supporting manufacturers' investment in and transition to lower emissions production. Projects could include technology shifts, energy efficiency measures, fuel switching, and changing usage patterns. However, many of these options will take some years to develop, particularly the move away from gas which, for some, is currently a 'non-substitutable' feedstock.

Australian energy consumption

Table 1: Australian Energy Consumption, by sector

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Table 2: Australian Manufacturing Energy Consumption, by subsector

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Attachment C

Suggested Q&A's

If asked: What are you doing to help electricity/gas/energy intensive businesses that are trying to negotiate new electricity/gas/energy contracts right now, during this spike in prices?

- We are aware of the impacts that the high domestic price of electricity/gas/energy is causing in some parts of Australian industry.
- As the Treasurer has said, all options are on the table.

If asked: Are you considering price caps like those in Germany and the UK?

- s 22 all options are on the table but ultimately, which options are implemented is a matter for Government.

If asked: Are you considering financial support and subsidising industry/manufacturers price for energy (gas and electricity)?

- That is a matter for Government.

If asked: How is the Government helping these industries transition longer term to lower emissions production.

- It is envisaged that the National Reconstruction Fund and the Powering Australia plan can play an important role in supporting manufacturers' investment in and transition to lower emissions production longer term.

- For example, meritorious projects could potentially include technology shifts, energy efficiency measures, fuel switching, and changing usage patterns.

- For instance, Australia's alumina industry is examining the feasibility of electrifying its current gas based production systems.

EC22-001978

National Reconstruction Fund: Design and implementation

ISSUE: In the 2022-23 October Budget, the Government announced key commitments to enable the establishment of the National Reconstruction Fund (NRF).

TALKING POINTS:

- The Government is investing $50 million over two years from 2022-23 to establish the NRF. This funding will be used to:
  - Undertake consultations to help the design the NRF, including the enabling legislation and the Investment Mandate (IM).
  - Establish the NRF agency.
  - Develop Co-investment plans.
- The announced funding outlines initial costs associated with establishment. Full costs for the NRF will be finalised in 2023-24 Budget context.

Legislation

- The Government has committed to introduce legislation to Parliament as soon as possible.
- The Bill is framework legislation, modelled on enabling legislation for other similar specialist investment vehicles' (SIVs) such as s 22 .
- The National Reconstruction Fund Corporation Bill will:
  - establish the NRF as a statutory corporation and outline its investment functions and powers;
  - set out financial and governance arrangements; and
  - allow responsible Ministers to issue an IM to guide the investment strategy of the NRF.

Investment Mandate

- The IM will provide guidance to the Board on the performance of the NRF's investment function. It is expected to cover matters such as:
  - outcomes to be delivered;
  - risk and rate of return;
  - limits on types of financial instruments that may be used;

Contact Name: s22	Contact Number: s22
Cleared by: s22	Clearance Date: 02 November 2022
Witness responding: s22	

- investment governance and reporting requirements; and
- advice on government policy priorities.

- The IM will be settled in the 2023-24 Budget context.

Approach to Public Consultation

- [Targeted consultation on the Bill occurred in w/c 31 October. This approach balances the need to ensure the Bill is fit for purpose, while introducing the legislation into the Parliament this year to ensure the NRF can be up and running as soon as possible.]

- Public consultation on the NRF design and implementation will commence in coming weeks, with an initial focus on the IM.
  - IM consultations will seek insights on NRF design and high-level investment opportunities and broader reforms to support growth and competitiveness across NRF priority areas.

- Consultations include planned engagement with:
  - Businesses;
  - industry peaks;
  - financial and legal experts;
  - unions;
  - communities; and
  - State and Territory Governments.

- A Senior Officials Meeting will facilitate State and Territory Government consultation. [The initial meeting was held on 4 November.] Bilateral engagement will continue as required.

- Where consultations identify possible investments for the NRF, the Government will be able to refer these to the NRF Board for consideration once established.

- From 2023, the government will commence public consultation on Co-investment plans.

QUESTIONS AND ANSWERS

When will the NRF start making investments?

- The government is working to establish the NRF as quickly as possible.

What is being done to ensure the NRF start investing quickly once it's established?

- We will work across the Commonwealth and with States and Territories to identify a potential pipeline of investments that can be referred to the NRF for consideration.
- Ultimately it will be up to the NRF Board to decide which investments are progressed.

What is the breakdown for the $50 million of funding in the Budget?

- The $50 million of funding is broken down as follows:
    - $45.0 million for NRF entity design and establishment, which comprises expenditure on:
        - Consultations on the NRF and Investment Mandate - $4.32 million
        - Board establishment - $0.5 million
        - Agency establishment - $25.9 million
        - ICT infrastructure - $14.2 million
    - $3.8 million for Developing Co-Investment Plans.
    - The above expenditure equates to $48.8 million for DISR.
    - The remaining $1.2 million are Department of Finance expenses.
    - This brings the total investment to $50 million over two years from 2022-23.

Why is the underlying cash impact for this measure outlined in the Budget different to the total funding announced?

