



COMMONWEALTH OF AUSTRALIA

Proof Committee Hansard

SENATE

ECONOMICS LEGISLATION COMMITTEE

Estimates

(Public)

THURSDAY, 6 JUNE 2024

CANBERRA

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ECONOMICS LEGISLATION COMMITTEE

Thursday, 6 June 2024

Members in attendance: Senators Bragg, Canavan, Cox, McDonald, David Pocock, Roberts, Dean Smith, Thorpe, Walsh and Whish-Wilson

INDUSTRY, SCIENCE AND RESOURCES PORTFOLIO

In Attendance

Senator Ayres, Assistant Minister for Manufacturing, Assistant Minister for Trade

Department of Industry, Science and Resources

Ms Meghan Quinn PSM, Secretary

Corporate

Mr Neal Mason, Deputy Secretary, Enabling and Business Services Group

Ms Jane Urquhart, Deputy Secretary, Resources and Strategy Group

Ms Michelle Dowdell, Head of Division

Mr Bede Jones, General Manager

Mr Gavin McCosker, Chief Finance Officer

Ms Rebecca Lee, Chief Information Officer

Mr Stewart McGill, General Manager, Information and Communications Technology Operations Branch

Ms Leanne Yannopoulos, Chief Operating Officer

Ms Tanja Watson, Acting Chief Operating Officer

Ms Sam Chard, Head of Division

Mr Derek Stiller, General Manager, Integrity Branch

Chief Counsel and Integrity

Ms Janean Richards, Head of Division

Mr Ray Marcelo, Acting Head of Division

Mr Merrick Peisley, Acting Head of Division

Ms Tegan Johnson, General Manager, Ministerial and Executive Enabling Branch

Ms Naomi Perdomo, General Manager, Whole of Government Policy and Priorities Branch

Ms Deborah Miliszewski, General Counsel

Outcome 1: Support economic growth, productivity, and job creation for all Australians by investing in science, technology and commercialisation, growing innovative and competitive businesses, industries and regions, and supporting resources.

Program 1.1: Growing innovative and competitive businesses, industries and regions

Ms Julia Pickworth, Deputy Secretary, Industry and Commercialisation Group

Ms Isolde Lueckenhausen, Acting Commissioner

Mr Mayuran Jeyarajah, Acting Deputy Commissioner, Investigations

Mr Gary Rake, Chief Executive Officer, Australian Building Codes Board

Mr David Luchetti, Head of Division

Mr David Chuter, Executive Director, Industry Growth

Ms Tanya Blight, Executive Director, Office of Industry Innovation and Science Australia

Ms Louise Talbot, General Manager, Sector Development

Mr James Flick, General Manager, Industrial Net Zero Policy

Ms Leah Wojcik, General Manager, Industrial Net Zero Transformation

Ms Donna Looney, Head of Division

Ms Jocelyn Cooper, General Manager

Ms Jasminder Higgins, General Manager

Ms Dara Williams, Head of Division

Mr Matthew Crawshaw, General Manager

Mr Merrick Peisley, Acting Head of Division

National Reconstruction Fund Corporation

Mr Ivan Power, Chief Executive Officer

Ms Rebecca Manen, Chief Operating Officer

Outcome 1:

Program 1.2: Investing in science, technology, and commercialisation

Ms Helen Wilson, Deputy Secretary, Science and Technology

Dr Bruce Warrington, Chief Executive Officer

Ms Jo White, Director

Mr Nicholas Purtell, Head of Division

Ms Natalie Weddell, General Manager

Ms Linda Lee, General Manager

Mr Anthony Murfett, Head of Division

Mr Daniel Quinn, General Manager

Mr Anthony McGregor, Head of Division

Ms Michele Graham, General Manager, Quantum Branch

Analysis and Insights Division

Ms Michelle Dowdell, Head

Ms Kate Penney, General Manager

Mr Merrick Peisley, Acting Head of Division

Mr Enrico Palermo, Head of Agency

Mr Christopher Hewett, General Manager, Space Policy

Australia's Chief Scientist

Dr Cathy Foley

Commonwealth Scientific and Industrial Research Organisation

Dr Doug Hilton, Chief Executive

Ms Kirsten Rose, Deputy Chief Executive

Mr Tom Munyard, Chief Operating Officer

Dr Peter Mayfield, Executive Director, Environment, Energy and Resources

Prof Elanor Huntington, Executive Director, Digital, National Facilities and Collections

Dr Jack Steele, Director, Strategic Government Programs

Outcome 1:

Program 1.3: Supporting a strong resources sector

Ms Jane Urquhart, Deputy Secretary, Resources and Strategy Group

Mr Sam Usher, Chief Executive Officer

Ms Jodie Lindsay, General Manager, Social License and Operational Support

Mr Peter Chesworth, Head of Division, Minerals and Resources

Ms Victoria Pullen, General Manager, Critical Minerals Office

Ms Kym Moore, Acting General Manager, Mining Branch

Oil and Gas

Mr Robert Jeremenko, Head

Mr Cliff Weeks, General Manager, Offshore Resources Branch

Ms Norelle Laucher, General Manager, Offshore Strategy Branch

Mr Shane McWhinney, General Manager, Northern Endeavour Branch

Mr David Lawrence, General Manager, Gas Branch

Mr William Tan, General Manager, Decommissioning Branch

Mr Graeme Waters, General Manager, National Offshore Petroleum Titles Administrator

Analysis and Insights Division

Ms Michelle Dowdell, Head
Ms Crystal Ossolinski, General Manager
Ms Shevaun Fitzmyers, Principal Adviser
Mr Merrick Peisley, Acting Head
Ms Tegan Johnson, General Manager, Ministerial and Executive Enabling Branch
Ms Naomi Perdomo, General Manager, Whole of Government Policy and Priorities Branch

Geoscience Australia

Dr James Johnson, Chief Executive Officer
Dr Steve Hill, Chief Scientist
Mrs Alison Rose, Chief, Space Division
Mr Jonathan Ross, Branch Head, Satellite Land Imaging Collection
Dr Andrew Heap, Chief, Minerals, Energy and Groundwater Division
Dr David Robinson, Head, Basin Systems Branch
Mr Trent Rawlings, Chief, Corporate Division
Ms Erika Taduran, General Manager, Enabling Services
Mr Clive Rossiter, Chief Information Officer
Mr Michael Koh, Chief Financial Officer

National Offshore Petroleum Safety and Environmental Management Authority

Ms Sue McCarrey, Chief Executive Officer
Mr Graham Blair, Deputy Chief Executive Officer, Regulatory Operations
Mr Cameron Grebe, Deputy Chief Executive Officer, Strategic Regulation and Improvement

Outcome 1:

Program 1.4: Nuclear powered submarine program

Australian Nuclear Science and Technology Organisation

Mr Shaun Jenkinson, Chief Executive Officer
Mr John Edge, Chief Operating Officer
Dr Miles Apperley, Group Executive, Nuclear Safety Security and Stewardship

Committee met at 09:02

CHAIR (Senator Walsh): I declare open this hearing of the Senate Economics Legislation Committee into the 2024-25 budget estimates. I begin by acknowledging the traditional custodians of the land on which we meet today and pay my respects to their elders past and present. I extend that respect to Aboriginal and Torres Strait Islander peoples here today.

The committee is due to report to the Senate on Tuesday 2 July 2024, and it has fixed Friday 26 July 2024 as the date for the return of answers to questions taken on notice. The committee's proceedings today will begin with the Department of Industry, Science and Resources, outcome 1, program 1.3, Supporting a strong resources sector.

Under standing order 26, the committee must take all evidence in public session. This includes answers to questions on notice. I remind all witnesses that, in giving evidence to the committee, they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee, and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence. The Senate has endorsed the following test of relevance of questions at estimates hearings: any questions going to the operations or financial positions of the departments and agencies which are seeking funds in estimates are relevant questions for the purpose of estimates hearings. I remind officers that the Senate has resolved that there are no areas in connection with the expenditure of public funds where any person has the discretion to withhold details or explanations from the parliament or its committees unless the parliament has expressly provided otherwise.

The Senate has also resolved that an officer of a department of the Commonwealth shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions asked of the officer to superior officers or to a minister. This resolution does not preclude questions asking for explanations of policies

or factual questions about when and how policies were adopted. Witnesses are reminded of the Senate order specifying the process by which a claim of public interest immunity should be raised. I incorporate the public immunity statement into the *Hansard*.

The extract read as follows—

Public interest immunity claims

That the Senate—

(a) notes that ministers and officers have continued to refuse to provide information to Senate committees without properly raising claims of public interest immunity as required by past resolutions of the Senate;

(b) reaffirms the principles of past resolutions of the Senate by this order, to provide ministers and officers with guidance as to the proper process for raising public interest immunity claims and to consolidate those past resolutions of the Senate;

(c) orders that the following operate as an order of continuing effect:

(1) If:

(a) a Senate committee, or a senator in the course of proceedings of a committee, requests information or a document from a Commonwealth department or agency; and

(b) an officer of the department or agency to whom the request is directed believes that it may not be in the public interest to disclose the information or document to the committee, the officer shall state to the committee the ground on which the officer believes that it may not be in the public interest to disclose the information or document to the committee, and specify the harm to the public interest that could result from the disclosure of the information or document.

(2) If, after receiving the officer's statement under paragraph (1), the committee or the senator requests the officer to refer the question of the disclosure of the information or document to a responsible minister, the officer shall refer that question to the minister.

(3) If a minister, on a reference by an officer under paragraph (2), concludes that it would not be in the public interest to disclose the information or document to the committee, the minister shall provide to the committee a statement of the ground for that conclusion, specifying the harm to the public interest that could result from the disclosure of the information or document.

(4) A minister, in a statement under paragraph (3), shall indicate whether the harm to the public interest that could result from the disclosure of the information or document to the committee could result only from the publication of the information or document by the committee, or could result, equally or in part, from the disclosure of the information or document to the committee as in camera evidence.

(5) If, after considering a statement by a minister provided under paragraph (3), the committee concludes that the statement does not sufficiently justify the withholding of the information or document from the committee, the committee shall report the matter to the Senate.

(6) A decision by a committee not to report a matter to the Senate under paragraph (5) does not prevent a senator from raising the matter in the Senate in accordance with other procedures of the Senate.

(7) A statement that information or a document is not published, or is confidential, or consists of advice to, or internal deliberations of, government, in the absence of specification of the harm to the public interest that could result from the disclosure of the information or document, is not a statement that meets the requirements of paragraph (1) or (4).

(8) If a minister concludes that a statement under paragraph (3) should more appropriately be made by the head of an agency, by reason of the independence of that agency from ministerial direction or control, the minister shall inform the committee of that conclusion and the reason for that conclusion, and shall refer the matter to the head of the agency, who shall then be required to provide a statement in accordance with paragraph (3).

(d) requires the Procedure Committee to review the operation of this order and report to the Senate by 20 August 2009.

(13 May 2009 J.1941)

(Extract, Senate Standing Orders)

CHAIR: I remind all senators that, as we continue our work implementing the *Set the standard* report, as Chair I will ensure that proceedings are conducted in an orderly, respectful and courteous way. The committee has agreed to authorising all media outlets to record the proceedings of the public hearing, subject to the broadcasting resolutions in the standing orders and the following conditions. Media entry is subject to not exceeding the maximum capacity of the room, and social distancing will be observed. The committee or a witness may object to being recorded at any time, and the committee may require that recording cease at any time. Recording must not occur from behind the committee or between the committee and witnesses and must not otherwise interfere in the proceedings. Computer screens and documents belonging to senators, members and witnesses must not be recorded, and flashes must not be used. The directions of the committee secretariat must be followed at all times.

Department of Industry, Science and Resources

[09:05]

CHAIR: I now welcome Senator the Hon. Tim Ayres, representing the Minister for Industry and Science and representing the Minister for Resources. I also welcome the Secretary of the Department of Industry, Science and Resources, Ms Meghan Quinn. Welcome to officers of the department, too. Does anyone have any opening comments they need to give, or shall we proceed straight to questions?

Senator Ayres: I want to correct one piece of evidence that I gave yesterday. I indicated that the minister met with the CPSU in relation to the CSIRO; it was in fact the minister's office that met with the CPSU.

CHAIR: Thank you, Minister. We'll proceed to questions. I'll go to Senator McDonald.

Senator McDONALD: Good morning. Let's go! In the latest budget, there was \$14.3 million across four years from 2024-25 within Future Made in Australia workforce and trade partnerships. Within this item, there was a specific reference, 'to negotiate benchmarks for trade in high-quality critical minerals'. Can the department advise how much of this funding will be allocated to this component through the forwards, please.

Ms Quinn: I'm happy to take that. We were allocated funding under the Critical Minerals Strategy. One of the aspects of the Critical Minerals Strategy is to work with international partners on supply chains, and one of the aspects of supply chains is to make sure we've got international standards for the production of critical minerals—things such as environmental standards, greenhouse gas emissions standards and labour standards. There's quite a bit of work in the international forums, of which there are a few, working through these issues. The money was going to support our contribution to that. Some of the money is also going to the Department of Foreign Affairs and Trade. I'll throw to my colleague.

Ms Urquhart: If I recall correctly, you were asking about the component of the \$14.3 million that goes to Department of Industry, Science and Resources. That totals \$4.3 million over the forwards and comprises funding for two parts of the department: the critical minerals work and the National Measurement Institute. The measure goes to improving competitiveness and working with trade partners. That's about strengthening global rules on trade practices as well as, more specifically, negotiating benchmarks for trading quality critical minerals.

Senator McDONALD: Thank you. How much is going to Foreign Affairs?

Ms Urquhart: There's \$10 million after the \$4.3 million over the forwards that isn't the Department of Industry, Science and Resources. I would need to—

Senator McDONALD: That's fine. If that's a separate—

Ms Urquhart: I'm not sure that that's only the Department of Foreign Affairs and Trade, though, because my recollection is that there are multiple departments involved in that measure.

Ms Pullen: In terms of how much is going to the Department of Foreign Affairs and Trade, it is \$4.242 million.

Senator McDONALD: This is additional to the \$14.3 million?

Ms Pullen: This is part of that.

Senator McDONALD: Is that across the forwards?

Ms Pullen: That's across the forwards. I can break that up if you'd like me to.

Senator McDONALD: That would be terrific.

Ms Pullen: In 2024-25, it is \$1.66 million. In 2025-26, it is \$1.526 million. In 2026-27, it is \$1.549 million. In 2027-28, there is no further funding.

Senator McDONALD: So it is just the first three years of the forwards?

Ms Pullen: Yes.

Senator McDONALD: What activities are you expecting that Foreign Affairs will carry out to support the Future Made in Australia workforce and trade partnerships program?

Ms Pullen: As you know, the Department of Foreign Affairs and Trade has a strong network globally. In terms of specific activities that they will do, they will obviously be working with private firms to discuss any potential green premium, which has been discussed by our minister, but anything further we would have to refer to the department.

Ms Quinn: It is the case that this department is the standing member of the international fora relating to critical minerals. But there are some international fora that the department of foreign affairs is a standing member

of, because sometimes critical minerals is just one part of a broader set of issues, so we work cooperatively with our cousins in DFAT to cover the field depending on the best use of our resources.

Senator McDONALD: One of the Australian critical minerals companies suggested that, in order to progress the critical minerals agenda, particularly following the domestic defence supply arrangements with the US, the best thing Australia could do would be to send departmental officials—I assumed it would be resources officials who would know where the critical minerals were and what the resources were but I'm not sure; I would have to clarify that—to the US for big blocks of time, three and four weeks, to really build those relationships because the US Department of Defense doesn't have that understanding of Australia's capacity and capability. Do you think they are activities that would be undertaken under this program either by this department or by foreign affairs?

Ms Quinn: The work program under that allocation of funding was more specifically about international agreements and negotiations on international agreements. The Department of Industry, Science and Resources does have two full-time staff in the Washington embassy. They do spend quite a substantial amount of time on critical minerals issues, and we have an ongoing direct relationship with the US system under the critical minerals task force that was part of the state visit agreements between President Biden and Prime Minister Albanese. We do have regular dialogue with our US colleagues, which includes providing information about the opportunities in Australia down to not only the mineral deposits but also particular companies. It gets into a great deal of granularity. We also have through that system connections into the Department of Defense, and senior representatives of the US Department of Defense were in Australia in the last month, I think.

Senator McDONALD: Yes, I met one of them at the US embassy.

Ms Quinn: We've had discussions both in Australia and in the United States about the opportunities for critical mineral companies. Of course, in addition to what we do, there are the Austrade connections into the system, which are very active in critical minerals around the world and we work closely with them.

Senator McDONALD: Do you think there would be some sort of success measure? In 12 months time when we meet again, who would be tracking how many deals have been signed by Australian companies, how much investment had come in to Australian companies? Who would track that kind of success measure?

Ms Quinn: That is something this department does in terms of pulling it all together for a picture of what is happening in the sector.

Senator McDONALD: Do you have an idea of what the baseline number is now so that, when I ask you next year, we will be able to see if that has grown or not?

Ms Quinn: The team will have that information. We are tracking all the lists of deals in the private market that we see. I'm not sure if we have it added up on top but we are happy to take it on notice. My colleague from our analysis and insights division can help.

Ms Dowdell: We do have a range of information. I don't have a consolidated number here, but we can take it on notice for you.

Senator McDONALD: That would be terrific, if you could. Because next time we meet—October—I will ask you what the measure is from your answer on notice to then. And we will be looking for that number again because, for the \$14.3 million, it will be great to understand if that has been a good investment. Perhaps we should spend more on that. Or is it at a slower burn? This is such an important element for Australia's future prosperity that understanding the success of the measure will be very important.

Ms Dowdell: I would note the regular resources and energy major project report, which we publish around December, usually is our way of tracking both critical minerals and other projects. That is our regular reporting, but we will see what we can provide in the meantime.

Senator McDONALD: It doesn't split out by jurisdiction, though, does it? We are seeing the projects, absolutely, but we're not seeing US defence related—

Ms Dowdell: That's right.

Senator McDONALD: Is that something you can do—split that list by jurisdiction investment?

Ms Dowdell: I would have to take that on notice. I think we can. We have been looking at the sources of investment in those projects, so we will see what we can provide.