- The $50 million of funding announced for this measure reflects the NRF establishment costs over 2022–23 and 2023–24.
- The underlying cash impact (UCB) (-$44.8 million over 2022-23 and 2023-24) published in the Portfolio Budget Statements and Budget Paper No. 2 is different because the measure was funded by redirecting savings identified as part of the government's Spending Audit.
- This measure was partially funded by redirecting $5.2 million from the 2022–23 March Budget measure titled *Boosting the Modern Manufacturing Strategy* and *Addressing Critical Supply Chain Vulnerabilities* (the Manufacturing Investment Plans component).
- UCB impact table included over the page.

- UCB Impact table:

Entity	2022–23	2023–24	2024–25	2025–26	Total
DISR	-$9.0m	-$34.5m	-	-	-$43.6m
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Total	-$9.5m	-$35.2m	-	-	-$44.8m

Note: The headline figure of $50 million is consistent with the figure published in the measure description text of Budget Paper No. 2, should be used to explain the amount government has committed to the measure. Receipts associated with establishing the National Reconstruction Fund have not been disclosed in Budget Papers, as the nature of the measure is that a reliable estimate of UCB impact cannot be provided until final parameters for the NRF are settled.

Why does the funding announced to establish the NRF only extend to 2 years?

- The first two years of funding will allow the government to undertake the critical first steps of establishing the entity, undertaking consultation, and developing the legislation, IM and co-investment plans.

- Final costings will be considered post consultation.

Why are the costs included in the Budget different to the costs estimated by the s 22 ?

- Only initial establishment costs are included in the 2022-23 Budget.

- s 22 The department's costings provide a more up to date, reliable and reasonable cost estimate, consistent with those of the s22

Doesn't the NRF duplicate the functions of other investment vehicles (e.g. s 22)?

- There are a range of existing investment vehicles across government, each has are tailored to deliver specific policy outcomes.

- The NRF will work with other investment vehicles like the s 22 to minimise duplication and coordinate co-investment where appropriate.

What impact will the NRF have on regional Australia?

- The NRF priority areas include sectors that have a strong regional presence — such as resources, agriculture, defence and renewables. NRF investments in these sectors will help regional areas diversify their economies and workforce opportunities.

How will the NRF make a positive contribution towards Australia's net-zero targets?

- Renewables and low emission technologies are an NRF priority area. The Government has announced up to $3 billion of NRF finance to support the *Powering Australia* plan.

- The NRF isn't about supporting business-as-usual operations. It will help businesses transform to be more competitive, including harnessing emerging opportunities in the net zero economy.

How will the NRF make a positive impact on gender equality?

- The department has worked closely with s 22 to ensure that the NRF actively supports the Government's gender equality agenda, which recognises women's participation and equality as a key economic imperative.
- As part of its establishment the department will ensure the NRF's Board and staff are gender and culturally diverse, and committing to consult inclusive and diverse voices as a part of stakeholder consultation.

EC22-001999

Government aspiration to lift investment in R&D to 3 per cent of GDP

ISSUE: Minister Husic statements on aspiration to lift R&D to 3 per cent of GDP. Greens aspiration to lift R&D and other science, research and innovation to 4 per cent of GDP.

TALKING POINTS:

- The Minister has noted there is a need to look at addressing the decline in Australia's R&D intensity (R&D as a proportion of GDP). This reflects that:
  - There are clear links between economic growth and R&D intensity.
  - Australia's gross R&D expenditure declined after peaking at 2.25 per cent of GDP in 2008-09, and was estimated at **$35.6 billion, or 1.79 per cent of GDP in 2019-20**.
  - Australia's R&D spend as a proportion of GDP, or R&D intensity, is lower than our peers (the OECD average is 2.6 per cent of GDP, others are much higher such as Israel at 5.4 per cent of GDP).
- Overall R&D spending encompasses business, government, higher education and private not-for-profit sector spending. Boosting Australia's R&D intensity will require effort by a range of sectors and stakeholders.
  - Businesses contributed $18.2 billion in 2019-20, or 0.92% of GDP.
  - Higher education contributed $12.2 billion in 2019-20, or 0.61% of GDP.
  - Direct government spending on R&D contributed $3.4 billion 0.17% of GDP.
  - Private non-profit spending contributed 1.3 billion, or 0.07% of GDP.
- Government investment can act as a catalyst to support and drive further investment by the private sector and universities, and in turn, contribute to key priorities such as jobs, sovereign capability and innovation.
- In recognition of this, governments invest in R&D, including by:
  - Supporting business to invest in R&D through the Research and Development Tax Incentive. Business R&D intensity is the primary determinant of overall R&D intensity, which is influenced by the structure of our economy, business cycle, talent and incentives.
  - Supporting industry-led collaborative research partnerships through the Cooperative Research Centres initiative and direct Government investment in world-leading R&D, s22
  - Research block grants for Australia's universities.

Contact Name: s 22	Contact Number: s 22
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Witness responding: s 22	

- The Government has announced some measures in the 2022-23 October Budget which will support lifting Australia's R&D intensity.
  - The Buy Australia Plan and $15 billion National Reconstruction Fund to diversity and transform Australia's industry and economy through investments in areas such as advanced manufacturing will help, with manufacturing known to be a key driver of business R&D investment.
  - A $34.5 million investment in Supporting Talent and Leadership in Australian Science and Technology.
- The challenge is more than simply increasing R&D intensity. To reap the full benefits of higher R&D, it's about translating its outputs into new and more innovative ways of to doing things. This is one pillar of a broader approach and goes hand in hand with efforts to commercialise more ideas here.

If asked: what steps are being taken to deliver on this target / has the department briefed the Minister / been asked to develop a game plan?

- The department has been focused on supporting the delivery of the government's election commitments and immediate priorities, including measures for the recent 2022-23 October Budget.
- The Minister has not committed to achieving this target by a particular date. He notes there's a huge challenge, that ideas and collaboration across sectors will be needed and this is one part of an overall innovation plan.
- Boosting Australia's R&D intensity will also require whole of government collaboration. The department works closely with a range of departments to align policy in this area, including Education, Infrastructure and more.

If asked: why has Australia's R&D intensity dropped (see also background)?

- This decline was mainly due to proportionate falls in business R&D, predominantly as a result of the mining sector moving from a development to a production phase, as well as a shift towards a service based economy.
  - Businesses ultimately make their own investment decisions based on assessments of market conditions, risks, returns, and other factors.
  - R&D investment by the mining sector tends to be cyclical. Its decline in recent years has been partly offset by solid increases in expenditures in other industries, particularly in professional, scientific and technical services — and primarily by small to medium enterprises (SMEs).

BACKGROUND:

Government and Greens R&D investment aspirations

- Increasing Australia's R&D intensity towards 3% of GDP is not an election commitment.
- Minister Husic has made a number of statements (see articles and excerpts at Attachment A) in various media around an aspiration of lifting Australia's R&D as a proportion of GDP (R&D intensity), including the following:
    - Article: *Plans to halt slide in govt R&D spending*, InnovationAus, 2 August 2022
    - Article: *Scientists 'cautiously hopeful' as minister vows action on funding boost*, Sydney Morning Herald, 9 August 2022
    - Article: *No plan to meet election promise to lift R&D spending*, AFR, 25 October
    - Article: *Making Budget for Science*, Cpsmos, 26 October 2022
    - Article: *Budget offers scattered SRI investment*, InnovationAus, 2 November
    - Interview: Tech Council of Australia report launch at Australian Parliament House, 2 August 2022
- In Opposition, the ALP had a clear target to move R&D intensity closer to 3 per cent. As expressed in its 2021 National Platform, this would bring us in line with key economies – in 2020 the OECD averaged 2.67% of GDP.

    Labor will work with business, industry, universities and research institutes to boost Australia's investment in research and development as a percentage of GDP, getting it closer to 3 per cent of GDP achieved in other countries. Labor will ensure that the Australian science and research community will be at the heart of this effort to improve Australia's performance.

- The Minister has indicated aspiration to lift R&D intensity to 3 per cent:

    We do, relative to other nations, have a low level of research investment relative to GDP. We have to develop a game plan to lift investment levels, both public and private.

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- The R&DTI includes provisions aimed at encouraging collaboration between business and research service providers (RSPs). For example, the minimum R&D threshold for accessing the program is waived where a company collaborates with a public or private RSPs registered with the program. The department is currently working with the research sector on administrative measures to better promote industry-research collaboration to companies looking to access the program.

More information on declining R&D intensity in Australia

- A decline in business spending on R&D (BERD) has contributed to lower overall spending (GERD). BERD as a proportion of GDP has fallen 0.45 percentage points from a peak of 1.37% in 2008-09, while GERD as a proportion of GDP fell 0.46 percentage points from 2.25% over the same period. According to a s 22 s 22 this fall in Australia's R&D intensity is primarily due to structural shifts in the Australian economy:
    - 70% of the decline in BERD can be attributed to a drop off in mining R&D investment as that sector shifted from a development to a production phase, following the end of the mining boom in the late 2000's.
    - Another 20% of the fall can be attributed to a gradual shift towards a service-based economy, with R&D investment by the Professional, scientific and technical services industry division recently overtaking the Manufacturing industry division as the largest contributor to BERD.
    - The source of the remaining 10% decline in BERD was unclear, possibly due to a shift from R&D to non-R&D innovation investment in non-mining sectors.
- Based the latest 2019-20 ABS data, released in 2021, Manufacturing sector R&D is recovering, and Australia's overall R&D spend increased by around 3 per cent in real terms. Overall R&D intensity has remained steady at around 1.8%, with BERD intensity stabilising at around 0.9%.