Senator McDONALD: The \$14.3 million less the \$4.242 million would be \$10 million over the forwards. You talked about the critical minerals strategy, supply chains. Secretary, are you looking for these to go to more studies or reviews? Are you expecting that there will be you some real meat on the bones of what the supply chain means? How do you see it working?

Ms Quinn: To date there has been a focus on understanding the mapping of supply chains. There are quite a few bilateral relationships we have built with other countries so that they can understand their demand and we can match it with our supply and, through that, build more of a market understanding of the opportunities for critical minerals. That has been the first phase of the focus. More recently, we have moved to thinking about what are the requirements to be able to build more market mechanisms for different types of critical minerals to differentiate those that have different standards to others, nickel being our main focus but not just nickel. That is a different process. That is working with those that set standards or would need to accept standards such as financial market participation, the demanders of critical minerals at the end chain such as the big manufacturing organisations. A lot of that is working with officials to build a coalition of countries that are willing to build legal frameworks that the market could operate in. That is a different type of work. That is traditional government-to-government relations supported by analytical efforts, but it is more government-to-government relations. I will pass to the team to see what else they were planning to do under that measure.

Ms Urquhart: This measure is being DFAT-led in the rules based global trading system, within which we will be providing advice on the specifics of the critical minerals interest. But also, as I mentioned, the National Measurement Institute is also present for its expertise. We would expect DFAT leadership in that. I would expect that the work will inform positioning in a variety of fora, whether it be future free trade agreement negotiations or other global fora that go to standards and other arrangements.

Senator McDONALD: I turn back to Austrade, which we mentioned before. Is that not where negotiations to ensure proper benchmarks for minerals would be occurring—under the Austrade banner?

Ms Urquhart: No. I would expect DFAT to be taking a lead in negotiations of that type.

Senator McDONALD: What does Austrade do in this space then?

Ms Urquhart: Austrade tends to work more at the firm level.

Ms Quinn: They're part of the intelligence gathering network that we have for what the market conditions and barriers to certain activities are. They're very important in gathering information by talking to both customers and other producers, but they do very much operate at the firm level. They are very valuable in terms of networks for our companies. As you know, many of our critical minerals companies are in the mid-size to small-size range, so they do rely on and use the Austrade network to be able to match with people who will demand their resources. They also introduce the demanders and suppliers to mechanisms within Australia and bring them to our attention to facilitate government assistance.

Senator McDONALD: Terrific. I was at the same PDAC conference as you in Canada and was impressed by the energy of the Austrade officials that I met there.

I want to turn to another component in this section: the \$8.7 million in 2024-25, which includes a review of Australia's critical minerals trade policy setting. How much of this \$8.7 million will be allocated on this component?

Ms Urquhart: The figure that I have is \$2.8 million over the forwards to this department. To refer back to Budget Paper No. 2: you would be aware it's pages 72 and 73 that cover the measure at the higher level as set out by Treasury. It incorporates quite a number of elements. The \$8.7 million to which you refer is the 2.3 that comes to this department.

Senator McDONALD: How will that 2.3 be utilised by the department?

Ms Pullen: Under the Future Made in Australia, critical minerals will be, you know, one of the foundational policy components. With that lift up in policy development in securing diversified supply chains, continuing to implement the critical minerals strategy and, again, working with those international partners, it's really fulfilling those roles.

Senator McDONALD: Okay. The review of Australia's critical minerals trade policy settings will be led by the department?

Ms Pullen: It will be led by DISR and very, very closely with DFAT. I have a counterpart in DFAT. We speak daily.

Senator McDONALD: What sort of things will this review hope to deliver and examine?

Ms Quinn: I see the review as developing policy to support the Future Made in Australia. Critical minerals are under the national interest stream of Future Made in Australia, so we will be working to fulfil that space.

Senator McDONALD: On trade agreements—sorry, I'm just trying to tease out exactly what you mean.

Ms Pullen: It is not trade agreements per se, but there is a lot of work going on at, for example, the International Energy Agency. They are working on looking at, securing those diversified supply chains, ensuring that globally and with like-minded partners we are in a position to respond and allow continued important manufacturing where there's a severe supply chain deception. So it's not necessarily trade agreements per se; it's ensuring the strength of the supply chain away from the current lack of diversification that we have.

Senator McDONALD: I understand. Thank you for that.

In this budget, there was \$29.7 million allocated across three years from 2023 to 2025 to improve environmental and safety outcomes for the resources sector. Is this all new funding, or does it include funding from previous measures?

Ms Quinn: You don't happen to have what page you are referring to in Budget Paper No. 2?

Senator McDONALD: It is page 142.

Ms Quinn: Thank you.

Senator McDONALD: I just assume that the departments are all over their budget measures, so I hadn't thought to—

Ms Quinn: Yes. There's just quite a few this time.

Senator McDONALD: That sounds promising.

Ms Quinn: On page 142, the majority of the \$20 million that you're referring to there is for the National Offshore Petroleum Safety and Environmental Management Authority. That is new money.

Senator McDONALD: This was to assist NOPSEMA with its regulatory functions?

Ms Quinn: That's right. NOPSEMA is currently funded through payment of fees from the offshore industry. There has been a slowing in that process in recent times, so NOPSEMA needs funding to support it in the interim.

Senator McDONALD: Okay. So that's not going to worker safety; that's regulatory functions. Is that correct?

Ms Quinn: It's going to support NOPSEMA to sustain their regulatory functions, which ultimately goes to offshore safety, yes. That's through the regulator.

Senator McDONALD: Given that it receives its funding primarily from fees received, would you expect that that \$20 million will be recouped in the future?

Ms Quinn: NOPSEMA will be looking at its cost recovery model in the period ahead to look at its financial sustainability. Normally, NOPSEMA is cost recovered. The government is supporting it in the interim, and whether or not that money is recouped is an open question.

Senator McDONALD: Does that \$20 million include additional ASL or FTE?

Ms Quinn: No. It's to support their existing regulatory activities.

Senator McDONALD: If it's not more people, could you give an example of how \$20 million could be spent to speed up their regulatory activities?

Ms Quinn: It's to sustain their existing people.

Senator McDONALD: So they're not currently receiving enough to fund their existing people.

Ms Quinn: Correct—just temporarily.

Senator McDONALD: I assume that this funding, being part of the budget, was allocated prior to schedule 2 part 2 being ripped out of the safety and other measures bill?

Ms Quinn: It was part of the budget, yes. That was prior to the adjustments in the Senate.

Senator McDONALD: Now that there isn't a pathway for the government to deliver reforms to the offshore regulations, what will this funding be used for?

Ms Quinn: This funding goes to the financial sustainability of NOPSEMA to sustain their existing functions. It's independent of any regulatory change.

Senator McDONALD: But that regulatory change was embedding the existing removal of duplication between the EPBC and NOPSEMA.

Ms Quinn: Streamlining, yes.

Senator McDONALD: Will that not being reconfirmed not add to duplication of regulation in NOPSEMA?

Ms Quinn: It doesn't change the activities of NOPSEMA per se. The streamlining has most of its impact on industry.

Senator McDONALD: I'm just trying to understand this. So the government had a plan to include this schedule. It had an activity to perform that change—that schedule 2 part 2. So, unless the government knew prior to the budget that they were going to do a deal with the Greens to remove schedule 2 part 2—I'm just wondering, then, if that \$20 million is going to be an adequate payment.

Ms Quinn: My team will correct me, but I don't believe there's any connection between the two activities that you've mentioned. The \$20 million is a measure to immediately address immediate financial risks for NOPSEMA, and it will include a review of their cost recovery and regulatory levy framework. It's around the financial sustainability of the regulator within its existing regulatory activities. The government considers, when it considers other changes to the regulatory environment, whether there needs to be a change in funding for regulators, and that is a separate matter. So this measure is based on the existing legislation.

Senator McDONALD: If the extension of the lack of duplication between the EPBC and NOPSEMA is not recommitted to in legislation, does that mean that, whilst it won't change NOPSEMA's activities, it will mean that companies have to now go back through the EPBC legislation?

Ms Quinn: At a high level, the intention of that amendment was to ensure that streamlining was maintained between the two regulatory activities that companies face, and the streamlining is designed to ensure that there is a reduction in regulatory activity. I'll pass to the team to add anything they would like.

Ms Urquhart: That is correct. It was about, from the point of view of the company, whether they would need to get an approval under two acts or simply one. So the streamlining mechanism is in place until there is legislated change, and then there is a risk of that streamlining connection being severed and requiring companies to secure two approvals. You'll appreciate that the government has quite an agenda of regulatory reform around environmental management, consultation and clarification on consultation requirements. It was in anticipation of that that that particular part of the draft legislation was being proposed.

Senator McDONALD: So it means that, as it stands currently, companies will have to go back and get two approvals, then.

Mr Jeremenko: No, the existing streamlining applies. What that schedule that was removed in the Senate was going to do was make sure that, should there be amendments, they wouldn't unlink the existing streamlining. So the government has been very clear that the removed schedule from that bill still remains government policy, and the intention is that that will still be made law to enable that streamlining to continue should there be changes that require it to prevent the unlinking.

Senator McDONALD: Just to go back, of the \$29.7 million, we've identified \$20 million. What is the balance of that measure, please?

Mr Jeremenko: There is \$2.9 million—again, I'm reading from page 142 of BP 2—over two years from 2023-2024 to continue work health and safety reforms, which is a further safety review, if you like, to the safety amendments that were in the bill that we were just speaking about and that actually did pass the parliament.

Senator McDONALD: And?

Ms Urquhart: The measure incorporates \$6.8 million over two years to implement the Offshore Decommissioning Roadmap.

Senator McDONALD: Terrific. Thank you.

CHAIR: Senator McDonald, I'm going to share the call and come back to you. Senator Cox?

Senator COX: Can I start asking some questions on the National Resources Statement? The previous government had a National Resources Strategy, which originally had a five-point plan attached to it. Given the change of government to the Albanese government, and with the recent budget and some changing of priorities, can you advise if there've been any recent updates to this plan?

Ms Quinn: I confess to not being familiar with the previous government's plan. This government has updated the Critical Minerals Strategy, has the Future Gas Strategy, and the minister made a statement to parliament about resources in general just last year. We're working to those strategies, consistent with that statement to parliament.

Senator COX: Just to confirm, is it critical minerals and future gas only? Does the hydrogen strategy come into that?

Ms Quinn: The hydrogen strategy is managed by the Minister for Climate Change and Energy, and the energy component of his department supports him in that.

Senator COX: Great. Thank you. I'll move on. The budget papers contain \$566 million for geoscience, to map resources and make these results available to industry. Those two categories were, in fact, strategic materials and critical minerals. Can you explain what strategic materials are?

Ms Quinn: The government has had a discussion with the community and the resources industry about defining critical minerals—there's a Critical Minerals List. Through the most recent update of the Critical Minerals List there was also a discussion about strategic resources, which might not meet all the criteria for critical—

Senator COX: I think the wording is 'strategic materials'. It's very specific. It doesn't mention resources. It mentions strategic materials. From a policy perspective, I think it's really important we get our language right. And even more important is how we define that, so we know what we're dealing with. Are we referring to gas as strategic materials?

Ms Urquhart: No, we're not. You might recall that the government updated the Critical Minerals List and, at the time, also created what's known as the Strategic Materials List. The materials list consists of aluminium, copper, phosphorous, tin and zinc. The funding that you referred to comes under a program called Resourcing Australia's Prosperity, which provides funding to Geoscience Australia. That funding is, essentially, for what they call precompetitive geoscience—mapping Australia to identify where there are deposits of both critical minerals and strategic materials. In addition, there's also a component about mapping water sources. Perhaps interesting to you would be, in particular, the work that Geoscience Australia intends to undertake on engagement with First Nations communities around data and—

Senator COX: I will be asking that when they come on later today. Can you confirm that we're not mapping gas as part of that work? Is that the view of the department?

Mr Chesworth: Resourcing Australia's Prosperity is intended to provide a holistic understanding of Australia's full resource potential. Essentially it will be looking for everything. It's not designed to go out and look for gas, but that does not mean that gas may not be found in the process of mapping the whole country.

Senator COX: Are we doing oceans as well? Are we doing offshore, to make sure that we capture all those gas projects? Are we going to provide that information for free to industry?

Mr Chesworth: I'll just ask my colleague, Ms Moore, to come to the table.

Ms Moore: Geoscience Australia will be able to provide a more detailed answer. For Resourcing Australia's Prosperity, a large amount of national mapping will be happening in the offshore environment to understand what is sitting offshore, but no deep dives.

Senator COX: Do the strategic materials—using the terminology that you use in the policy—include any potential carbon capture and storage, or CCS, sites? Are they going to be mapped also?

Mr Chesworth: Again, the—

Senator COX: There's nothing off the table, is there? Is that the answer?

Mr Chesworth: Yes. But, again, the purpose of Resourcing Australia's Prosperity is to map the country and what's underneath it. So it's, again, to provide that holistic understanding.

Senator COX: For the purposes of the budget measure, what proportion of the \$566 million will be used to look at that, from the approach of the department? What proportion is going to go towards looking at offshore gas in the oceans and CCS and keeping that dying industry alive while pumping money into it? How much of the \$566 million are we doing?

Ms Urquhart: My understanding is that the focus is on land and it is on precompetitive geoscience, which is about identifying what minerals lie where. But I would suggest raising detailed questions about the program with Geoscience Australia.

Senator COX: Okay, but Mr Chesworth says nothing's off the table. So, is that correct? Are you going to pump in as much money as we can to that, Ms Urquhart?

Ms Urquhart: As I said, my understanding is that the focus of Resourcing Australia's Prosperity is on the landmass and on mapping where the resources lie.

Senator COX: Okay. Let's move quickly to—

Ms Quinn: I just want to clarify that what Mr Chesworth said was that the intention is to map what we have, and Geoscience Australia will be drawing on existing information in terms of some of those activities. There is a great deal of data that is in various places, and one of the tasks is to bring existing data in a way that supports communities and industry to understand what potential activities we have in Australia. And the intention—to be

really clear here—is to map Australia and look at what we have and make that available to all participants in Australia. They won't be ruling out anything, because they're scientists and when they find stuff they'll be providing that information to the community.

Senator Ayres: Senator, this is Australia's great source of comparative advantage here, as 97 per cent of our trading partners have baked in net zero targets of their own, and we have the task in Australia of transforming our energy system and reindustrialising our economy. Making sure that there is a very clear evidence base to future investment decisions in Australia is very important and is designed not only to speed up the rate of change but also to make sure Australia is adapting and doing well out of that big industrial transformation.

Senator COX: That's all well and good, but if we keep opening up new gas fields we're not going to get to meeting any emissions targets, and we all know that, because of the safeguard—

Senator Ayres: Whatever you think about the future of gas investments, I don't think closing one's eyes to where mineral resources are is a very effective way—

Senator COX: Well, it's a distraction, isn't it.

Senator Ayres: of making good policy decisions about Australia's industrial future.

Senator COX: Alright, well let's talk future gas—the great segue to that. Minister Madeleine King, on the release of the Future Gas Strategy, spoke about the importance of Narrabri, the proposed gas project in New South Wales. That's on sacred Gomeroi country. Does the government think the native title rights of traditional owners in this country should be respected?

Senator Ayres: Is that a question for me?

Senator COX: Yes, it is—if you're representing the government, Minister.

Senator Ayres: The answer is yes.

Senator COX: Then why is the minister making comments supporting the project without highlighting the opposition of the traditional owners, the Gomeroi people, and the recent Federal Court case that ruled that the project cannot go ahead at present? Why are we speaking out of both sides of our mouths?

Senator Ayres: All of these projects, whether it's a shopping centre—

Senator COX: I'm not talking about that; I'm talking about gas.

Senator Ayres: or a gas project—any form of development has to work its way through the various regulatory, environmental and other approvals. This project is no different, and I expect that it will take its course.

Senator COX: So we can make statements about supporting projects without understanding—this government has been caught up in that before. It has been going out and supporting stuff and then realising that there are Federal Court cases and High Court determinations, and then they have to disentangle themselves from that and step away because they haven't done their homework. I want to know why the minister keeps coming out pre-empting that this is going to go ahead, even though she knows that in Narrabri, the Gamilaraay people do not want the Pilliga opened up for Santos for gas. Why are we doing that?

Senator Ayres: I don't know to what you're referring, Senator.

Senator COX: You're representing the minister.

Senator Ayres: You claim that the government has—that these things have occurred before—

Senator COX: Well, they have. She's made a statement about it.

Senator Ayres: I don't know what you're talking about.

Senator COX: Can you explain how the statements by Nurrdalinji Aboriginal Corporation and Dja Dja Wurrung Clans Aboriginal Corporation, which called for an urgent shift away from gas, could be, and were, misused in the Future Gas Strategy to imply that these organisations supported gas expansion?

Ms Urquhart: I'm aware of the report in the *Guardian Australia* newspaper on 10 May reporting concerns expressed by the Nurrdalinji Aboriginal Corporation chair, Mr Sandy, in respect of utilisation of a quote in the Future Gas Strategy. The Aboriginal corporation gave a submission to the Future Gas Strategy. For all submissions that we took in, we asked people making submissions to indicate if they could be made public or kept confidential, and, in this case, it was indicated that the submission could be made public. I've had a look at the quote in question that appeared in the Future Gas Strategy. It was used in relation to energy security and how gas was used in different contexts. The quote linked to the corporation's full submission to ensure that the full context of the quote in the submission from the Aboriginal corporation was made available. I noted too that the text before and after the quote did not discuss the development of gas supply for such communities but, rather, pointed

to the use of renewables in microgrids—consistent, I believe, with the views of the Aboriginal corporation as expressed in that article.

Senator COX: Has the government apologised to the Nurrdalindi people, and to Mr Sandy about the misuse of his statement in that submission? This is not the first time Mr Sandy has given evidence in any inquiry in parliament. In fact, I was in the room in Darwin alongside senators who are here today to hear Mr Sandy talk about his opposition with what's happening with gas on his country. Clearly someone is not doing their homework. Has the government apologised to them?

Ms Urquhart: As I indicated, the quote was not used in a way that was suggested in the article.

Senator COX: So Mr Sandy is lying? Is that what you're saying?

Ms Urquhart: I have been—

Senator COX: He's claiming that you've used a statement to say that he is supporting future gas. Has someone in the department picked up the phone and talked to Mr Sandy directly?

Ms Urquhart: The way the quote was used in the text of the Future Gas Strategy was not connected to advocacy for gas; it was connected to a statement of how—

Senator COX: Why would you put it there when you know that Mr Sandy, Nurrdalindi, Dja Dja Wurrung—all of these groups—are opposed to gas expansion? You don't have to look further than any of the submissions that they've made. I'm sure someone in this department, sitting behind here, can do control-F and find Nurrdalindi and find their opposition to gas. Why would you put it in your FutureGas Strategy to say that traditional owners love and want gas expansion on their country when you know that they don't, Ms Urquhart?

Ms Quinn: Senator, you're misrepresenting what my colleague has said. She has explained that the quote was provided in a public submission that is available for anyone to draw material from—not just the department. We sought public submissions; people provided public submissions. We checked whether they were comfortable with those submissions being made public. We drew from the submissions, where relevant, for the analysis to provide support to the government. It was not used in the context of gas. It was used in the context of energy security for regional communities, and that was the quote that was put in the gas strategy, which canvassed use of energy—

Senator COX: So, Ms Quinn, will you be removing that and reissuing the document? In the context in which it was used, it misrepresented that Mr Sandy, Nurrdalindi and Dja Dja Wurrung all support a future gas strategy that includes gas and that includes fracking on their country. Is the government going to remove the quote and reissue the document? And how are you going to prevent this from happening in the future?

CHAIR: I'll let Ms Quinn have time to finish her answer to the previous question and that statement as well.

Ms Quinn: We have explored the issue, and we believe that the quote is accurately represented. It is linked to the submission. Anyone can look at the broader submission if they wish. The gas strategy canvassed a large number of issues, some of it around the use of energy in different locations in Australia. That was the area that the quote was used—

Senator COX: So you don't care what traditional owners think, but you want to use their quotes, out of context, in your documents? Is that right, Minister?

CHAIR: Senator Cox, I did—

Senator Ayres: I've listened—

Senator COX: You don't care what [inaudible]—it's pretty clear. You're not willing to take it out of your own documents. It's ridiculous.

CHAIR: Sorry, Minister. I did want to give Ms Quinn the opportunity to fully respond, which I did say, and I'd like to get your full response.

Ms Quinn: Once again, it's a public submission. It's available for people to—

Senator COX: Which you don't have permission to use in that context.

CHAIR: Senator Cox!

Ms Quinn: We asked—

Senator COX: You don't.

Ms Quinn: We asked, when people provided submissions, if they were comfortable with us using the submissions and making them public. We have that permission. We used the submission in the context of energy security for regional locations. We use submissions in a rigorous, academic and analytical way. There's no implication in the use of the quote that it supports other elements of the gas strategy. We have applied the same

methodology and professional standards to the use of this submission as other submissions, and it's available to people to look at the full submission and see other aspects of the analysis. So we do not believe that there has been any professional reason to change the use of that submission. It is entirely consistent with what we have done with other parts of the process.

Senator COX: It's a lack of respect for black people. It's a lack of respect for Mr Sandy, who has gone out to the *Australian* and told them, very clearly—because, obviously, they can't get access to your department—that you are deaf to respect for traditional owners in this country, and you will continue to misquote them for your own purpose, in your Future Gas Strategy. You won't remove the document, you won't remove the quote and you have no plan on how you're not going to do this again in the future. That equates to respect in this country, and there's none when it comes to you pumping out gas on their country and not even getting free, prior and informed consent. And, when they tell you it's not used in the right context, you still continue to use it because you are deaf to it. This government is doing that. They're doing that to traditional owners. It's embarrassing. When you sit here and say you have respect for First Nations people, you don't. You're not even listening when they say, 'We don't want you to use those quotes,' and 'That is not what I meant.' The least you can do is remove that.

CHAIR: Do you want to respond, Minister?

Senator Ayres: I'm not sure there was a question there, but, to the extent that a response is required from the minister, firstly the minister has heard the explanation from the department, which is consistent with what you've just heard now, and they are satisfied with the explanation. The Future Gas Strategy is a substantial document, and it sets out an evidence base underlined by a set of principles that is consistent with the government's objectives here. We think it is a very useful document for—

Senator COX: You can say what you want. It speaks for itself—

CHAIR: Senator Cox!

Senator COX: and this government think that they can do whatever they want with others' statements. It's ridiculous. It's embarrassing, actually, Minister—I had more respect for you.

CHAIR: Senator Cox! I'll allow the minister to finish, if he would like.

Senator COX: There's nothing else to say. It's ridiculous.

CHAIR: Have you concluded?

Senator Ayres: I have concluded.

CHAIR: I'll share the call. Senator Canavan.

Senator CANAVAN: Is the position of the government that oil and gas is not a strategic resource?

Senator Ayres: I'm not sure what—

Senator CANAVAN: I'm just going on there about the definition of strategic resource. Is oil and gas a strategic resource?

Senator Ayres: Officials can take you through the critical minerals and strategic resources and all those sorts of questions. The approach in terms of critical minerals clearly sets out the government's approach, which has some flexibility in it to adjust to changes in global markets and technological developments. Certainly, the Future Gas Strategy sets out the government's approach in terms of gas. To the extent that these questions of energy are strategic questions, beyond the categories that the departments and government have developed in order to aid precise policymaking, of course energy questions are strategic and have strategic value; they have had through our history and will continue to have.

Senator CANAVAN: Do we have a specific strategic materials list? Is oil and gas on that list?

Ms Urquhart: No, it is not.

Senator CANAVAN: It seems a bit strange. There's probably not a more strategic resource in world history, is there, than oil and gas?

Ms Urquhart: We prepared an update of the critical minerals list. As part of that of that work we applied a set of criteria that the team could outline for you. Where there were materials that didn't meet all of those criteria but we thought there was a case for close monitoring of supply in those areas, we constructed the concept of a strategic materials list. I outlined before the five or so materials on that list. I would acknowledge that the work on and production of the Future Gas Strategy indicates the importance that the government attaches to gas.

Senator Ayres: It's also fair to say, Senator—I'm not sure if this is the right terminology, but in terms of the way that you think about these issues—in terms of the critical minerals list, these are not mature and developed industries like the gas industry, the oil industry—

Senator CANAVAN: But nickel is on there.

Senator Ayres: our iron ore capability or a series of these resources activities that have sustained investment. The critical minerals list are minerals that are there for new technology areas. They require thoughtful approaches to how the government shapes investment. There are also opportunities for Australia in production terms that require different considerations, and they have their own particular strategic value. That doesn't mean that other things that Australia produces don't lack strategic or economic importance.

Senator CANAVAN: When we developed the strategic materials list, was the defence department consulted?

Mr Chesworth: To my best recollection, the defence department was consulted on both the strategic materials list and the critical minerals list.

Senator CANAVAN: Maybe you could check that on notice and come back to me with the dates.

Ms Quinn: I'm certain there were. We consulted publicly as well and consulted across government. We worked closely with the Department of Defence on critical minerals and strategic materials, given the use of such inputs into their production chains.

Senator CANAVAN: Of course. As I said, there's probably not any material or resource more important oil and gas to defend our country.

Senator McDonald very skilfully officially opened the Pembroke Olive Downs mine a few weeks ago. I was there. It was the third coalmine opening I'd been to in 18 months. That's a record pace. It's never been like that in my time in this place—and apparently it's a dying industry. At that opening, the CEO recounted a shocking story. They're a nascent company, not a big multinational or anything like that. It's a family owned, Australian company. As he was trying to get this mine going, a major bank in this country refused even to allow them to have a transaction account opened with them. They didn't want a loan. It was not about equity, finance, debt or financial advice. They could not open a transaction account. I hear that that's perhaps the most stark of these stories, but I hear them all over the place now with family owned businesses and mining services businesses who are being debanked by our major financial institutions despite the contribution they make to our country and to our nation's budget. Is there any work going on in your department about this debanking issue? It's raised with me by many businesses in the mining industry. Are you getting that feedback? And is the government looking into this at all about how it could help?

Senator Ayres: It sounds like something that would be a matter for Treasury or some of the related portfolios.

Senator CANAVAN: This is something uniquely affecting the resources industry.

Senator Ayres: Banking regulation, Senator, as you would well know, is a matter for Treasury and the Assistant Treasurer who has responsibilities in this area.

Senator CANAVAN: I have some knowledge of how this department works, because I usually have fairly regular communication between the department and industry and businesses, as you'd expect. Is this something that's coming up in conversations? Is there any follow-up happening?

Senator Ayres: As I indicated, that's really something for another portfolio.

Senator CANAVAN: I think Mr Chesworth wanted to say something. Minister, it's up to you. Do you want to let him speak? Mr Chesworth, do you have something to add?

Mr Chesworth: I was simply going to add that, no, it hasn't come across our radar in a very obvious way. In any year, there are hundreds of issues that come across, so it may have come up somewhere. Obviously, in our media monitoring, we've been able to observe the approach of the major banks and the second-tier banks in response to their financing and other activities for firms they perceived to be involved in the resources sector. But it's not something that we've really seen and not something that we are working on at the moment.

Senator CANAVAN: Not that it should matter much, but this mine is actually a coking coalmine and obviously we need to make steel for a variety of uses. Minister, is the government concerned that our major financial institutions aren't supporting Australian family owned businesses who are making a commodity that is going into wind turbines and construction and building houses? Isn't the government concerned at all?

Senator Ayres: I approach these kinds of reports with some scepticism given that I've seen they are the focus of right-wing culture war activity in other jurisdictions—

Senator CANAVAN: This is the CEO!

Senator Ayres: I just wonder whether it's actually a real thing. I'll read any reporting of the commentary—

Senator CANAVAN: Minister, I'll pass on Barry's number to you and you can give him a call.

Senator Ayres: What you'll do is you'll let me conclude my answer. We have a terrific resources sector in this country. The role of coking coal in our steel industry is very important. The government has the largest industrial package of any Australian government ever that is designed to make sure that we build Australian industrial capability and have steelmaking and iron processing right across all of the critical minerals capability for our future. We are very focused on the future of Australian resources.

Senator CANAVAN: I'll happily pass on Barry Tudor's number to you, Minister. Hopefully, he can disabuse you—

Senator Ayres: I'll be delighted to talk to Mr Tudor.

Senator CANAVAN: of the slur you just made that he is somehow a right-wing activist. The claims I put to you, as I clearly outlined, were from him. Maybe you want to pigeonhole him into some sort of category—

Senator Ayres: It wasn't him I was talking about, Senator Canavan!

Senator CANAVAN: That's what you did. That's what you just did.

Senator Ayres: It was the fellow who was retelling the story.

Senator CANAVAN: As I said, this is a family owned Australian business that has fought very hard to deliver amazing results, employing thousands of people in central Queensland and helping her own budget through royalties and huge wealth for our nation. It would be great if they could have a bit more respect and perhaps at least a hearing with the department. I'll pass the details onto the department and yourself.

I just wanted to go now to some questions on notice. It might be helpful to table at least one of these. You should have one of these. It's a question on notice taken during the hearing in February at the additional estimates. Where's the number? It doesn't seem to have a number. Yes, it does. Is it AI-47? It must be answered by AI now too, given the quality of the answers we have given to us lately.

Senator Ayres: Does that mean that you think they have improved or deteriorated?

Senator CANAVAN: Now you've got this PMO manual, it can just be all AI.

Ms Quinn: We are getting questions on AI, but we haven't answered them.

Senator CANAVAN: I would answer it, that's true! It can't be AI. You probably have that one. I might keep that one for me, but the other one was to the climate change and energy department, and it's SQ24-000249. I'll get that one tabled; you might not have that one in front of you. They are similar questions. I asked at the last estimates for the safeguard mechanism baselines for a number of entities in the nickel industry. I asked on notice for a bit more detail from the climate change department. Obviously, it's their responsibility, but I can't physically go to that committee hearing, unfortunately, so I am following up here because, as I say, this question wasn't answered by yourself. It just simply provided me with a description of the safeguard mechanism when I asked for details about it. In the answer that the climate change department gave, they pointed me to a website, which didn't answer my question. In fact, the website link was broken as well. We were able to find it, but it doesn't answer the question. What I'm asking for are the baselines, under the safeguard mechanism, for these four nickel entities for the next 10 years. You presumably have this information, or is this information available?

Ms Quinn: We'd have to take this on notice, as I said last time. The safeguard mechanism is administered by the Department of Climate Change, Energy, the Environment and Water. We work with them, but they are responsible for holding that data—to the extent they have it—so I'm happy to take it on notice and direct it to them.

Senator CANAVAN: My question actually was: do you have that available to you? Are you in the department able to see that, okay, this nickel entity is facing a baseline for the next 10 years of this amount—even though it's something determined by the climate change and energy department. I know your involvement in trying to support our nickel industry, which is struggling at the moment. Do you have that information available to you?

Ms Quinn: I will take that on notice.

Senator CANAVAN: You don't know that?

Ms Urquhart: I would be surprised if we held that level of detail, but we'll take it on notice to see if we do.

Senator CANAVAN: You're kidding! It's just for the next 10 years.

Ms Urquhart: But you said it was for particular entities.

Senator CANAVAN: Yes. Aren't you trying to help the nickel industry at the moment? I've seen statements from your minister saying that the safeguard mechanism is not an issue for the nickel industry. How would she know that if you haven't actually got the information? Do you have it or not?

Ms Quinn: We've taken it on notice, and we can come back to you.

Senator CANAVAN: You've taken on notice whether or not you have access to baseline information?

Ms Quinn: Correct.

Senator CANAVAN: It's obviously not top of mind if you can't answer it—

CHAIR: The question has been taken on notice.

Senator CANAVAN: you can't just give a yes or no answer right now. I'll come back to this later.

CHAIR: Thank you. I'll share the call. Senator Pocock.

Senator DAVID POCOCK: My question is about the government's gas-led recovery strategy.

Senator Ayres: You should direct questions about policy documents and slogans to the previous government. The gas-led recovery was—

Senator DAVID POCOCK: Sorry; it's been rebranded to the Future Gas Strategy.

Senator CANAVAN: Different slogans, David!

Senator DAVID POCOCK: A different heading.

Senator Ayres: We'll look forward to the kind of questions that you're signalling, I suppose.

Senator DAVID POCOCK: Apologies.

CHAIR: I think you're in the right part of the program.

Senator DAVID POCOCK: A Freudian slip there. I'm interested in whether the department modelled the emissions implications of the strategy, including the potential emissions associated with new sources of gas supplies explored under chapter 7.

Ms Quinn: I will provide a high level. The purpose of the Future Gas Strategy was to build an evidence base on both the demand side and the supply side for the current understanding of what's happening with the gas industry in Australia and overseas. We looked at multiple scenarios and multiple sources of information to bring together a holistic view.

The government outlined six principles for the Future Gas Strategy from a policy perspective. That was underpinned by an analytical report that went into analysing different scenarios. There were different scenarios on the emissions pathways for the gas industry because there is not one known future for gas, and so there were multiple emissions scenarios for the gas industry.

Senator DAVID POCOCK: Did you model each scenario?

Ms Quinn: I'll pass to the team, but there were a range of scenarios and all of them looked at different forces and different emissions.

Senator DAVID POCOCK: Was each scenario modelled in terms of emissions?

Ms Ossolinski: The analysis that's been conducted to underpin the Future Gas Strategy has been published as part of the strategy in the Future Gas Strategy analytical report.

Senator DAVID POCOCK: Including the emissions?

Ms Ossolinski: Yes. The emissions component of the analysis is contained in chapter 2. In that, we draw on the national emissions projection, which are created by the Department of Climate Change, Energy, the Environment and Water. It gives us a profile of what Australia's emissions look like today coming from gas, as well as what the projected emissions coming from gas are likely to be over the near future, based on the scenario that they use to do the predictions.

Senator DAVID POCOCK: Looking at that, it looks like there's information there, but why wasn't the actual modelling included?

Ms Ossolinski: There's a really high level of uncertainty around how both gas demand and supply will play out over the future. We use a range of scenarios in here which draw on both from the IEA and the Australian Energy Market Operator's forecasts for demand within Australia, which looks at three different levels of how demand may progress into the future.

Senator DAVID POCOCK: Are you able to table that detailed modelling with the uncertainties?

Ms Ossolinski: We can table the report. All of the information is available in the report, so we've been as transparent as we possibly can.

Senator DAVID POCOCK: What about the underlying modelling with the uncertainties that you just mentioned?

Ms Ossolinski: The uncertainties are inherent in the environment today. We are looking into the future and into an uncertain world. Scenario analysis is used to try and pick a range of options to use to base ourselves in how things may progress into the future.

Senator DAVID POCOCK: I've got the report. I'm interested in if you can table the modelling that sits behind it.

Ms Dowdell: I think we made available on our website the underlying data that supported this. Is your question to the options to close the supply gap in chapter 7 particular sources. Was your question about the emissions from those particular sources in Chapter 7?

Senator DAVID POCOCK: My understanding is that you've got the raw data and then you've got the report. I'm interested in what happens to emissions if new gas projects come online.

Ms Dowdell: We haven't modelled the emissions impact of particular new projects coming online as part of the Future Gas Strategy.

Senator DAVID POCOCK: Why is that?

Ms Dowdell: Because we weren't identifying what possible sources there were, but we didn't go to the level of modelling those for particular projects.

Senator DAVID POCOCK: Is that why on page 25 it says that the Future Gas Strategy has not modelled gas emissions to 2050?

Ms Ossolinski: There are a range of models that underpin this: the scenarios we use for international come from the International Energy Agency; those we use domestically come from the Australian Energy Market Operator, AEMO; and the projections themselves come from the Department of Climate Change, Energy, the Environment and Water. What we have done in this report is pull those together to provide as comprehensive a picture as possible. We haven't undertaken additional modelling beyond the data available in those modelling exercises.

Senator DAVID POCOCK: Can you table that?

Ms Dowdell: It's all publicly available information, but we can provide you the links to those.