R&D expenditure in Australia (all figures in current prices)

- In Australia, gross R&D expenditure (GERD) by business, government, higher education and private not-for-profit sectors was $35.6 billion in 2019-20, or 1.79% of GDP.
- **Business Expenditure on Research and Development** – BERD – is the primary determinant of GERD. Australian businesses spent $18.2 billion on R&D in 2019-20, or 0.92% of GDP.
    - The R&D Tax Incentive (R&DTI) is the Australian Government's primary program for encouraging businesses to spend more on R&D to generate spillover benefits for the broader Australian economy. Each year, around 12,000 companies of all sizes across all sectors register for the program, receiving over $2.7 billion in tax offsets on their eligible R&D expenditure.
- **Higher Education Expenditure on Research and Development** – HERD – is the next largest contributor to GERD. HERD contributed $12.2 billion on R&D in 2019-20, or 0.61% of GDP. Key measures that support HERD include:

- Research Block Grants, made up of Research Training Program (RTP) and Research Support Program (RSP) grants, which are paid to eligible higher education providers (HEPs).
  - The RTP grant supports the training of next generation of researchers and innovators by offsetting fees otherwise payable, supporting general living costs and providing ancillary allowances to students.
  - The RSP grant supports the systemic costs of research.
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- GovERD, which captures **direct government spending on R&D**, contributed $3.4 billion on R&D in 2019-20, or 0.17% of GDP. Key contributors to GovERD include the:

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- The other component of GERD - **Private non-profit Expenditure on Research and Development** – contributed 1.3 billion on R&D in 2019-20, or 0.07% of GDP.
- Direct and indirect Government support for science, research and innovation (SRI) is published in SRI Budget Tables. In 2021-22, the estimated government spend on SRI was $12.6 billion, 11.8 billion of which was for R&D (or 94%).
  - Around $2.9 billion (or 23% of total SRI spend) was for business R&D, 99% of which was provided by the R&D Tax Incentive.

EC22-001887

Treasury vs REQ forecasts

ISSUE: The Department's September 2022 *Resources and Energy Quarterly* (*REQ*) and Treasury's *2022–23 Budget (released October 25th)* feature differing commodity price outlooks.

TALKING POINTS:

- It is not unusual for a range of possible price forecasts to exist given the current uncertainties in the global outlook, and the differing objectives applying to different forecasts.
  - DISR and Treasury consult closely in the development of forecasts and Budget assumptions.
- The 2022–23 Budget notes that a prudent approach is taken to commodity price assumptions, with recent strong commodity price levels assumed to be temporary.
  - This is done to ensure that economic and fiscal parameters are grounded in long-term economic fundamentals and are not unduly influenced by short-term volatility.
- REQ forecasts and 2022–23 Budget assumptions both suggest that iron ore prices will decline over the outlook period. However, Treasury has assumed a deeper and more rapid decline (refer to comparisons in table 1).
  - Both the REQ and Budget outlooks assume lower expected growth in Chinese steel production, and a recovery in Brazilian iron ore supply.
- REQ forecasts and 2022–23 Budget assumptions both suggest that coal prices will decline from their current highs over the outlook period.
  - Both the REQ and 2022–23 Budget note that the Australian coal supply has been affected by persistent weather events (associated with La Niña and a negative Indian Ocean Dipole) as well as COVID-19 disruptions. This has contributing to elevated prices.
  - The potential loss of some Russian seaborne coal supply has also put upward pressure on prices. A partial restoration of global supply is expected to ease some of this pressure, though both publications note that prices still remain subject to upside risks.
- Treasury also consulted with DISR in forming assumptions on retail gas price increases. DISR provided advice on global energy market conditions.

Contact Name: s22	Contact Number: s22
Cleared by: s22	Clearance Date: 28 October 2022
Witness responding: s22	

BACKGROUND:

- The September 2022 REQ was released on 4 October 2022.
  - Australia's resource and energy export earnings are forecast to reach $450 billion in 2022–23, surpassing the previous record of $422 billion in 2021–22.
  - Australia's resource and energy export earnings are expected to ease to $375 billion in 2023–24 as global supply responds to high prices amidst a softening demand backdrop.
  - The recent surge in resource and energy export earnings has been driven by a spike in global energy prices, and by sustained Australian dollar weakness against the US dollar.
  - Energy prices have been elevated by a looming drop in exports of gas, coal and oil from Russia, which has long been one of the world's largest exporters of energy products.
  - Supply has also come under pressure as European governments attempt to rebuild energy stockpiles ahead of the winter season, when demand typically spikes. Droughts across parts of Western Europe, the United States and southern China have also exacerbated energy shortages.
- Price forecasts in the REQ are updated quarterly and are based on an assessment of developments in global markets that impact demand and supply.
  - This is a different approach from Treasury, which makes price assumptions based on the need for a 'prudent' approach, which aligns fiscal parameters to longer-term economic fundamentals.
- The 2022–23 Budget included a sensitivity analysis of iron ore price movements on nominal GDP and tax receipts.
  - A US$10 per tonne increase in the assumed price for iron ore exports would be expected to push nominal GDP up by around $4.5 billion in 2022–23, and by around $2.4 billion in 2023–24.
  - A US$10 per tonne increase in the assumed price for iron ore exports would be expected to push tax receipts up by around $0.5 billion in 2022–23 and 2023–24.
- The fall in the iron ore price in the June and September 2021 quarters represents one of the largest and fastest falls in the price of iron ore in the past decade.
  - Prices fell from around US$230 per tonne (FOB) in May 2021 to just over US$80 a tonne in November – a 64% (US$150/t) fall in 5 months
  - Previous falls included:
    - A fall of US$51 a tonne in October 2011, after reaching their previous record high in early 2011.
    - A 61% fall from US$110 a tonne on 9 April 2014 to US$43 a tonne on 9 April 2015.