Senator DAVID POCOCK: You mentioned the International Energy Agency—and it looks like there are multiple references to the IEA—but the IEA's net zero pathway is very clear about no new fossil fuel projects. So I'm interested in why you've picked and chosen IEA quotes, but when it comes to something that this government has signed up to, net zero by 2050, you've conveniently left out that the IEA says no new fossil fuel projects to get there.

Ms Ossolinski: We do draw heavily, as you say, on the IEA's projections, through their *World energy outlook*, to underpin this report. I think the trajectory that you're referring to—and I'd like to clarify this—is their net zero trajectory?

Senator DAVID POCOCK: Yes.

Ms Ossolinski: The IEA do publish a range of reports on the outlook for gas, and their most detailed exposition around their net zero trajectory is contained in their report *Net zero by 2050: A roadmap for the global energy sector*. I think that is where you are drawing this information from. Can I clarify that?

Senator DAVID POCOCK: Yes. My understanding is that, as part of that, they're pretty firm on no fossil fuels. Yet the government is proclaiming 'net zero by 2050', but it's looking to expand the fossil fuel industry.

Ms Ossolinski: We include this scenario within our report, and we draw on it heavily. The scenario itself is a hypothetical scenario, as most net zero scenarios are today. It is providing us with a guide on how to transition the energy system to net zero by 2050, limiting global temperature rise to 1.5 degrees specifically. But in that report they don't look at Australia's energy needs or circumstances in particular. The thing that I do say—and I can quote from the report, because I do have some of the documents here today—and you're right: they do talk about the investment levels required. Their actual quote is:

To ensure a smooth match between supply and demand there would need to be continued investment in existing sources of oil and gas supply, and some new sources of supply would need to be approved for development over the next few years—

at a global level. That's on page 156 of the net zero roadmap that I've referred to. They do reference long-lead-time gas projects as being ones which are unlikely to be needed in the future if this net zero trajectory is followed. So it's a guidance point for one way to reach net zero.

Senator DAVID POCOCK: So the government's decided not to adhere to that net zero pathway that potentially looks after us and things like the Great Barrier Reef? That's my inference.

Ms Quinn: I'll just take you back to the gas strategy and the principles under which the government was looking at the—

Senator DAVID POCOCK: Thanks, Secretary.

Ms Quinn: gas future. One of those is, very clearly, a commitment to reducing emissions.

Senator DAVID POCOCK: Thank you. You know you're hitting on something when the secretary jumps in, and this is why I'm—

Ms Quinn: I just want to be really clear: you're asking for a government policy position, and the government has set it out very clearly in the document. My colleague was talking about the scenarios and then the accuracy of the International Energy Agency's analysis. They themselves have acknowledged that there are multiple paths. They have multiple scenarios for the future. It is uncertain. There is a trade-off to be had in various parts of the system between the time and sequence of actions. It's a complicated transition to net zero, it's important that we get there, but the question is how to sequence it and how to deliver it by also achieving economic growth, energy security and supporting partners in their emission reduction path. The aim of the gas strategy is to provide multiple scenarios, to provide the analysis and to have the debates that people need to have. I just want to be clear that that's why we were very comprehensive in the analysis that we provided, and it's open for people to make their claims against different scenarios.

Senator DAVID POCOCK: Thank you, Secretary. That's good to know and will probably be cold comfort to climate scientists and others who are really concerned about a strategy promoting gas, given what we're seeing and what we know about the future. I was interested in the analytical report, which acknowledges that Chevron's Gorgon Project, the only operating CCS facility in Australia, has been plagued by technical issues; that's on page 30. Given the department's acknowledgment of these technical difficulties, did the department assess the risks of relying on CCS to abate LNG extraction when CCS is clearly an unproven, costly, false solution?

Ms Quinn: At a high level, we are aware of the project in Western Australia. That project is providing carbon capture and storage—

Senator DAVID POCOCK: What was committed to and promised?

Ms Quinn: The company has been very transparent about some of the technical issues they've faced in that project. It is being able to capture carbon and store it.

Senator DAVID POCOCK: What percentage of—

Ms Quinn: I haven't got the numbers top of mind.

Senator DAVID POCOCK: I guess that's my question. We've got one project, and it's well off-target. It's incredibly expensive. And yet the whole strategy is premised on CCS reducing scopes 1 and 2.

Ms Quinn: I'm not sure I accept that.

Ms Ossolinski: I'd also like to draw your attention to the information we provide in the analytical report around the use of CCUS globally. At the moment there are 41 operational CCUS projects globally and 351 in development. There are also plans by other nations to use CCS more broadly, including for industrial capture, with plans going ahead for a project in offshore Europe, and there are a number in the United States. This is a strategy that is being pursued globally. It is required to abate certain types of emissions, in particular reservoir emissions, where there are very few or no alternatives.

Senator DAVID POCOCK: What percentage of emissions are captured by CCS facilities globally?

Ms Ossolinski: I'm sorry, I don't have that information with me.

Ms Quinn: We'll take that on notice.

Senator DAVID POCOCK: When I talk about the IEA's net zero pathway, you say, 'They didn't factor in Australia,' and when I talk about the one CCS project we have in Australia, which is not up to scratch and is only sequestering a tiny amount of the CO₂ from that project compared to what was promised, you tell me, 'Let's look globally.'

Ms Dowdell: I think it's also fair to say that the analytic report looks at a number of technologies available for abatement. That section runs through a number of them. We were just looking at the available technology in the analytic report. We were not saying what is favoured but were giving some information about the range of technologies.

Senator DAVID POCOCK: On those 41 CCS or CCUS projects, I can tell you it's 0.1 per cent of emissions. I'm interested if you know it's a worry if we're relying on CCS to abate emissions when you point to these examples that are abating 0.1 per cent of emissions.

Ms Ossolinski: I think I'd go back to saying that, within the report, we look at a range of different abatement options, including reduction in demand, which is covered in chapter 3, and a range of alternative energy sources such as biomethane. Electrification also features strongly in the report. CCUS is one component of the options.

Senator DAVID POCOCK: Thank you, that's good to know. But the report is basically recommending the expansion of the gas industry using CCS. I was asking Santos at a Senate committee hearing about their Barossa project. They said, under the Safeguard Mechanism, it's CCS or carbon offsets. Those are their two options. Clearly, this is premised on CCS, and yet, when I put to you globally that CCS is abating 0.1 per cent of emissions, you refuse to answer whether or not that's a concern.

Ms Quinn: You are technically asking for a policy view.

Senator DAVID POCOCK: Your report is saying that we can rely on CCS as part of future gas projects, but, if you actually look at the evidence, it's 0.1 per cent of emissions. So that doesn't seem to be a big part of the solution.

Senator Ayres: The officials have indicated that, in that section of the report and the analytical report and the other material they have used to prepare the report, there are a series of abatement technologies and a series of different pathways that are used to provide the analysis and evidence that's presented in the Future Gas Strategy. I think experts are entitled to disagree with elements of the report or argue about what emphasis should be placed on particular technologies or particular approaches. That's why the report is presented. It's not a secret report. It's there for everyone to see. I think the analytical report is a public document—and I think much of the other material that surrounds the report. It is there for public debate and engagement, particularly with experts, to improve the public and policy debate around these issues and to assist governments, including state governments, regulators and the industry to make good decisions about future investment and the way that we shape the investment market.

Senator DAVID POCOCK: Thank you. Just—

CHAIR: I'll share the call, so one final question.

Senator DAVID POCOCK: Okay—

CHAIR: You've had a good crack, there.

Senator DAVID POCOCK: Minister, I honestly feel sorry for public servants that have to push policy which in 2024 is morally bankrupt. You cannot talk about experts when climate scientists are besides themselves, are quitting their jobs to move into advocacy, because they see a government that has taken Scott Morrison's gas-fired recovery, chucked it in the microwave, reheated it, brought it out with some analysis and is saying that, despite what the climate scientists are saying, despite us heading towards a future that doesn't include a Great Barrier Reef—that will totally reshape the way we live and the people and places we love—we are relying on fanciful fixes like carbon capture and storage at this scale when we know it's not working. Yet you're willing to say, 'Well, you may have a different opinion.' It's not me. It's climate scientists. It's people who actually care—

CHAIR: I'm just looking for a question, Senator Pocock.

Senator DAVID POCOCK: So I'm interested in what percentage—

CHAIR: Sorry, Senator Pocock, Senator Canavan is raising a point of order.

Senator CANAVAN: Chair, on a point of order, I was happy to let Senator Pocock make statements, but I do think it's going against the spirit, at least, of the standing orders to ascribe motives to public servants in the way that Senator Pocock was when—

Senator DAVID POCOCK: I'm not talking about public servants here—

Senator CANAVAN: Hang on. You did. You said you don't understand how they could serve—

Senator DAVID POCOCK: I'm talking about the government—

Senator CANAVAN: Hang on. I'm making my point of order—

Senator DAVID POCOCK: You're verballing me, because I said—

Senator CANAVAN: No. Senator Pocock, just let me finish my point of order. He said that he doesn't know how public servants could serve a government that is morally bankrupt.

Senator DAVID POCOCK: You weren't listening.

Senator CANAVAN: It is exactly what you said. That is the problem here: public servants can't respond to that because they are not allowed to, and shouldn't, give opinions at the table. So I think it's not right for senators to do that.

CHAIR: Well, I think—

Senator CANAVAN: Keep your comments focused on the government and not public servants.

Senator DAVID POCOCK: Can I ask a question?

CHAIR: A point of order has been raised, and I have also given you the call.

Senator DAVID POCOCK: Thank you. I was about to ask my question.

CHAIR: I just need to respond to the point of order. I'll just say that, if you were to directly ask a question of someone who is at the table that impugned their motives, that wouldn't be appropriate.

Senator DAVID POCOCK: Yes.

CHAIR: I didn't think that that's where you were going—

Senator DAVID POCOCK: No.

CHAIR: but I would ask you to conclude with a question.

Senator DAVID POCOCK: Sure. Thank you, Chair.

Senator Ayres: At least an upward inflection at the end of the statement to indicate a question mark would be good.

CHAIR: Okay. You have the call to ask a question.

Senator DAVID POCOCK: I was saying I feel sorry for public servants having to push this government policy, and my question—

CHAIR: Do you have a question?

Senator CANAVAN: That's exactly my point, David.

CHAIR: Do you have a question?

Senator CANAVAN: They might not feel sorry.

Senator DAVID POCOCK: My question is—

Senator CANAVAN: You don't have the right to ascribe views to them—

CHAIR: Alright. I've made a ruling.

Senator DAVID POCOCK: Thank you. My question is: how much does the government seek to rely on CCS to expand the gas industry? Is there a percentage, Minister? Is it 56 per cent, 80 to 90 per cent? How much heavy lifting will CCS do?

Senator Ayres: To reflect on the whole of your question—

Senator DAVID POCOCK: That's my question.

Senator Ayres: It's as offensive to public servants, scientists, economists and engineers to patronise them as to impugn their motives. The government here has—

Senator DAVID POCOCK: I was impugning the government, not public servants, to be clear.

Senator Ayres: I'll get on to the government's motives. The problem here is this is what happens when simplistic slogans meet evidence and analysis. It confounds slogans and memes. We saw a bit of an illustration of the backwards and forwards on these questions with both—polar opposites—sets of arguments.

I know it suits your social media feed to talk about reheating the Morrison government's slogan. Well, the Morrison government's approach to this was a slogan. It wasn't supported by evidence. It wasn't supported by analysis. It wasn't supported by action. It was an ideological obsession that was discussed in a committee and then worked through a focus group. What the government has done here with the Future Gas Strategy is put together all of the information about future projections in terms of demand and supply for gas. Gas is—

Senator DAVID POCOCK: And the reliance on CCS? That's the question.

Senator Ayres: I'll come to CCS.

Senator DAVID POCOCK: Thank you.

Senator Ayres: Gas is necessary for a significant part of our industry.

Senator DAVID POCOCK: We export 75 per cent of it—

Senator Ayres: Don't worry, Senator Pocock, we'll get to all the bits.

CHAIR: Senator Pocock, you've asked the minister a wideranging question.

Senator DAVID POCOCK: Sure. I'm enjoying this.

CHAIR: It was a choice that you made, and now you're getting an answer.

Senator DAVID POCOCK: I'm enjoying this. I'm really enjoying this.

Senator Ayres: Gas is necessary, particularly gas supply for our east coast industrial facilities. As they work through their own trajectories—for example, some of their technologies allow for more straightforward abatement pathways, where, for example, hydrogen is added to their production strategies or they have new capital investment in order to reach their own abatement targets that are set for them in conjunction with the government. But gas is part of that process.

All of the pathways—or the analysis that I've read that sits in the Future Gas Strategy—show a decline in gas use by, in particular, east coast gas facilities. But closing down Australian industries, particularly where there is an enormous capability here for industry to lead globally and reduce emissions, is not the answer to this question.

Senator DAVID POCOCK: No-one's said—

Senator Ayres: When you look at the modelling and material that is provided, in terms of the work of our international partners, it is very much the same—that there are a range of possibilities. Of course, the rate in our trading partners in Korea or Japan depends upon the credibility of their pathways to net zero and the changing pattern of international agreements. You would argue, and I think I would agree, that the pace of international change needs to adjust to the climate realities. All of that material is contained in the report. It is a good report, but its assumptions aren't immune from criticism. That's why it is all out there in the open.

In terms of CCS, I've listened to this debate for many years. Whether it's the IEA, the CSIRO, the UN intergovernmental panel—they all say there's a role for CCS in the future.

Senator DAVID POCOCK: What per cent?

Senator Ayres: The range, from optimism to pessimism, about the role that CCS will play will depend upon the industrial process that it's being utilised for—

Senator DAVID POCOCK: New gas?

Senator Ayres: and it will depend upon the facts on the ground. It is a nascent set of technologies. It is not about what you wish to happen. Investment in these kinds of capabilities will succeed or not succeed depending upon the engineering and the economics of these propositions.

I often feel when I'm being asked these questions that there are people who just wish that something won't work. Then there are some people on the other side of the debate who invest everything in a particular technology. Well, time reveals all, Senator Pocock, and the economics and the engineering will determine this. We've relied upon the advice of the experts, and, patronised or not, departmental officials and the team that's been engaged in this have worked assiduously at compiling an evidence base for a sensible future gas strategy that will assist industry as Australia goes on our decarbonisation journey and as we work with our partners to support theirs.

CHAIR: Senator McDonald.

Senator McDONALD: Can I go back to the Gorgon project. It's my understanding that they've sequestered 9.5 million tonnes to date. Is the department of that same understanding?

Ms Quinn: That's correct. That's set out in the analytical report.

Senator McDONALD: It doesn't seem to align with the Australia Institute's out-of-date data that they've been quoting this week, does it? That's a statement. You don't need to respond to that; I'm frustrated by the misinformation that's been peddled. I want to talk about Australia being recognised as a domestic supplier under the US National Defense Authorization Act. What opportunities does this provide for Australian critical minerals projects and supply chains?

Ms Quinn: It means that Australian companies have a lower regulatory path to engaging with US counterparts. It's not the only mechanism that supports our critical minerals producers being able to join United States supply chains. There are a few different components. That one in particular looks to regulation and technology transfer. Among the other ones that we're working with, there's the critical minerals taskforce. There's also working with counterparts on environmental standards, as we talked recently about. And the Inflation Reduction Act itself in the US provides an opportunity for Australian critical minerals to feed into the supply chains because it has certain restrictions on other supply chains, which favour Australia.

Senator McDONALD: How is the department leveraging this opportunity to maximise Australia's critical minerals potential?

Ms Quinn: I'll answer at a high level, and then the team can provide additional information. There are multiple layers to how the department and the Public Service in general are supporting the critical minerals industry. One of the ways of engaging internationally is through Austrade, which we talked about before, Austrade being the connection between different proponents on the demand and supply sides. The Critical Minerals Office works very closely with Austrade and helps support that matchmaking. We are also supporting that within Australia through the critical minerals facilities, through grant opportunities for technology adoption and pilot plants, and through regulatory changes. There are also some other elements here. One of the particular supports the government announced in the budget was the critical minerals production incentive for refining, which—

Senator McDONALD: We'll come back to that one later. Thank you.

Ms Quinn: will support the critical minerals industry.

Senator McDONALD: Minister, thanks to the keen US interest in Australia's critical minerals for defence purposes, rather than just battery technology, will this signal a shift in the government policy to supporting strategic critical minerals production?

Senator Ayres: I think what you'll find is that there is a very high level of interest from our international partners, including our security partners, in Australia's critical minerals for a range of strategically significant products: for defence related products; as the focus of economies hones in on increasing computational power, for those kinds of technologies; in critically significant energy areas like solar and offshore wind; and in terms of storage technologies. In all of these there is a very high level of interest. And there are of course features of the global market that are not necessarily in Australia's interest. So—

Senator McDONALD: Minister King's last ministerial statement on resources—

Senator Ayres: You asked me a question. I'm just going to conclude the answer.

Senator McDONALD: Well, you're getting very broad, and I don't have all day.

Senator Ayres: The challenge here is these issues are complicated and broad. You're asking me if there's one area of focus for the Australian government in terms of critical minerals. I am saying there are a very broad set of potential demands, and there are market concentration issues in global trade in these areas and changing trading practices that offer challenges and opportunities for Australian industry. That is why the government is taking the approach that it is. It might be inconvenient for the coalition's—

Senator McDONALD: No, please stay focused.

Senator Ayres: narrow focus on these questions, but that is why the government is taking a broad and strategic approach.

Senator McDONALD: I've been here for 2½ hours and I'm just trying to get my points. Minister, if I look at Minister King's last ministerial statement on resources, she mentioned net zero 13 times and not once made the connection that critical minerals were vital in defence uses. Does the minister understand or recognise the vital need for our critical minerals in defence uses, or are her net-zero blinders stopping Australian companies from fully utilising the US National Defence Authorisation Act? Specifically please, Minister.

Senator Ayres: As I indicated, we're here to answer your questions not in terms of your points. If you'd listened to the previous answer, I think that's an answer to this question as well—that is, there are a series of opportunities here for Australian industry, for our miners and for production capability. They range across defence. The other technologies that I went through—I won't go through the whole list, because it appears to irritate you—

Senator McDONALD: I can only go by what the minister has said. I can't read her mind. I can't examine what she wishes she may have said. Ms Quinn, if you've got an answer, perhaps you'd like to provide it.