Table 1: Price forecasts and assumptions in the 2022–23 Budgets, and September 2022 REQ

	Treasury Budget assumptions		DISR forecasts	Latest price
	2022 –23 Budget (March)	**2022 –23 Budget (October)**	**September 2022 REQ**	**(25 Oct 2022)**
Iron ore	Decline to US$55/t by end of September quarter 2022* **From a spot price at time of publication of US$134/t*	Decline to US$55/t by end of March quarter 2023* **From a spot price at time of publication of US$91/t*	US$89/t average price in September quarter 2022 US$97/t in 2021–22 US$79/t in 2022–23	*US$87.8/t (CFR)*
Metallurgical coal	Decline to US$130/t By the end of September quarter 2022* **From a spot price at time of publication of US$512/t*	Decline to US$130/t By the end of March quarter 2023* **From a spot price at time of publication of US$271/t*	US$251/t average price in September quarter 2022 US$251/t in 2021–22 US$231/t in 2022–23	*US$284/t*
Thermal coal	Decline to US$60/t By the end of September quarter 2022* **From a spot price at time of publication of US$320/t*	Decline to US$60/t By the end of March quarter 2023* **From a spot price at time of publication of US$438/t*	US$419 average price in September quarter 2022 US$309/t in 2021–22 US$167/t in 2022–23	*US$390/t*
LNG	N/A	Decline to US$630/t (US$12/MMBtu) by the end of March quarter 2023* **From a spot price at time of publication of US$934/t (US$17.8/MMBtu)*	US$12.3/MMBtu in 2021–22 US$15.6/MMBtu in 2022–23	*US$27.4/ MMBtu*

Table 2: Iron ore price forecast changes between REQs

	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23
Actual	**120**	**116**	**89**				
Dec 21 REQ		81	77	75	73	71	-
Mar 22 REQ		117	105	95	88	81	75
Jun 22 REQ		119	112	104	95	87	80
Sep 22 REQ	-	-	92	99	103	95	87
Change in forecast (Jun 22 to Sep 22)	-	-	*-18%*	*-5%*	*8%*	*9%*	*9%*
22-23 Budget (March)	-	-	-	***55***	***55***	***55***	***55***
22-23 Budget (October)	-	-	-	-	-	***55***	***55***

Table 3: Metallurgical coal price forecast changes between REQs

	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23
Actual	**489**	**492**	**251**				
Dec 21 REQ		235	210	185	172	163	-
Mar 22 REQ		301	254	209	172	168	163
Jun 22 REQ		487	411	360	352	290	256
Sep 22 REQ	-	-	297	286	278	270	252
Change in forecast (Jun 22 to Sep 22)	-	-	*-28%*	*-21%*	*-21%*	*-7%*	*-2%*
22-23 Budget (March)	-	-	-	***130***	***130***	***130***	***130***
22-23 Budget (October)	-	-	-	-	-	***130***	***130***

Table 4: Thermal coal price forecast changes between REQs

	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23
Actual	**271**	**364**	**419**				
Dec 21 REQ		120	117	109	102	90	-
Mar 22 REQ		191	162	136	128	109	101
Jun 22 REQ		344	277	224	215	189	150
Sep 22 REQ	-	-	370	325	302	240	211
Change in forecast (Jun 22 to Sep 22)	-	-	*34%*	*45%*	*40%*	*27%*	*41%*
22-23 Budget (March)	-	-	-	***60***	***60***	***60***	***60***
22-23 Budget (October)	-	-	-	-	-	***60***	***60***