Senator Ayres: You've asked me the question, and as I've indicated there are a range of very interested partners who are very active in these areas. That is what the government is focused on. Like you, I don't read into the minister's mind about these questions—

Senator McDONALD: That's all I can act on.

Senator Ayres: nor do I cherry-pick her statements. The totality of the government's position is very clear in the Future Made in Australia agenda. That is why, for example, we are applying production tax credits to this sector for the first time, and that will stimulate many billions of dollars of investment of productive capability, particularly in regional Australia.

CHAIR: Everyone will be happy to know, on day 4 of estimates, we're 18 minutes from a caffeine break. In that regard, we're at the point where it's been, for a while, difficult to distinguish between the time for the question and the time for the answer. So, for the next 15 minutes or so, we might focus on that. Senator McDonald.

Senator McDONALD: Thank you, Chair, for that guidance. I'd like to turn to the recently announced EU and Australia memorandum of understanding on critical minerals. What access does this memorandum of understanding provide with regard to Australia and the EU's Critical Raw Materials Act?

Ms Quinn: I'll just give you a high-level statement and then pass to my colleagues. The European Union have done quite a lot of work in critical minerals analysis and policy action themselves. You mentioned their projects. They also have various targets and various industry transition elements. This is a huge opportunity for us to work with European counterparts to build the supply chains between Australia and Europe, and the MOU provides a framework. We have various MOUs at working level as well between individual members of the EU and the UK. But I'll pass to the team to provide more information on the recent signing of the MOU.

Ms Pullen: It was 28 May when both Minister King and Minister Farrell signed the MOU with the EU. That MOU is called the strategic partnership on sustainable critical and strategic minerals. There are a number of objectives under that MOU: first of all, to strengthen supply chains; the research and development component; and then also looking at leveraging environmental, social and corporate governance standards. That MOU has been signed, so our next step is for me, my team and the officials to work out a road map to complement the MOU, and that will include those specific focus areas.

Senator McDONALD: Okay. I'm going to go to something more narrow. Can you identify what critical minerals are being included in this list? Is it the EU Critical Raw Materials List or the Australian Critical Minerals List?

Ms Pullen: I will need to take that on notice, but I'll come right back to you.

Senator McDONALD: Will the MOU allow for the EU to create supply chains with Australian projects mining minerals on the EU critical minerals list?

Ms Pullen: My sense is yes, and the reason why I'm saying that is that we spoke about the French and German supply chains, I think, the last time we were here, and there were a number of minerals that we were looking at in those supply chains. At that point, it was nickel, and it's been added to our list. But we do ensure that our priority partners also have access and are able to build supply chains.

Senator McDONALD: The EU Critical Raw Materials List includes copper, phosphate rock and phosphorus, amongst others, which are not on Australia's Critical Minerals List. Should we expect an update to Australia's list to include those minerals, considering the EU deems them critical?

Ms Pullen: They're two quite separate pieces. The specific road map that we're going to be developing over the next six months will identify how we implement the MOU. But I would assume that on the Australian side we would prioritise our critical minerals.

Ms Urquhart: Just to add to Ms Pullen's answer, a review of the text of the memorandum of understanding reveals that it's not tied specifically to minerals on the Critical Minerals List. As would be usual in any bilateral engagement like this, the work that unfolds underneath the high-level principles invariably is a meeting of respective priorities. In that respect, the EU act will, of course, be relevant, as will our own priorities: the Critical Minerals List, the Strategic Materials List and other issues as they may be emerging and prioritised in government.

Senator McDONALD: So can Australian projects who produce materials or minerals that are on the EU critical minerals list but not on the Australian list expect to access support through the department to secure supply chain access to the EU through the MOU?

Ms Urquhart: Again, these sorts of bilateral engagements represent a fantastic opportunity to dig deeper into the needs of an entity like the European Union—or, in the case of the critical minerals taskforce, the US—across defence, net-zero transition and other requirements. In that context, what we're seeking to do is to work with these partners to reveal the opportunities for the Australian resources sector but also to establish, identify and address barriers that might exist to that exchange.

Senator McDONALD: I'm surprised that this MOU has been announced—I assume that there's been a great deal of work that's happened on it to get to the announcement point—but that we don't have any specific details on how it works. How are we to have faith, and how are minerals producers to have faith, in this being a useful announcement for them?

Ms Urquhart: The MOU is publicly available. We have referenced work on a road map to follow, which I would expect to become available. If you would allow me to highlight the objectives of the cooperation for parties that are interested, they are specifically to:

1. Identify and jointly develop projects of mutual interest and benefit along the entire value chain in the EU and in Australia, including by facilitating business-to-business links and supporting investments in sustainable critical and strategic minerals projects.

2. Enhance economic and industrial integration of the Sides in the sustainable and strategic value chain of critical minerals.

3. Develop open, fair and competitive markets for critical raw and processed minerals, to develop Australia's domestic critical minerals sector and enable the EU to diversify its suppliers for materials necessary to achieve the green and digital transition and its open strategic autonomy.

4. Closely cooperate on environmental, social and governance (ESG) standards and assessments and coordinate in international fora, where appropriate including to:

- align international mineral pricing with high ESG standards;
- strengthen supply chain transparency and promote market recognition for high ESG standards;
- strengthen market opportunities and projects for EU and Australian—

Senator McDONALD: This is the published MOU you are reading? Excuse me if I interrupt you, but I do have access to that, as does everybody who is following along.

Ms Quinn: I want to be clear: your question was whether the department would be working with proponents that were not on the list. We had a question in a slightly different form from Senator Canavan. The resources element of the department obviously works across the entire resources sector, and the government has certain policies such as the Future Gas Strategy, the Critical Minerals Strategy and the strategic materials list, but we clearly support resources broadly across the whole system.

Senator McDONALD: This is the lack of clarity as to which list it is. Are we talking about the EU list, the Australian list? Given that, specifically, the EU critical raw materials list does include coking coal, I'm wondering whether Australia will update its list to include coking coal, considering how important our strategic partners deem it is, or will the department help facilitate supply chain connections with the EU for Australian coking coal producers?

Ms Quinn: The way this usually works is that every country makes an assessment of its priorities based on its criteria. Australia has the critical minerals list and the strategic materials list. The EU has a list, the US has a list and others have lists. We will be using our lists for Australian policy. They will be using their list for EU policy. In terms of support across the whole resources sector, Austrade and the department provide our support to the whole resources sector.

Senator McDONALD: Thank you. That has answered my initial question about which list was being used. Is it Australia's critical minerals list or strategic materials or the EU list. It is the Australian list.

Ms Quinn: For Australian support. The Critical Minerals Strategy is very clear. We base the government policy priorities set out in the Critical Minerals Policy and the updated critical minerals list and strategic materials list. We've got various policies connected to those different lists. The EU have similar approaches. The intent of an MOU is to marry those two frameworks together to be able to work more closely, to shorten the time it takes and to get the regulatory environment, as much as we can, aligned. But it will always be the case that countries have their own national priorities through a connection of an MOU.

Senator McDONALD: Has the department done work on future demand for Australia's coking coal industry, considering its strategic importance to our partners?

Ms Quinn: We do produce the resources forecasts going out. We produce those on a regular basis through our outlook, and that does look at coking coal, yes.

Senator McDONALD: And shows that it does have demand and a future?

Ms Quinn: Yes.

Senator McDONALD: The United States has recently passed HR 1042, the Prohibiting Russian Uranium Imports Act. This will see the US phase out importing uranium for their energy needs from the Russian Federation. Is the department aware of this act?

Mr Chesworth: I could say yes. I haven't read it, but I understand that it exists.

Senator McDONALD: Aware is all I'm looking for. Additionally, the US has invested \$4.2 billion to establish a global uranium supply market with France, the UK, Japan and Canada. Were any representations made

to the Australian government, to Minister King or to any federal departments regarding this, given Australia is the largest holder of uranium reserves in the world?

Ms Quinn: I think we will be taking that on notice.

Senator McDONALD: The resources department wasn't asked to provide a brief on this?

Ms Quinn: I'm happy to take that on notice. I don't know the answer, so we will have a look.

Senator McDONALD: The department hasn't been asked to provide a brief on uranium demand, given the US providing \$4.2 billion to establish supply chains?

Mr Chesworth: If I could tease that out a little bit. The department often provides advice and is aware of future demand. Whether there was that interaction between the US and us, that's the bit I'm unsure of, and that's the part I'd like to take on notice.

Senator McDONALD: I assume that you would have been consulted. If you don't know, that satisfies me. Have any representations been made to the government, Minister King or any federal departments regarding Australia's state led prohibition of uranium mining? Secretary, I guess that's best directed to you.

Ms Quinn: I'm not aware of anything, but I will pass to the team.

Ms Urquhart: I'm not aware of anything. We can take it on notice and check.

Senator McDONALD: Thank you. Minister, considering Australia's other strategic partnerships with the US, including AUKUS and critical minerals, wouldn't it be logical to utilise our vast uranium reserves to support their zero emissions nuclear energy system?

Senator Ayres: As you said in your initial question about these matters, this is largely an area for state regulation. Australia does have uranium mining capability. If there is any other information I can provide you in terms of the Commonwealth's approach to how we engage with the states and territories on this question or whether representations have been made recently, I'll provide it on notice.

Ms Quinn: We do track what we expect to happen for Australian exports of uranium. We are expecting there to be an increase in how much uranium we export over the coming years, reflecting the demand internationally. We have safeguards around our exports, where we provide only to parties that are party to international agreements. Our primary export is to the United States, France and Canada. Their work on managing demand would clearly be an opportunity for our existing exporters to increase their production.

Senator McDONALD: I am concerned that the US is providing a significant amount of money for supply chains for uranium. I'm interested in how Australia accesses that given that we're not party to those agreements and there doesn't seem to have been discussion with Australia. Does that mean we could well be exporting uranium from Australia to one of those other countries, who then benefit from the supply chain agreements from the US? That's very speculative. I don't expect you to answer that. If we're not party to it then we won't get the money, will we? Again, I wouldn't expect you to answer this.

Senator Ayres: I suppose the best way of answering that, as you've indicated, is that there are, in a range of these areas—and you have traversed some of them this morning—fast-moving developments in terms of the way that industry measures in other countries. Our trading partners and trade arrangements are moving quickly. The department, and of course the Department of Foreign Affairs and Trade, are very focused on all of those questions. If there's anything additional we can provide in relation to that uranium question, we would be happy to.

CHAIR: Last question.

Senator McDONALD: With regard to the existing uranium mining here in Australia, given that increase in demand, will we need new mines to meet that future demand?

Ms Quinn: We are expecting an increase in production out of the three existing mines over the next few years. In terms of beyond that, it would be a matter for proponents and regulation to be able to accommodate. I've got analysis on the next few years, in which we do expect uranium exports to increase, as I said, to the United States, France and Canada. Going further out, it's a matter for proponents and regulators to work through the issues to see whether there would or wouldn't be an expansion or new mines.

CHAIR: Thank you.

Proceedings suspended from 11:00 to 11:12

CHAIR: The committee resumes with outcome 1, program 1.3. I might take the opportunity to remind all participating senators of our 10 pm hard marker. I give the call to Senator McDonald.

Senator McDONALD: Can I turn back to the production tax credit. There are a few details that I'd like to confirm. What is the commencement date of this program?

Mr Chesworth: The critical minerals production tax incentive is expected to commence 1 July 2027.

Senator McDONALD: In the roundtables that you have done with industry, have you ascertained if this is early enough to save Nickel West?

Mr Chesworth: I'll take that in two parts. There is a significant process of consultation to be conducted prior to 1 July 2027 to build the production tax credit. It's a very significant task. I am not aware of any particular discussions about Nickel West. However, I met with Nickel West last Friday.

Senator McDONALD: Did they indicate to you that a start date of 1 July 2027 would be enough to assist that project?

Mr Chesworth: I'm very reluctant to go into the details of that discussion. It was in confidence, the reason being a concern about the impacts on markets.

Senator McDONALD: I understand that. However, given the minister held a roundtable with nickel processors in January and the urgency that was expressed there around the number of nickel workers—thousands in Western Australia—I do think it's important, given this was an announcement, there was a presumption that it would assist critical minerals players like nickel, which were added to the critical minerals list belatedly. You know that I remind everybody about me writing to the minister on this last June—I like to keep flagging that. We have an announcement, we have billions of dollars, and yet nickel workers don't have any surety from this as to whether or not it will assist them. I appreciate Nickel West, the specific company, but what about the nickel industry more broadly in Western Australia?

Senator Ayres: That's really a policy question. It doesn't surprise me that the inconsistency in the coalition's position has intensified even further. The coalition is opposed to the production tax credits but wants them to start earlier. Is that really the position? I mean, it is a policy framework that is designed to support—

CHAIR: I'm trying to intervene, Minister—

Senator Ayres: Sorry, I didn't realise you had—

CHAIR: but I've just put something chewy in my mouth and it's making things very difficult for me. Senator McDonald might want to redirect, which I think is appropriate.

Senator Ayres: Fine.

Senator McDONALD: Thank you for your assistance, Chair. I've also met with nickel players in Western Australia. They are understandably very concerned about their market. We talked earlier about supply chains being disrupted. This is the perfect example of an industry that has undergone a disrupted supply chain and disrupted market. Thousands of people work in that industry. What I'm trying to understand is how the nickel industry will engage with the production tax credits measure as it's announced currently?

Senator Ayres: I can only rely on what they say. Paul Kopejtka, from Alliance Nickel, said:

It's an absolute shot in the arm because this will boost investment. There's no doubt.

Senator McDONALD: So, Minister, you have ascertained that this will save the thousands of nickel worker jobs in Western Australia, in the minister's home patch, that this will be 'a shot in the arm for investment' and that we should see nickel players continuing to operate. I'm seeking to provide them some insurance. I understand that your job here is to provide a political line, but I'm seeking to ascertain support for nickel workers who, right now, are feeling very nervous about what their future looks like.

Senator Ayres: The production tax credits will be subject to future design work in the lead-up to 2027, between this department, Treasury and across government. They are designed, as Mr Kopejtka says, to stimulate future investment in capability in the minerals areas that they are allocated to for production facilities. That's the focus of the strategy, and it's not a surprise to see it being welcomed by industry, particularly in Western Australia.

Ms Quinn: I might just add—

Senator McDONALD: I'm seeking to get department specifics, Minister. I appreciate your input, but could we keep it focused on what is actually happening? Secretary, you're going to add to that?

Ms Quinn: I was just going to add that there are a few different things going on in the nickel market, as you mentioned. One is that the nickel price fell pretty low.

Senator McDONALD: Thank you, Ms Quinn. I understand the challenges for nickel. What I'm seeking to understand specifically is this policy measure. How can nickel players in Australia expect this to assist them and not have closures within the next three years, which is what they were talking about in January?

Ms Quinn: The nickel price did fall significantly. It has come back up a little bit, which will support the nickel industry. The government is working on many fronts to support the nickel industry. One we mentioned earlier is through the ESG standards and working with others to create a market for efficient and low-emissions nickel.

Another substantial element is the critical minerals production tax incentive which, from 1 July 2027, will provide a refundable tax offset of 10 per cent of eligible Australian production costs for all 31 critical minerals currently on the critical minerals list. That 10 per cent refundable tax credit will be a significant boost to those existing facilities and new investors looking to bring on new nickel production in Western Australia and elsewhere.

The government is supporting, through some of the grant programs, technological advances for parts of the nickel supply chain to be able to improve their IP and improve their technological capability to remain competitive internationally. There are new developments in technology, which is one of the reasons behind some of the increase in supply elsewhere. All of that will go together to support the ecosystem.

In terms of individual facilities and their long lifespans and individual commercial discussions, we are in discussions with parties. We are discussing, as Mr Chesworth said, with Nickel West, but we're also talking to other nickel players in Western Australia to see what their issues and concerns are. The announcement of the tax policy will be factored into people's investment decisions. Clearly the government is focusing on moving to legislation and defining the details with industry, and we'll be working through that with our Treasury colleagues and with industry to make sure that there is clarity and understanding about the tax incentive because how you define things and what is eligible production is going to matter for that 10 per cent tax credit, so we'll be working with industry to refine that. That will provide them with more certainty about how the legislation will be designed.

Senator McDONALD: So from what you've just outlined there, does that mean that the nickel price has a greater impact than a potential production tax credit?

Ms Quinn: They go together. Clearly it depends on how much the nickel price moves. This is about providing funding on the production side, so when people produce, they will get support through the tax system.

Senator McDONALD: I understand that.

Ms Quinn: The revenue obviously matters on the price. We have seen significant changes in the nickel price. One of the things that we talked about earlier is how can we work with international parties, including the demand side of strategic materials and critical minerals, to have markets such that they don't have such volatile price movements. Such volatile price movements are not good for either the demand side or the supply side of the critical minerals industry.

Senator McDONALD: There are no details—you're still working on the details of the PTC—so how can you assert that this will provide certainty to industry?

Ms Quinn: If you were doing cost-benefit analysis of activities in the critical minerals industry before the announcement and after the announcement, it would be the case that the financial considerations for companies that took place after the announcement would be significantly improved.

Senator McDONALD: Companies tell me that government subsidies don't usually form the basis of their business case development—that is, kind of like does the project stack up outside of that and then that is a benefit to the bottom line. I wonder if the lack of detail on exactly what it's going to look like would have a negative impact on investment decisions.

Ms Quinn: I find that difficult to imagine. We have seen production tax incentives—

Senator McDONALD: Well, I'm surprised they're not telling you. If they're telling me, then I'm surprised you're not hearing that in your feedback.

Ms Quinn: It depends very much on the design of government assistance. I can understand, in some cases, if you weren't sure about whether you would be eligible et cetera, that there might be some uncertainty around factoring in and relying on assistance that could be changed quickly and easily et cetera. The production tax incentives, as the hydrogen side, are designed to be part of the tax system. It will be clear to companies once the specification has been worked through, which will happen as quickly as we are able to work with companies. Once the rules of the tax system are defined, companies will know. There won't be any doubt. The legislation will

be passed. They'll know that they're eligible for receiving it. They'll be able to bank that into their financial models, and, as a result, it will have an impact. It's not like something that relies on ongoing government decision every two years, such as other policy frameworks. Quite a lot of design went into thinking about the production tax incentives to provide that certainty to business. This type of arrangement has been put in place in other tax systems, and we have seen industry respond to those tax incentives in other countries.