Figure 1: REQ iron ore forecast comparison

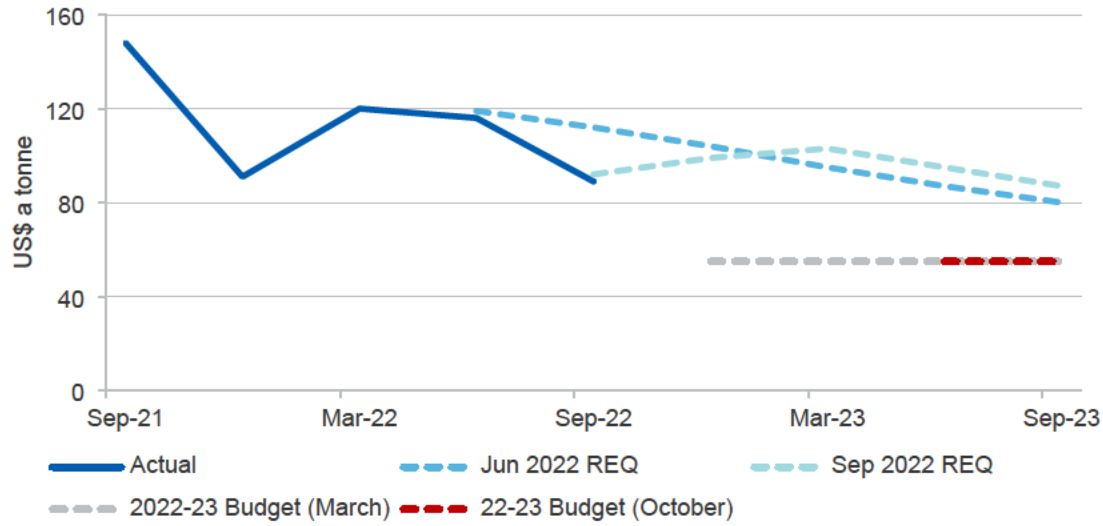


Figure 2: Metallurgical coal forecast comparison

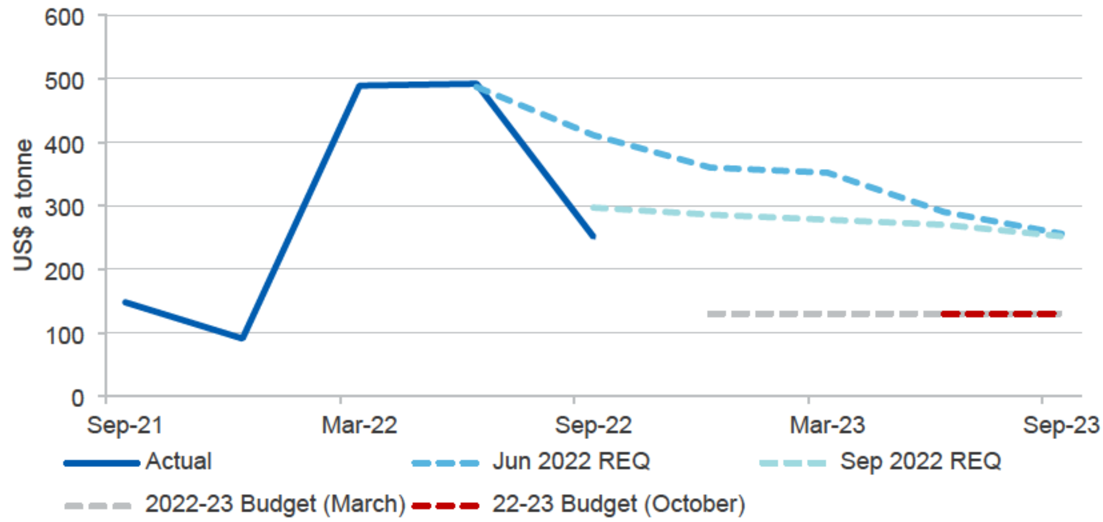
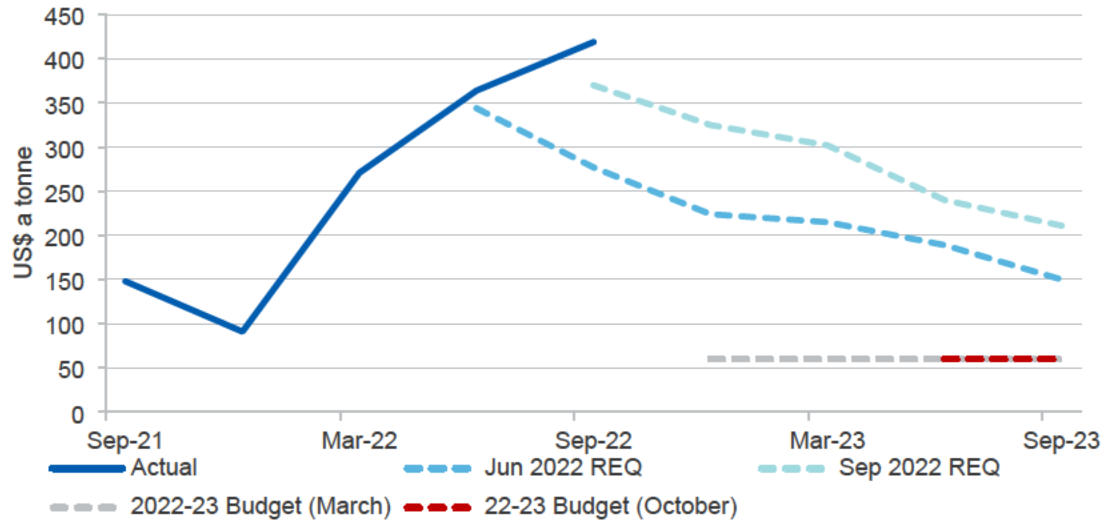


Figure 3: Thermal coal forecast comparison



- Table 2.3 of the 2022–23 Budget presents a sensitivity analysis for commodity prices in which they are assumed to remain elevated over the December quarter of 2022 and then glide down later (that is, over the March and June 2023 quarters).

Sensitivity analysis of a later fall in commodity spot prices

	2022-23	2023-24	2024-25	Total
Nominal GDP ($billion)	35.0	8.8	0.0	43.8
Tax receipts ($billion)	2.5	6.5	0.9	9.9

Source: Treasury.
Note: The long-term commodity price assumptions are: iron ore – US$55 per tonne free-on-board (FOB); metallurgical coal – US$130 per tonne FOB; thermal coal – US$60 per tonne FOB.