Senator McDONALD: I'm assuming, though, there was a lot more detail now provided to provide that certainty. You said that the amount of investment confidence has changed from before and after the announcement, and yet we've just discussed that there isn't a lot of detail. Companies don't know if they are in or out, so I'm trying to understand how you'd assert that this has improved investment confidence when there's not enough detail for companies to yet make a decision as to whether or not they would be eligible.

Senator Ayres: I think it's useful to reflect on one of the overseas examples and the response of the investment community to the US inflation reduction announcement, which has some similar characteristics to the production tax credit model that is such a strong feature of the Future Made in Australia approach.

Senator McDONALD: We should look at the IRO then.

Senator Ayres: In the US example, the announcement that they made had what I would describe as a head-turning effect in investment houses and boards all around the world, and investment decisions were made on the basis of that. They have been working through, over the ensuing 18 months or so, some of the detail that you're referring to and the Australian government will be working through with industry as the act is finalised and makes its passage through the parliament and as the details of production tax credits are worked out. But I can tell you, from my own experience and what has been advice provided to us, that the Future Made in Australia announcement and headline announcements of the production tax credit have had a similar head-turning effect—that is, manufacturers and miners are now very much focused on billions of dollars worth of investment opportunities in Australia for production that otherwise did not exist. That is the feedback that the government is getting. That is what the policy is calculated to develop.

Senator McDONALD: The secretary just said that there is no detail yet and that you are working on the design.

Ms Quinn: There is high-level specification. We know that it's covering—

Senator McDONALD: May I finish my question? I'm wondering how this gives certainty, specifically for miners who don't process. You've just asserted, Minister, that this has electrified and turned the heads of industry. Will it affect miners? How will it affect miners?

Senator Ayres: Miners that get into processing in Australia will benefit materially from the—

Senator McDONALD: How many miners are associated with processing?

Senator Ayres: Let me finish answering the question. The problem is that not enough of them are engaged in processing. If the future that you envisage for Australia, or for Western Australia in particular where some of this activity and debate is currently focused, is just as a quarry, then that is not sufficient for Australia to be able to navigate what are going to be a challenging set of decades in front of us. The production tax credit is focused, like it says on the box, on production capability in Australia. We want more of our miners to be engaged in processing, and we want more of them to be engaged with processes in partnerships that will expand demand for their product. These are all upsides. These production tax credits are only advanced to companies that are eligible when they manufacture successfully in Australia, and that requires many, many billions of dollars worth of investment.

Senator McDONALD: We've just confirmed that this credit is only for processes of critical minerals. If you're a miner who doesn't process—could we clarify what the parameters for 'processed' are? Would it include a concentrator, or is it granulated nickel or nickel briquettes? Where are we up to with that, Secretary?

Ms Quinn: That is the detail that we're working through, with industry, to define the categories and make it clear. We will be drawing on the definitions used in other parts of our policy framework, and we will have an eye to what's happening overseas as well, given that one of the purposes of this is to support competitiveness in international supply chains. So we will be working through those technical details to define the legislation so it's very clear in advance what people are eligible for and so they will know what they're eligible for and be able to apply and get their refundable tax credit of 10 per cent of eligible Australian processing costs from 1 July for the 31 critical minerals currently on the Critical Minerals List.

Senator McDONALD: Will it apply to new projects that start after the commencement date, or will it be retrospective?

Ms Quinn: It will be for production post July 2027.

Senator McDONALD: I'm sorry if I wasn't clear. Will it be for processing facilities that are already in operation but are in operation after 1 July 2027? Is that what you're confirming?

Senator Ayres: I'll provide additional information, if I can, later on this morning, but there is a process of working through the detail of these with the mining sector, with our production capability and with investors, and I don't want to constrain that discussion by setting artificial parameters around that in estimates today. The focus of the strategy is on developing new processing capability in Australia. Of course, there will be some work that is engaged in by this department and also across government—Treasury, in particular—that will set the definitional questions around that, and that will rely upon the exigencies of different industries or different critical minerals themselves and their interactions with other parts of the Future Made in Australia agenda. I'm happy to take that question on notice and see if we can provide additional detail at this stage, but we're serious about the consultation process being meaningful for industry. We've got our ears open in terms of the needs of the different parts of the sector, and we're not taking a blanket approach across the sectors, if I can put it that way.

Senator McDONALD: Imagine I'm a junior player seeking to use a larger company's processing facility. Does the junior receive the credit for actually producing the minerals to get processed, or does the processor itself receive the credit for having done the processing?

Ms Quinn: These are details that we will work through with industry.

Senator Ayres: I'm reluctant to provide huge amounts of detail, but I think I can say that it is for processors. It is for processing capabilities and for manufacturing jobs. That will stimulate additional investment in mining, and, in all of the mining engineering, all of the supply chain that goes into that process, it is designed to drag through investment at the production—sorry, I keep interchanging 'production' and 'processing'. I don't mean to be confusing.

Senator McDONALD: I'm keeping up. Thank you for your assistance.

Senator Ayres: It's designed to be there at the processing end of the production chain.

Senator McDONALD: So in the case of nickel, where BHP does most of the processing, that would mean that BHP would get the credits?

Senator Ayres: Well, there's a question there about to what extent it engages new production—that is, new production investments—

Senator McDONALD: It's not new production. It's existing.

Senator Ayres: Indeed. And those questions are the kinds of questions that the department and Treasury will be working through with the sector. It is designed to create new investment in new processing and manufacturing capability in Australia in critical minerals, which is relevant to this bit but, of course, to all the other parts of the manufacturing agenda more broadly.

Senator McDONALD: What is the expected legislative timeframe, Minister?

Senator Ayres: Well, I hope that means that you're going to vote for it.

Senator McDONALD: That wasn't actually the question. The question was, 'When do you expect you'll be bringing the legislation forward?' And I hope it won't be like other pieces of policy where the coalition isn't consulted, sees the legislation when the ink is not even dry and is expected to provide support for legislation when we have no answers. I'm just trying to find out if this is something we would support.

Senator Ayres: It'll be provided. That is, of course, a matter for government in terms of when the legislation is provided, but I can assure you that we are very keen for there to be an exhaustive discussion in public and in the parliament. The coalition will be given every opportunity to work out whether it's for Australian manufacturing or against it. There will be plenty of opportunity. We're looking forward to the debate.

Senator McDONALD: Terrific.

Senator DEAN SMITH: Will it be legislated prior to the election?

Senator Ayres: Well, that's going to be a matter for the parliament.

Senator DEAN SMITH: No, a matter for the Prime Minister—

Senator Ayres: We've seen other pieces of legislation in the national interest—

Senator DEAN SMITH: Is the election in late November or early December, or is it next year?

Senator Ayres: opposed by the coalition in a narrow partisan interest. I'm looking forward to a good debate about this. I think every senator in the Australian parliament should vote for it, because it's in the national interest.

Senator McDONALD: Do you guarantee the legislation won't be guillotined like 14 other pieces of legislation were in the last Senate sitting?

Senator Ayres: As always, that's a matter for the parliament. We will act in the national interest, and we are determined to grow Australia's manufacturing capability. I'm looking forward to the parliamentary debate.

Senator McDONALD: So, just to summarise this session before the chair passes the call: you don't know how the production tax credit will work; you don't know who's in or who's out; you can't confirm that existing processes will receive support; junior miners who process through other facilities are left out; there's no detail on how any of this will work; it's a multibillion-dollar announcement with zero substance; and we don't know when it will arrive before the parliament for debate and consideration, which just about sums up this government's approach.

Senator Ayres: None of those assertions are correct, and it's characteristic of the coalition's unremittingly negative—

Senator McDONALD: No.

Senator Ayres: and no-plan approach on these questions. That is what we have come to expect: a fact-free—

CHAIR: You put a series of propositions, Senator—

Senator McDONALD: which we just worked through.

Senator Ayres: set of criticisms—

Senator McDONALD: No. Well, Minister, I'm excited for you—

CHAIR: No. Senator McDonald—

Senator McDONALD: to confirm these points—

Senator Ayres: Feel free. There's—

CHAIR: Senator McDonald and Minister! Senator McDonald, you just put a series of propositions to the minister—

Senator McDONALD: Which I've just worked through. Every question, we have just worked through—

CHAIR: He will now have the opportunity to respond to them, as you knew when you put those propositions to him.

Senator McDONALD: Well, we've worked through each of those specific items.

CHAIR: Minister?

Senator Ayres: None of those assertions are correct, in form or substance, and it is characteristic of the coalition's approach—

Senator McDONALD: We've just extended time by another hour.

Senator Ayres: to national development issues, which is all about the slogans and not about the substance. We are going to be focused on the national interest here, and we are going to keep working through these issues. We're going to work through them carefully with industry, through the department and directly.

If you've got views about the shape of some of these incentives and where they might be best directed, we'd be delighted to hear from you on them. If there's a constructive approach from any member of the coalition or any crossbench senator on these issues, we'd be delighted to hear from you. We are going to keep moving through these issues in a sequential and careful way. The biggest sovereign risk to these propositions is the coalition voting against it in the parliament.

Senator McDONALD: Not if you guillotine it. I will have to come back and ask those questions again because we've just had: 'We don't have an answer. We'll have to provide more detail. We are negotiating with industry.' Yet, when I put that, to clarify that that's where we're up to—

CHAIR: I'll just clarify where we're at in the program. We're in outcome 1, program 1.3: Supporting a strong resources sector, topics and entities—minerals and resources, oil and gas. We have 30 minutes left in this part of the program before we bring NOPSEMA forward. So, if you're indicating that you have more questions, you ask them.

Senator McDONALD: I have more than half an hour's worth of questions.

CHAIR: You should ask your questions now.

Senator DEAN SMITH: There's only one hard marker, and that's 10 o'clock.

Senator McDONALD: Ten o'clock tonight.

Senator DEAN SMITH: Yes.

CHAIR: Because you said that, Senator Smith, it was just indicated to me that the senator would have to come back later. I'm saying now is the time to ask those questions. That's it.

Senator McDONALD: If we're not finished on program 1.3, we won't be finished on program 1.3.

CHAIR: You have to ask your questions now.

Senator McDONALD: I'm just clarifying the position. Is this credit only applicable for minerals on the critical minerals list—not the strategic materials list?

Ms Quinn: The government-announced policy is for production, processing and refining for the 31 critical minerals currently on the critical minerals list.

Senator McDONALD: The minister said that my assertion was not correct about the detail of the program. Was there any part of that that was not correct that I should return to? I'm only seeking to provide clarity around the legislation to people who are following along. The first one was whether or not existing processes will receive support. Am I correct that that's not clarified yet?

Ms Quinn: We'll be working through the detail. It's one of the issues will be around how we characterise eligible production costs, and how those are worked through. The definition of production costs is something that needs to be very clear so that we can provide certainty to businesses. As is always the case with the tax legislation, there are propositions put and they're tested with industry to make sure they're clear, and so there are technical details that need to be worked through. It's not quite so clear to say whether something is or isn't there because there are additional resources. So the definitions are important and it's important to work through with industry for that. It's not a straightforward question. It will be clarified through detailed consultation with industry, the tax office, Treasury and us.

Senator McDONALD: My assertion is, to summarise: you don't know how it will work; you don't know who is in or out; you can't confirm if existing processes will even receive support; junior miners who process through other facilities are left out; and there is no detail on how any of this will work. This is a multibillion-dollar announcement with zero substance, which about sums up this government's approach.

Senator Ayres: You're trying to put words in the secretary's mouth. You've asked her a question; she responded, in some detail. It is entirely sensible—in fact, it would be very strange if it was different—that the government will work through the detail of these measures with the sector and with the experts. The broad parameters of it are very clear. The impact it will have in terms of Australia's manufacturing capability is also very clear. I'll let you write your own press releases, without putting words in the mouths of officials.

Senator McDONALD: I'm pretty sure, when you announce a multibillion-dollar program, you should know whether it is for new processes or existing processes. Isn't that critical to program scope and costing?

Senator Ayres: It's not a multibillion-dollar package; it is a \$22.7 billion package. It is the largest pro-manufacturing package in Australian history. It is there to reshape our economy, and to reindustrialise our suburbs and our regions. It is a very significant piece of work. The parameters have been outlined very clearly by the Treasurer and the various ministers in the budget, in the budget papers and in their statements before and since. It is designed to build new production capability. I don't think we could have been any clearer about that issue. We are going to continue to work through the detail, which of course is important, in a careful way with our partners in the private sector and with experts.

Senator McDONALD: That's a very specific number: \$22.7 billion.

Senator Ayres: That's the number in the budget.

Senator McDONALD: How did you come up with that number if you don't know the details?

Senator Ayres: What you're going to have to do, if you want to talk about the numbers in the overall package, is probably go through that in detail with Treasury.

Senator McDONALD: We have a spillover with them in two weeks, so we'll come back to that.

Senator Ayres: The assumptions that underpin those figures have been available for people to ask questions about over the course of the last fortnight.

CHAIR: I'm going to take a very brief suspension while I consult with senators about the program.

Proceedings suspended from 11:45 to 11:46

CHAIR: The committee resumes with program 1.3. I'll go to Senator McDonald.

Senator McDONALD: I want to turn to question on notice AI-07. I asked the Critical Minerals Office a series of questions about their activities. First, on ASL, your answer stated that the Critical Minerals Office had 20 ASL. Can you provide the total staffing costs for those 20, please?

Mr Chesworth: I'm very sorry, I do not have the QON in front of me. I will make best efforts to get that as quickly as possible.

Senator McDONALD: No worries. On the answer—and you'll just have to trust me here—you said that the Critical Minerals Office had 20 ASL. What I was looking for was the total staffing costs for the 20 ASL.

Mr Chesworth: Could I take that on notice, please, Senator?

Senator McDONALD: Sure.

Ms Quinn: It will likely be more people than at that time because that was at the end of 2023, and the work program for the Critical Minerals Office has increased since then. So we can come back on notice with the number of ASL and the number of staff. We're going through a budget planning process at the moment as well in terms of how we're going to allocate staff. There's not a fixed amount because we do have departmental resources that we move for priority areas. We will have additional resources working on critical minerals to work through the tax credits that we talked about and also the previous funding that we got that we talked about earlier about international agreements and MOUs.

Senator McDONALD: Great. So there will be more than 20 ASL, and you'll come back with the total staffing costs.

Mr Chesworth: Yes.

Senator McDONALD: The answer that I'm referring to also stated:
The CMO does not track data of how many regulatory approvals it facilitates.

Can you tell me why it is that the Critical Minerals Office doesn't track data of approvals that it facilitates?

Ms Quinn: At a high level, I can answer that. We have a major project facilitation agency that, if projects meet those specifications and the government agrees for them to be part of that program, tracks those very intensively and provides a high level of concierge service through Commonwealth and state regulation. So those projects will be tracked. In terms of the next tier down, where it might be a matter of providing advice and assistance to particular proponents, that's a little harder to keep track of because it depends on what level of advice and assistance they require, and we might get referrals through state organisations, not just directly to us. So it is part of the obligations and the work of the team. But we do get referrals from lots of different components. We might get multiple referrals on the same company.

Senator McDONALD: I understand. Many of the critical minerals projects aren't major projects. Some are, but many of them aren't. I'm trying to understand—with the Critical Minerals Office, I had assumed that one of their key objectives would be providing that advice. It might be low level or it might be high level. But it's certainly a KPI that it be facilitating approvals, state and federal. I would have thought that they would be keeping a spreadsheet that says, 'These are projects on the books that we're helping with, that we're aware of and that we're working our way through.' Does the Critical Minerals Office keep some sort of data of key activities?

Ms Quinn: It does. Local entities track the workload and where resources are allocated. I guess the issue is: to what specificity? We don't have a KPI on the number of companies supported in terms of our KPIs, so it isn't something that's tracked to that level of detail. It does many things and it can facilitate through many routes. I'm not sure of the efficiency of creating something to track that unless there were a specific policy need to do so. It does facilitate companies. We've mentioned that it can get inquiries through Austrade, it can get inquiries through states, it gets direct inquiries—they come in through all different sources.

Senator McDONALD: Ms Pullen, what sort of KPIs do you work towards with your team?

Ms Pullen: I can get to that in a moment, but I think it's also probably worth noting that we don't hold regulation—

Senator McDONALD: I understand.

Ms Pullen: We're not a regulator. I guess what might be useful is outlining on the ground how we manage it from day to day. We do keep a list of the companies we speak to, to make sure we've got that engagement, and that engagement is absolutely imperative to our policy-building. In addition to that, in addition to the engagement side, we also have the support to government, providing policy advice and policy briefs. So that's really where our KPIs sit.

Senator McDONALD: You're seeing vanadium projects at the moment?

Ms Pullen: We do speak to vanadium companies, yes.

Senator McDONALD: Would you assist them with federal government approvals, like EPBC approvals?

Ms Pullen: We ensure that we link up the industry proponents to the correct people, both within the Commonwealth government and also within state and territory governments. That also sometimes means linking them up with prospective financiers overseas.

Ms Quinn: To be clear, we are not funded to do the work that the companies need to do to be able to meet those approvals.

Senator McDONALD: No. I am just trying to understand what it is that the Critical Minerals Office is doing. In the answer you don't have, but I assure you exists, the answer highlights that the Critical Minerals Office refers industry to DQ to engage on approvals processes, informs industry about the major projects office, and informs industry about grant opportunities and other funding means. You identified policy work to government as another stream of work. What other functions outside of those listed on the question on notice return does Critical Minerals have, or have we just worked our way through them all?

Ms Quinn: There are two we have already canvassed today. One is international agreements—work under MOUs and other international agreements—and managing supply chain analysis. It also manages some program implementation.

Senator McDONALD: Is that government program implementation?

Ms Quinn: Yes.

Senator McDONALD: For example?

Ms Quinn: The critical minerals development program. This is in the QON.

Senator McDONALD: You have found it, have you?

Ms Quinn: I have it, yes.

Senator McDONALD: Terrific. You might pass it on to Mr Chesworth.

Ms Quinn: And the international partnership and critical minerals programs are two. There is also a bilateral program with the Indian government and there are various international sub components, bilateral things, supply chain analysis et cetera. So it does analysis, it does policy work, it does programming implementation and it does industry facilitation in terms of connectivity. It does not do the work for those companies. It then engages across the system on other policy developments. One of the other aspects is it supports the minister, which is not on this QON list. But the funding support that Export Finance Australia provides through the critical minerals facility, CMO provides support in that process as well.

Senator McDONALD: Is that to critical minerals producers?

Ms Quinn: Yes, to EFA and the ministers and the companies as well. We spoke to you yesterday about due diligence processes that happen through projects, and the Critical Minerals Office is part of that due diligence process.

Ms Pullen: If we are speaking about EFA, we also support the NAIF, the Northern Australia Infrastructure Facility, in the same manner.

Senator McDONALD: I'm just trying to understand what is the difference between being an informing agency where you can have a webpage and go to these different spots and actually engaging, for example, in the major projects facilitation process? Do you get involved in that, or do you direct people in that direction and off they go?

Ms Pullen: I would say it is a little bit of both. Because the landscape is complex across international, state and territory and then also the federal components—and, as we know, the critical minerals sector is quite diverse—it is about engaging with industry to be able to pinpoint them to not the beast of some government but to the individual who can support them, as opposed to a webpage.

Senator McDONALD: I'm trying to understand. Of the 20 or more ASL who are in your team, Ms Pullen, can you give me an example of a critical minerals project that you are progressing?

Ms Pullen: Well, the government recently announced the funding of both Arafura, the re-engagement with Renascor and Alpha HPA both through EFA and NAIF. As an example, part of the process of both EFA and Northern Australia Infrastructure Facility have to do in order to provide that funding is they come to us to assess whether the particular proponent is aligned with the critical minerals strategy. We go through quite a technical process through that to provide that assurance for both the EFA and the NAIF.

Ms Quinn: I know the question asked specifically about the Critical Minerals Office but it might assist you to know that there are other parts of the development that work with critical minerals issues. Our analysis and insights division, for example, provides analytical support. We have our international division that provides international support. So there are other parts of the department that work with critical minerals issues as well; it isn't just confined to the Critical Minerals Office per se.

Mr Chesworth: We work with our international division partners on matters relating to national security and critical minerals and we work with Treasury and some of the national security agencies on those issues as well.

Senator McDONALD: Terrific. Thank you for that addition. I have finished with the Critical Minerals Office, thanks, Ms Pullen. Can you advise how the department usually collects or prepares data to inform policy decisions by government.

Ms Quinn: At a high level, I can do that, and our analysis and inside team can join me. It depends a bit on the policy issue. There are official sources of data, such as from Geoscience Australia or the Australian Bureau of Statistics or international organisations, that we draw on visually at an aggregate or an industry level. Depending on the issues, we might go deeper in terms of talking directly to companies and extracting information from those companies, or we might go to other organisations that hold confidential information that we can extract and use. It depends very much on the project. I am happy to expand if you want to narrow the scope of the type of work you had in mind.

Senator McDONALD: Broadly, that is policy decisions. How about data to be used in speeches, media releases or other ministerial statements?

Ms Quinn: It is the same process. We have a comprehensive set of data that we hold in our databases but we will search out data from other sources if needed. Sometimes there has been work done by other entities that they have published and reported on that we will draw in to provide advice to our ministers. That includes analysis done by industry or other official organisations.

Senator McDONALD: Does the department use information from industry or from market research to inform advice or decision-making process?

Ms Quinn: We certainly use information provided by industry in our analysis. We are always very careful to discuss with them the confidentiality provisions. Sometimes people provide us with those reports that they have commissioned or reports they have used internally in their internal processes. Some of that is for public and some of it is commercial-in-confidence, so we kind of track through those issues. We are also very conscious of probity issues, so we have very strong integrity framework within the department for what is used for analysis may or may not be available to others, for example, if they are doing grant applications. The data supplied through grant applications is treated appropriately.

Senator McDONALD: Secretary, I assume the department provides the most current data possible and I assume it would be poor practice for departmental policy advisers to rely on out-of-date data.

Ms Quinn: We clearly update our data and use the most recent data where it is available.

Senator McDONALD: Last estimates we discussed the average wage of resource sector workers, to which Minister King has repeatedly used \$144,000 as the figure. Minister, you told this committee that this figure was from the Parliamentary Library. You didn't offer any further information. The Parliamentary Library then informed me this figure, \$144,600 was from 2019-20, which seems to be out of date. Secretary, is it correct to assume that the department was not asked to provide this information?

Ms Quinn: I'm not sure. I'm just checking—there was a question on notice on this as well, provided last time, where it was confirmed that that was the average wage in the resource sector quoted by the minister and resourced from the Parliamentary Library. So, clearly we didn't provide that particular data.

Senator Ayres: And given that it was partly directed towards me: if I recall correctly, that was indeed the evidence I gave. I'd be surprised if the Parliamentary Library, given the conventions around it, gave you an answer in relation to material that they'd done research on for another parliamentarian—

Senator McDONALD: No, I asked them the same question—

Senator Ayres: Yes, that's right. Of course, the position in terms of wages for workers in the sector will no doubt have improved since 2019 and since 2022.

Senator McDONALD: Secretary, do you know why the minister chose to use the Parliamentary Library instead of requesting wages information from your own chief economist in the department—that is, Ms Dowdell?

Ms Quinn: I don't know, no.

Senator McDONALD: Secretary, does the department know what the current average wage for resources is?

Ms Quinn: It is something we could source.

Senator McDONALD: Thank you.

Ms Dowdell: I don't have that information at hand, but I can get it for you.

Senator McDONALD: Thank you.

Ms Quinn: I'd just note that there are lots of definitions of 'wages'. Having done this in a previous life, I know there are average full-time weekly—there are all sorts of different definitions of wages.

Senator McDONALD: Well, perhaps we could take the definition that the minister was using previously. That might be a reasonable equivalency.

Ms Quinn: We can have a look to see how specific it was.

Senator Ayres: I think it's a very broad question, Senator. I mean, the central issue of course is that workers in the resources sector, particularly blue-collar workers, will earn more as a result of the government's industrial relations changes and get to keep more of what they earn because of the government's tax policy changes. I understand the sensitivity about that, but that is indeed the case.

Senator McDONALD: It wouldn't be standard practice to use five-year-old data as part of your policy decision-making. Is it now government policy to rely on old data in speeches or talking points?

Senator Ayres: The Parliamentary Library is an excellent source of research and evidence. It's used by parliamentarians, backbenchers, committee chairs, senators, members of parliament and ministers. All sorts of people engage with the Parliamentary Library. They do terrific work. In this case I think the minister got some material from the Parliamentary Library. I think it must have been in the context of a question in the House. I don't think that's a surprise.

Senator McDONALD: Most people don't have access to their own department, though, to ask questions of. The Parliamentary Library is a terrific resource, but I don't think in the specifics of the resources sector we would suggest that it's better than the department or better than the chief economist for the department.

Senator Ayres: I don't think anyone's asserted a relative value in terms of these things. Capabilities in the department are there for a particular purpose, and they do excellent work. The Parliamentary Library is there to serve the parliament, and members of parliament and senators, and they also do excellent work.

Senator McDONALD: Alright. Sticking with this data issue, page 43 of the *Future Gas Strategy: analytical report* states:

The forecast increase in annual and peak daily gas demand from 2032 signals a need for investment in additional gas-powered generation capacity (or storage), to satisfy peak electricity demand and firm up variable renewable energy generation. ... Under the Step change scenario, AEMO projects peak east coast daily gas demand for gas powered generation to almost triple 2023 levels by 2035 ...

What is the government doing to ensure that this investment in additional gas powered generation capacity happens?

Ms Quinn: Energy policy is actually a matter for the minister for energy and the department that's supporting energy. The question more rightly goes to that area.

Senator McDONALD: You're absolutely right. I was thinking about gas supply to inform that gas generation because that's our space. You're quite right about that. I will redirect that question. So I assume you also won't have a view on the exclusion of gas from the Capacity Investment Scheme either?

Ms Quinn: That is a matter for the minister for energy.

Senator McDONALD: Page 66 of the analytical report states:

In the near term, there is significant concern and uncertainty around the potential for a shortage of supply over coming years.

On the **east coast**, major annual shortages are expected to emerge from 2028...to close the gap requires further supply or a reduction in demand.

What is the government doing to mitigate this risk of shortfalls? We should probably divide this into two: a priority around increasing supply or reducing demand.

Ms Quinn: One of the reasons for doing the gas strategy was to highlight the different demand and supply projections, to provide a consolidated picture for industry participants. One of the first things the government is doing is highlighting the future demand and supply under different scenarios so that market participants can see that information and make the decisions that they will make. As you said, it is suggesting that there is a shortfall in a number of years time. Just the information is an important action that the government is taking.

In terms of specific policy actions, there are regulatory frameworks in place that we've canvassed in previous estimates, such as the Australian Domestic Gas Security Mechanism, and the heads of agreement with gas suppliers. There is also an arrangement under the gas code of conduct in terms of gas supply, and the government has a regulatory responsibility in terms of the offshore gas regulatory framework, including releases of permits and the like.

There are a range of other things that the government are working on to support supply, which were outlined in their action item, the action plan for the gas strategy. There were six different action item sets. They set out the various things they're doing on the supply side. On the demand side, those policy issues are largely in the domain of other ministers, such as the electrification of activity and the changes in emission reductions for gas used within industrial processes. Those are both matters for the Minister for Climate Change and Energy. There are state responsibilities as well. One of the things that the government has announced and that we are working through is what it looks like out to 2023 in terms of emission reductions for different sectors, the sector emission reduction plan processes.

Senator McDONALD: Sorry, did you say out from 2023?

Ms Quinn: From here out to 2035, sorry.

Senator McDONALD: That makes more sense.

Ms Quinn: That will look at the consolidated view about demand and supply as well, so that's another opportunity. I will just pass to my colleagues to see if I've missed anything in terms of the broad sweep of actions that the government is doing to manage the gas situation.

Mr Lawrence: As the secretary has said, and as you've asked, there are three ways to address the supply gap: you can increase supply, you can decrease demand or you can do both. The Future Gas Strategy explores all of those options. As the secretary said, there are a range of measures or discussions in the Future Gas Strategy around principle 3, that gas demand reduction will be addressed through the net zero sectoral plans. It mentions the role of gas substitution by expanding the supply of low-emission gases. And, in principle 4, we talk about how reducing gas demand may require the advancement of a range of different technologies, changes in operations that switch from carbon based feedstocks to alternative inputs and electrification of high-heat processes or switching to low-emissions gases.

In relation to increasing supply, the strategy notes the mechanism's already in place, which is what the secretary discussed, which is the Gas Market Code. There are already five supply commitments which are providing an additional 564 petajoules of gas to the market. We have the heads of agreement in place to make sure that the east coast LNG exporters offer their uncontracted gas to the domestic market first. We will be working with states and territories to monitor pricing impacts, and that includes through the biyearly reviews of the Gas Market Code. Of course, we also have the ADGSM as a measure of last resort, through which the government can control exports if it must. The government is also considering regulatory reforms to bring greater regulatory certainty to offshore gas developments. In the strategy, it talks about reframing offshore acreage release towards a demand driven process, with a particular focus on brownfield areas close to existing infrastructure, improving the way marine seismic surveys are licensed and looking at retention lease policies.

CHAIR: I'll share the call, Senator McDonald. We'll go to Senator Pocock.

Senator DAVID POCOCK: I'm keen to ask some more questions about gas. Was there any advertising spend that has been spent or set aside for the Future Gas Strategy?

Ms Quinn: No.

Senator DAVID POCOCK: Going back to CCS, earlier the minister said, 'There is a range from optimism to pessimism about the rate of the role that CCS will play.' He went on to say, 'Investment in these capabilities will succeed or not succeed depending on the engineering and economics of these positions.' I agree, but I'm concerned the government is placing unjustifiable faith in CCS, and Australians are taking on all the downside—the risk of this. Are there estimates contained in the Future Gas Strategy of total emissions CCS will abate in Australia?

Ms Quinn: As my colleague Ms Ossolinski mentioned, we've taken gas emission projections from our colleagues in the department of climate change and energy who do the projections. Underneath that, there will be assumptions about the different arrangements. One of the important things to think about is that the regulatory regime in Australia is using the Safeguard Mechanism, which, as you know, puts a constraint on the amount of emissions that existing and new facilities can emit. Then, it's up to companies to meet those safeguard arrangements through different options. There will be current guesses about how much is CCUS versus other technology options embedded in the department of climate change's projections. We can ask them if they can

provide that information. The important thing is that companies will be required by law to meet their emission obligations. Whether it's through CCS or other mechanisms, the policy intent is they reduce their emissions, and that is what is expected to happen.

Senator DAVID POCOCK: Do those numbers from DCCEEW include CCS, and how much CCS is going to be relied on under the various scenarios?

Ms Quinn: I'm not sure that we've got that level of detail, but it could be that they're accepting that the government policy regime will require companies to reduce emissions, and therefore that's what they've got in the emission projections.

Senator DAVID POCOCK: That's under the Safeguard Mechanism. Under the Future Gas Strategy, what is the potential reliance on CCS?

Ms Quinn: We take the expert views on emission projections from those that do the emission projections in detail, and that is the department of energy and climate change.

Ms Ossolinski: We do contain some information in the report with regard to the role of CCUS in the emissions projections on page 23. I will direct you there. Part of the projected decline in emissions from gas supply—not so much from use—is expected to be achieved through lower fugitive and stationary emissions as facilities respond to the safeguard mechanism reforms. Fugitive emissions are projected to decline by 28 per cent between 2022 and 2035. This is due to assumed efficiency gains, flaring reduction and CCUS projects at LNG facilities.

Senator DAVID POCOCK: Is that CCS modelling based on what Gorgon told us was possible or what we're actually seeing globally in terms of performance?

Ms Ossolinski: The modelling underpinning it was not conducted by myself and my team, so I'd have to inquire further around what underpins that.

Senator DAVID POCOCK: On notice, that would be great. I'm interested in whether the government will rule out providing indemnity to CCS projects, given you said it will sort of stand on its own feet when it comes to—

Senator Ayres: I'm not quite sure what that means. You heard the secretary's evidence in terms of these abatement and emissions outcomes that are required under the safeguards measure. CCS will play a role or not. There are a range of abatement measures that these projects need to undertake. The government approach to these things will be guided by the evidence. We're not ruling out a nascent technology playing a role. The advice that we've received from—whether it's the IEA or the CSIRO—is consistently that CCS is likely to play a role. In terms of the kinds of projects that the secretary was talking about, it will be a matter for them to meet their targets and how they do it.

Senator DAVID POCOCK: I understand that, but I'm interested in whether or not the Commonwealth will indemnify these projects. We saw with Gorgon that the Commonwealth had to indemnify WA for all future everything to make Gorgon commercially viable. If that's the only project in Australia that required Commonwealth indemnification, is that going to be the plan with the next one? Does the government plan to indemnify Bayu-Undan?

Senator Ayres: I'll ask officials to supplement this to assist to characterise what's occurred here and our future approach.

Ms Urquhart: CCS policy is the responsibility of Minister Bowen in the climate portfolio. Minister King has responsibility for regulation in the offshore context under the OPGGS Act. The examination we've done of CCS, working with colleagues across government—because the Future Gas Strategy is genuinely a whole-of-government report—was about providing the analysis and data on the facts as we understand them as well as projecting different scenarios, as Ms Ossolinski has taken you through.

Senator DAVID POCOCK: I really want to come to the indemnification issue.

Ms Urquhart: I'm personally not sure that I understand what you mean by indemnification. Could you repeat your question?

Senator DAVID POCOCK: We have indemnified the WA government, so we'll basically pick up any cost if Gorgon leaks at any time in the future and there are lawsuits or we're liable under international climate treaties or obligations. My understanding is that it wouldn't have worked without that indemnification because it's inherently risky technology. We're looking at Bayu-Undan and we're talking under the sea here through an old pipeline, and I'm interested in whether indemnification has come up. Does the government have a view on that? Does it plan to

indemnify that and other projects or is it ruling it out and saying that this technology needs to stand on its own two feet and taxpayers won't shoulder the risk forever?

Ms Quinn: As I understand it, any indemnification discussions around carbon capture and storage would be a matter for the Department of Energy and Climate Change.

Senator DAVID POCOCK: It didn't come up as part of the Future Gas Strategy discussions on CCS?

Ms Quinn: The government has not, as part of the action plan, included any discussion around what you're talking about. As I understand it, that was a particular project that involved particular discussions at the time, rather than under a policy framework writ large. It was more around what assistance the government was willing to do at that time, combined with Western Australia, to facilitate a particular project. I'm not aware of any framework that has indemnification. The government has been very clear about the safeguard mechanism being the mechanism to reduce emissions across industrial facilities, including on oil and gas extraction. I think it's probably best to address the specific questions of indemnity discussions to the responsible department and Minister.

Senator DAVID POCOCK: I guess I'm concerned that it sounds like this wasn't a consideration at all under the Future Gas Strategy, where we're relying on CCS, and the only CCS project in Australia required the Commonwealth to indemnify it. Why was that?

Ms Quinn: CCS is part of the opportunities that companies have.

Senator DAVID POCOCK: I understand that. But the underlying indemnification, I would have assumed that that would have been identified in the Future Gas Strategy. In this case that we keep pointing to, Gorgon, it was only commercially viable, the company would only proceed, if we took the risk.

Ms Quinn: Companies are required to meet the safeguard mechanism—

Senator DAVID POCOCK: I understand that bit. But the indemnification is the future bit.

Ms Quinn: in which case they are required to meet the safeguard mechanism. You're talking about a project that was in place before the safeguard mechanism. The first and major policy for emissions reduction in the gas sector is the safeguard mechanism. That is the overriding mechanism to reduce emissions. We will be looking at these particular emission components in the process of the resource emission plan.

Senator DAVID POCOCK: I'm not sure how the safeguard mechanism is relevant to the question of indemnification of CCS facilities.

CHAIR: The department and the secretary said, as is appropriate, that matters in relation to indemnification belong with a different minister in a different portfolio.