- Table 8.1 of the 2023–23 Budget outlines the expected impact of a permanent US$10 per tonne increase in the iron ore price on nominal GDP and tax receipts (relative to the baseline forecast).

Sensitivity analysis of a US$10 per tonne movement in iron ore prices

	US$10/tonne FOB[(a)] fall		US$10/tonne FOB increase	
	2022-23	2023-24	2022-23	2023-24
Nominal GDP ($billion)	-4.5	-2.4	4.5	2.4
Tax receipts ($billion)	-0.5	-0.5	0.5	0.5

(a) Prices are presented in free on board (FOB) terms which exclude the cost of freight.
Source: Treasury.

SUPPLEMENTARY BUDGET ESTIMATES
OCTOBER 2022
BACK POCKET BRIEF

Portfolio Budgets Overview

An outline of measures presented in the 2022-23 October Budget Industry, Science, and Resources Portfolio Budget Statements (PBS). Figures are rounded to one decimal place for consistency with presentation in Budget papers.

KEY POINTS

2022-23 BUDGET MEASURES

Minister for Industry and Science

Buy Australian Plan

- This measure delivers the Buy Australian Plan to support Australian businesses to compete more effectively, increase employment and build resilience in supply chains.
- There are no financial implications for the Industry, Science and Resources Portfolio associated with this measure.

Government Spending Audit – Industry and Science Portfolio – efficiencies

Through the Audit, savings of **$506.4 million** have been identified in the Industry and Science Portfolio, including the below savings outlined in Budget Paper No. 2:

- **$303.7 million** from the partial reversal of the 2022-23 March Budget measure *Boosting the Modern Manufacturing Strategy and Addressing Critical Supply Chain Vulnerabilities*, including:
    - Reversing uncommitted funding in the Modern Manufacturing Initiative (**$250 million**)
    - Not proceeding with a third round of the Manufacturing Modernisation Fund (**$53.7 million**)

Contact Name:	s22	**Contact Number:**	s22
Cleared by:	s22	**Clearance Date:**	26 October 2022
Witness Responding:	s22	**Witness Position:**	A/g Chief Finance Officer

- **$197.7 million** from redirecting uncommitted funding from the Entrepreneurs' Programme to deliver on the Government's election commitment
- **$5.0 million** from ceasing the Thermochemical Conversion Technology Trial Facility component of the 2019- 20 Budget measure Thermochemical Conversion Technology Trial Facility.

This funding will offset the Government's election commitments, including the establishment of the $15.0 billion National Reconstruction Fund, and will also be redirected to fund other Industry and Science Programs to realign expenditure to support Government priorities.

National Reconstruction Fund – establishment

This measure provides **$15.0 billion** over seven years from 2023-24 to establish the National Reconstruction Fund.

Funding includes:

- **$15.0 billion** in targeted co-investments through independently assessed projects
- **$50.0 million** over two years from 2022-23 to support the establishment of the Fund. This includes:
  - **$48.8 million** for the Department of Industry, Science and Resources
  - **$1.2 million** for the s 22

Note: The underlying cash impact for DISR is (-$44.8 million over 2022-23 and 2023-24) as the measure was partially funded by redirecting $5.2 million in funding from the 2022–23 March Budget measure *Boosting the Modern Manufacturing Strategy and Addressing Critical Supply Chain Vulnerabilities*. If asked, this redirected funding was originally provided to develop the former Government's Manufacturing Investment Plans.

Supporting Australian Industry

This measure provides **$135.5 million** over 4 years from 2022–23 to deliver on election commitments to continue to support Australian industry to develop domestic manufacturing capabilities and upskill the manufacturing sector workforce, including:

- **$113.6 million** over 4 years from 2022–23 to support local industry to secure and support new jobs, and strengthen key domestic manufacturing capabilities in regional areas. (Of this $113.6 million in support, **$111.2 million** will be provided by the Industry and Science Portfolio).
- **$14.2 million** over 4 years from 2022–23 to develop a National Rail Manufacturing Plan to ensure more trains are built in Australia, support skilled manufacturing and expand the local rail industry.
- **$6.1 million** over 4 years from 2022–23 to help consumers choose ethically sourced Australian textile, clothing and footwear products.

- **$1.6 million** over 2 years from 2022–23 to implement Mandatory Country of Origin Labelling to support the Australian seafood industry.

Supporting Talent and Leadership in Australia's Science and Technology

This measure provides **$47.2 million** over 6 years from 2022–23 to support the development of talent and leadership in Australian science and technology, including:

- **$13.5 million** over 4 years from 2022–23 for continued resourcing of the Critical Technologies Hub and to establish new subject-specific nodes to provide balanced whole of government advice on critical technologies.
- **$10.3 million** over 6 years from 2022–23 for Australia to host the International Science Council's Regional Presence for Asia and the Pacific.
- **$10 million** over 3 years from 2022–23 to continue Questacon's national science, technology, engineering and mathematics (STEM) engagement activities through its Questacon Science Circus and Engineering is Elementary programs.
- **$5.8 million** to support women in Science, Technology, Engineering and Mathematics through the Women in STEM and Entrepreneurship program and to undertake an independent review of existing STEM programs.
    - This funding includes **$4.7 million** redirected from the 2022-23 March Budget measure *Women in Leadership*, previously provided for the former Government's Women in Manufacturing Initiative.
- **$4.8 million** over 4 years from 2022–23 to develop Australian quantum technology through sponsoring up to 20 PhD research scholarships and encouraging collaboration on quantum research across Australian universities.
    - This initiative is partly met by $4.0 in funding from the Department of Defence's Next Generation Technology Fund
- **$2.9 million** in 2022–23 to improve the provision of important science and technology advice to the Australian Government and to support the delivery of the 2022 Prime Minister's Prizes for Science.
    - This funding has been redirected from the 2022-23 March Budget measure, *Advancing Science, Technology, Engineering and Maths*.

Note: The net underlying cash impact for this measure reflects that it was partially funded by redirecting savings identified as part of the Government's Spending Audit, and that $4.0 million in funding s 22 , which will partially meet the cost of the initiative *Supporting Australian Quantum Researchers*.

Minister for Resources

Supporting Australia's Resources

This measure provides funding to support the Australian resources industry, including:

- **$99.8 million** over 3 years for tailored grants to support the development of the critical minerals industry through the Critical Minerals Development Program.
    - This funding will be offset by partially reversing the Critical Minerals Accelerator Initiative from the 2022-23 March Budget measure *Critical Minerals Strategy – implementation* and will achieve savings of **$100.3 million**.
- **$50.5 million** over the forward estimates to establish the Australian Critical Minerals Research and Development (R&D) Hub to centralise our world-leading R&D capabilities and unlock Australia's critical minerals potential.
    - This funding has been redirected from the 2022-23 March Budget measure *Critical Minerals Strategy – implementation*.
- **$10 million** over 3 years to fund research, development and demonstration projects that advance the maturity of methane abatement technologies in the resources sector.
    - This funding has been redirected from the 2022-23 March Budget measure *Energy and Emissions Reduction*.
- Funding to continue activities related to the decommissioning of the Northern Endeavour floating oil production storage and offtake facility **(financial implications are not for publication)**.

Note: The implications of this measure for DISR are shown as not for publication overall, due to the commercial sensitivities associated with the Northern Endeavour decommissioning process. The cost of the measure will be partially met from funding already provided by the Government and will redirect funding from the 2022-23 March Budget measures *Critical Minerals Strategy – implementation* and *Energy and Emissions Reduction*.

Supporting the Supply of Australian Gas

This measure provides **$65.7 million** over nine years from 2022-23 to implement reforms that will strengthen the Australian Domestic Gas Security Mechanism to better respond to forecast gas shortfalls, making gas more reliable for all Australians, including:

- **$40.9 million** over 8 years from 2022–23 to implement reforms to the Australian Domestic Gas Security Mechanism.
    - This includes $3.0 million over the forward estimates for DISR, with a total investment of $22.2 million over nine years from 2022-23.

- **$24.8 million** over 8 years from 2023–24 to extend the 2019–20 MYEFO measure titled s 22

Note: The net underlying cash impact for this measure reflects that it was partially funded by no longer proceeding with the Optimise and Discover Program included in the 2021-22 MYEFO measure *Strategic Basin Plans – additional funding*. s 22

Cross-Portfolio

There are also cross-portfolio measures with implications for the portfolio, which are summarised below:

- s 22

- **$30.6 million** in savings for the portfolio's contribution to whole-of-government **Savings from External Labour, and Savings from Advertising, Travel and Legal Expenses**

s 33

- $2.0 million in savings for the portfolio's contribution to whole-of-government savings to offset **An Ambitious and Enduring APS Reform Plan**.

BACKGROUND

- Nil.

KEY QUESTIONS:

If Asked: Why is the government unable to provide a reliable estimate for the Underlying Cash Balance Impact (UCB) of receipts measures associated with the establishment of the National Reconstruction Fund from 2023-24 onwards?

- s 22
- Only initial establishment costs are disclosed in the 2022-23 Budget, while the department works through the final parameters of the NRF in consultation with industry.
- These parameters will have implications on how the implications of the NRF are presented in future Budget Papers.

If Asked: Why are some figures listed in Budget Papers as 'not for publication (nfp)'?

- The only nfp measure for the Industry, Science and Resources Portfolio in the 2022-23 October Budget is the *Supporting Australia's Resources* measure.
- This measure is nfp because of commercial sensitivities associated with the Northern Endeavour decommissioning component.
  - These figures are not for publication due to commercial sensitivities and ongoing competitive procurement processes. Releasing information on the amount of funds budgeted in advance would reduce competitive tension and potentially drive up costs in the tenders.
- The financial implications for the other measures in this measure grouping are disclosed in the measure text.
- Consistent with longstanding practice, when a number of measures are grouped together and the implications of one or more of the measures is nfp for an impacted entity, the financial impacts for the measure grouping as a whole are presented as nfp.