Senator DAVID POCOCK: Sure. I just want to confirm that it wasn't part of the Future Gas Strategy thinking or consultation.

Ms Quinn: It's not part of the—I can't confirm whether there were conversations—

Senator DAVID POCOCK: That's fine. You could take on notice about that.

Ms Quinn: The government's focus in terms of its action plan is very clear in the action plan summary, which is talking about the principles of reducing emissions. The principal method of doing that is through the safeguard mechanism. It hasn't ruled out thinking about other things in future, but its number one principle is to reduce emissions. There is a whole set of technical regulatory frameworks that have not been mentioned because they just exist in the system. I'll draw your attention to the action items in the action plan for the government.

Senator DAVID POCOCK: Has there ever been a CCS project under federal laws?

Ms Urquhart: No. Just to clarify, your questions suggested concern that the Future Gas Strategy is portraying CCS in a way that might be inaccurate. I would encourage you to have a look at page 23 of the gas strategy document, not the analytical report, third paragraph onwards. Our work has been to try to portray very accurately the realities of the state of CCS development and what might be expected for its realisation. In particular we say:

To be successful, the identification of geological storage sites and development of infrastructure and processes will need significant work, collaboration across industries, and investment. The 2023 Net-Zero Australia study suggested that a notional annual geological sequestration limit for Australia is 150 Mt-CO₂. For most scenarios in its report, annual sequestration demand reaches this limit by 2040. The study suggested that successful deployment of CCS would be a multi-decade effort.

There's more there in the same vein. So I just want to underline the genuine effort—

Senator DAVID POCOCK: Thank you, Ms Urquhart. I'm going to run out of time. I appreciate that, but I just want to clarify: indemnification was a key part of Gorgon, which we've yet to talk to, and CCS. I'm just

concerned that that wasn't considered. Please take notice whether indemnification was considered as part of the strategy.

Ms Urquhart: We do have a response to that.

Mr Lawrence: We received 292 submissions as part of that. I and my team participated in at least 70 meetings. In none of those submissions and at no stage in any of the meetings was indemnity raised.

Senator DAVID POCOCK: That doesn't surprise me, because the Commonwealth wears the indemnity for Gorgon.

Mr Lawrence: As the secretary has said, that was some time ago when that project started. We now have the safeguard mechanism in place. It sets the limits of CO2 emissions being baselined to zero for new oil—

Senator DAVID POCOCK: But that's not relevant for indemnification, which means that the Commonwealth takes the risk. They could meet their safeguard mechanism targets, and then 30 years this thing starts leaking, and then that's on us. That's my concern.

Senator Ayres: You've asked, in terms of the preparation of this report and the underlying work under this report, to what extent is this concept of indemnification playing a role. I think the official has just given you the answer.

Senator DAVID POCOCK: Thank you. That's really helpful. Minister, earlier this morning you describe the gas strategy as an evidence based, sensible future gas strategy. I was looking at appendix A of the analytical report, which sets out references. As far as I can see there's not a single climate scientist referenced there. There is reference to work done by the CSIRO on LNG and CCS, and work from the gas industry funded to zero. But there's no reference from the IPCC, nothing from climate scientists. That's a concern to me, that this is a strategy to promote industry without any consideration of the costs that future Australians will bear. Did the department speak to any climate scientists about the Future Gas Strategy during the drafting?

Ms Dowdell: In relation to that analytical report, we drew on input from our colleagues at the department of climate change. That provided the emissions information and the impact that those emissions would have on climate change. We didn't speak directly to any scientists to inform our analysis of these emissions. I will check with my colleagues whether they engaged during the broader strategy consultation.

Ms Quinn: I just want to reiterate what my colleague Ms Urquhart said earlier. This is a whole-of-government exercise. We coordinated it but the department of climate change worked very closely with us. They have carriage of climate change policy, and we would rely on their expertise in connection to the climate change community and scientists. As my colleague mentioned, we did have public submissions, and we did draw on the public submissions. We haven't listed all submissions there. We did roundtables. So it would be unfair characterisation say that it doesn't take into account environmental obligations. It is the first principles that the government worked to, and we did incorporate the latest information, filtered through experts.

Senator Ayres: I don't understand the point, really. The first principle that underpins this is that Australia is committed to supporting global emissions reductions to reduce the impact of climate change and/or reach net zero emissions by 2050. That's the key, number one assumption or driving objective that sits underneath the report. It's not a report that's designed to canvass other views outside of whether or not net zero by 2050 is or should be the government's objective. It is the government's objective. That's what underpins the whole report. There is a series of different projections in there that are helpful for understanding the best evidence provided to the government, in terms of what domestic demand for gas will be and what demand in our region and globally will be. It would be a strange thing to have a chapter in it that canvasses arguments for not having a net zero objective. That is the government's objective. We don't need to hear more about it. We're for it. We're for action on climate change domestically—

Senator DAVID POCOCK: Yes, I understand.

Senator Ayres: and we're for a more aggressive approach internationally.

Senator DAVID POCOCK: I understand that, but I guess that principle—principle 1 of the Future Gas Strategy, that Australia is committed to supporting global emissions reductions to reduce the impacts of climate change—sounds like something you might speak to climate scientists about. And what I'm hearing is that the Department of Industry, Science and Resources didn't speak to any climate scientists—

Senator Ayres: But they don't need to.

Senator DAVID POCOCK: They don't need to?

Senator Ayres: That is the government's objective. We are not deviating from that objective.

Senator DAVID POCOCK: So we don't need to speak to climate scientists?

Senator Ayres: It is there. We don't need to be persuaded—twice—that we have to, for all sorts of emissions reductions, climate and economic and strategic reasons, commit to that objective. That is what the approach to future gas is founded upon. If a future government—if the opposition ever forms the treasury benches again—deviates away from a net zero target, well, that's a matter for future governments. But this government is focused upon that objective.

Senator DAVID POCOCK: And I would have thought that if you're focused on that objective you'd be—climate science is not a fixed thing; it's an ongoing field. We're hearing more and more this week—Dr Joelle Gergis came in and briefed parliamentarians on the very latest science—that this is changing fast. We know there are these tipping points that we're heading towards, but we don't actually know where they are. So, you may say that, Minister, but I find it troubling that we haven't consulted climate scientists on a future gas strategy.

Ms Quinn: Perhaps I can just ask my colleague to clarify that point.

Mr Lawrence: Senator, I think that's a mischaracterisation, because, as my colleagues have said, there was a working group from an analytical side that included the Department of Climate Change, Energy, the Environment and Water—so, all those different areas. So, obviously there's—

Senator DAVID POCOCK: How many climate scientists?

Mr Lawrence: I don't know how many scientists they have within that portfolio, but they have—

Senator DAVID POCOCK: Maybe you could provide that on notice, if that's alright.

Mr Lawrence: Well, you'd have to ask those departments.

Senator DAVID POCOCK: They appointed me here. That's why I'm here. DCCEEW appointed me here.

Mr Lawrence: I'll keep going. On that group was also the Climate Change Authority, CSIRO, and the Clean Energy Regulator. As I said, there were 292 submissions. About 250 of them are listed on the department's website and are public; people can read them. There were submissions from and I know we had meetings with the likes of the Climate Council. We've met with them since the strategy was released. We've met with the University of Queensland. From memory, I think they made a submission. We also met with Lock the Gate. As I said, we probably had—my team talks about 50 to 70 meetings, and I think every meeting we've had this year has probably discussed the Future Gas Strategy. And there are a range of stakeholders that were consulted with and met with.

Senator DAVID POCOCK: Okay. I didn't see any of them in appendix A, but thank you very much.

Ms Quinn: We didn't list all the submissions in appendix A. And we're very open to talking. It was a very public process. We took submissions from many people.

Mr Lawrence: And we extended the submission process so that people could get their submissions in.

CHAIR: Thank you all.

Proceedings suspended from 12:39 to 13:30

CHAIR: The committee resumes with resources program 1.3. Senator McDonald has the call.

Senator McDONALD: Continuing with the Future Gas Strategy, Secretary, am I correct in assuming that the Future Gas Strategy needed the endorsement of cabinet before it was released.

Ms Quinn: It did go through cabinet processes, yes.

Senator McDONALD: Page 89 of the analytical report says:

If these gas supply developments are delayed in financing or regulatory approvals processes, supply shortages will emerge that could affect both domestic demand and exports. For example:

- if additional supply from Narrabri in the Gunnedah Basin is delayed, then the east-coast supply gap would emerge in 2027 of around XPJ.
- if the Atlas project in the Surat Basin is delayed, then production on the east coast would fall by 60 PJ by the end of 2025 and 120 PJ by the end of 2027. This would bring forward the east coast supply shortfall to 2026.

What is the government doing to ensure that these projects are not further delayed, given that they're built into future gas supply projections?

Ms Quinn: These projects are largely in the process of going through domestic regulatory approvals, which are a function of state. These are onshore processes which are not the responsibility of the Commonwealth legislation. In general for the gas supply side, the government has worked to provide certainty on the regulatory environment through the gas code—particularly in the gas code, which is a product between Minister King,

Minister Bowen and the Treasurer. This is up to proponents to work through the regulatory environment to get these projects up.

Senator McDONALD: I understand that, but, given that gas is a national supply issue, is the department liaising with those relevant state jurisdictions to say, 'We're just reminding you'?

Ms Quinn: The Minister for Resources does have regular processes of engaging with her counterparts. Below that, we have senior officials' discussions, and, below that, analytical connections. So we have all of those layers working with our state colleagues to exchange information and to highlight gaps. Then, of course, there's a replication on the environment side through the environment, and a replication on the energy side through the environment minister, so we do work with states, and we triage and ask them questions. I'd have to double-check whether any of these are under the Major Project Facilitation Agency, but, if they were, then we would have a role to more actively manage regulatory connections.

Senator McDONALD: Would you mind coming back to me if either of those two projects, specifically, are on the major projects facilitation list? Of course, it does become a federal problem if the minister then has to move to the ADGSM or another mechanism to sort out domestic supply.

The Future Gas Strategy says:

In all the scenarios considered in this strategy ... Australia's LNG exports decline by 2050.

Given that Japan and Korea's LNG demand will remain high to 2050 under IEA scenarios, and demand for LNG in Asia is forecast to increase to 2050, what is the basis for the Future Gas Strategy modelling to have a decline in Australia's LNP exports by 2050?

Ms Quinn: I'll pass to my colleague.

Ms Ossolinski: Australia does perform a large role in supplying LNG to the East Asian region and underpinning their regional and economic security in doing so. We have undertaken modelling which we've documented in our report in chapter 4, which looks at the demand coming from East Asia. While there is continued demand, that demand declines over time depending on the scenario we're looking at.

Australia's role will depend on a range of factors. At the moment, global supply is increasing through additional supply coming on, in particular from the US and Qatar, and the direction of demand for Australia's exports will depend on the cost from Australia as well as a range of other factors, including emissions and our trade connections in other ways with those countries.

Senator McDONALD: The first statement that I read about regarding all the scenarios considered mean Australia's LNG exports declined by 2050, in brackets it says: 'note this is not a policy setting'. If the demand is there from existing trade partners does that not become a policy setting?

Ms Dowdell: We've drawn on a range of sources, both the international scenarios but also through consultation with our trade partners, to understand what that might look like. So I don't think we could say with any certainty that it is a policy setting. We've undertaken some modelling and have some assumptions there about what we expect both through those international scenarios but also feedback from stakeholders about what they will be looking for from Australia over that period of time.

Senator Ayres: The answer to your question is no.

Senator McDONALD: Are you saying it's not a policy setting?

Senator Ayres: No, it is what it says on the box. It's a projection and, as I said earlier today, time reveals all. There will be developments in those markets that depend upon them credibly meeting their own net zero targets. There are also going to be developments like—for example, you mentioned Korea and Japan—the extent to which they adjust in terms of their supply chains and that production of, for example, green iron in Australia changes their emissions profile and energy requirements as well. We will be, and continue to be, a very good reliable energy partner. That's got an economic dimension to it, it's got a security dimension to it and it's got a net zero transition dimension to it.

Senator McDONALD: Terrific. We remain agile. I think that's the modern phrase, isn't it?

Ms Quinn: I can confirm that neither of those two projects are on the current list of major projects under the Major Projects Facilitation Agency.

Senator McDONALD: What's the process for adding a project to the major projects facilitation list?

Ms Quinn: People apply and there's a set of criteria. They're assessed and then we provide advice to the minister, and the minister decides whether to put them on the list. It's open to people to go through the application process, and the agency assists people in that process as well.

Senator McDONALD: As referenced in the same strategy—the Future Gas Strategy—on page 51, the International Energy Agency's stated policy scenario sees Asia-Pacific gas demand increasing by 20 per cent and global LNG demand increasing by 30 per cent in 2050, relative to today's levels. It's not a reduction but an increase. But in this same scenario the Future Gas Strategy suggests Australian LNG exports to the region will decrease by 13 per cent. Why isn't the government—for the reasons that you just outlined, Minister—looking to ramp up Australian LNG production to make the most of this opportunity on our doorstep and to help our regional partners meet their energy security and emissions reductions targets, particularly if they're moving from coal or something else? How do we assist Australian LNG to be the product of choice, as opposed to one of the other competitor nations that you identified?

Senator Ayres: I think the secretary has gone through a bit of a discussion with you about the extent to which approvals for gas projects are a matter for state legislation. These projects will be invested in depending upon the commerciality or otherwise of the project. We are providing as much information as we can to provide the investment community with as much evidence based material and analysis as is possible. They have to make their own decisions about investment in projects like this. It depends upon a lot of issues, not just the ones that I've referred to.

Senator McDONALD: These projects would probably be offshore projects. If the Future Gas Strategy says that Australian LNG exports to the region will decrease by 13 per cent, whereas we have other agencies, like the International Energy Agency, predicting increases, are we not sending a signal to investors and potential buyers that we're not going to be the solution?

Senator Ayres: I don't believe so. It's a projection. It's the best analysis that can be provided by experts. The verifiable evidentiary material that's out there draws upon scenarios, as you've indicated, from the International Energy Agency and others. It provides for a range of possible trajectories in terms of demand and supply. As you've indicated, it doesn't just make projections about global demand. It has a look at the best assessment that can be provided in terms of some of the regional dynamics. It's good information. It'll be used by government as a backdrop to decision-making over time. It's the best piece of work on this issue that I've seen.

Senator McDONALD: This is not political; I'm just flagging that. I'm trying to make sure that we are using the best data that we have—the most current data. I've referenced the International Energy Agency's stated policy scenario with a completely different, quite opposite, outlook to Australia's. I know that ASX listed LNG exporters have different projections to the Future Gas Strategy. As I said, I'm not trying to make this political; I'm just trying to flag that I think we've got this wrong. How do we best send clear messages to our investors—stay here, invest here, Australian jobs, Australian taxes—and satisfy the economic, security and emissions reductions plans for our near neighbours? I won't pursue it with you, Minister, because you're carrying the position, but I would ask whether or not there will be a review of this data so we can go back and have another look at it and go: 'Oops; perhaps that's not right and we actually will have an opportunity for further demand. We don't want it to come from Kuwait; we don't want it to come from the US; we want it to come from us to our near neighbours to assist them.' Will there be a review? How would we address this if we potentially have got it wrong?

Senator Ayres: I'll let officials deal with the question that you've raised. I'd just say that it would be a great surprise to me if the forecasts that individual firms had put together on the basis of their business intelligence were the same as each other, let alone the same as the government's assessment. But I might see if officials have a response to the two different bits of information that Senator McDonald has raised.

Ms Quinn: I was going to point out that action 6 from the government's strategy is about updating the strategy, and it makes clear that the gas strategy is a long-term outlook and that the government is closely monitoring what's happening in the gas transformation. They have tasked us with close monitoring of what's happening. We regularly review the investment outlook, the policy implications and what's happening internationally and domestically. We will continue to do that and to work through the regulatory environments. Others will look through the environmental implications, and we work together to provide whole-of-government policy advice.

I would note that Australia has had a strong international investment regime. The intention, clearly, of the strategy is to continue to support that. In terms of foreign investment, as one of the principles, it says:

Australia is, and will remain, a reliable trading partner for energy, including Liquefied Natural Gas (LNG) and low emission gases.

That's one of the principles that the government has outlined which guides the work of this department. To be clear, we're aware of the different scenarios and aware of the different opportunities, as are companies. It depends on a combination of investment costs, emissions reduction policies, cost to capital and demand. We will keep a close eye on it, and the government's committed to keep updating the strategy as necessary.

Senator McDONALD: I would just caution that future performance is not always based on past performance. As to the investment decisions, I think some of the changes that have been made recently on government interventions and the issues around challenges to approvals—the lack of clarification of those not being passed recently through legislation—mean that we are seeing investors make choices about where to go in the world. Major Australian investors are now investing in the Gulf of Mexico and Alaska, and significant investors are saying they wouldn't invest here again under our current regime. Again, I'm just concerned that we're making our decisions for the future based on how successful we've been in the past, and I'm not sure that that's still the case now. I don't expect you to provide an answer on that, but this worries me enormously when I look at our future cash flow. Did you want to add to that, Mr Lawrence?

Mr Lawrence: I think it's worth saying that the strategy has been well received by our trading partners. We've had conversations with them since it's been released, and they've acknowledged the strategy. As the secretary said, the guiding principle around No. 6—that Australia is and will remain a reliable trading partner—has been well received. The minister is quite clear in her foreword. It says, 'We cannot rely on past investments in gas to get us through the next decades,' so it's a clear statement that we welcome the investment.

I would note that Woodside, with its Scarborough project, has recently signed part-equity deals and offtake agreements with Japanese companies JERA and LNG Japan, and also, I believe, with KOGAS. And I think just last week Santos signed a deal with Hokkaido Gas, which I think goes to the strength of the trust that our trading partners place in Australia as a reliable supplier. As the secretary has also noted, action 6 is to update the strategy regularly to adjust to the changing environment. In our discussions with Japan, we are aware that it's currently developing its seventh industry plan, and that would be one of the reasons to look at its trajectory as it gets out to net zero. We'd factor that into any update to the strategy.

Senator McDONALD: I hope you're right. I just look at those two projects in particular that we've identified. If they don't come online, then we would have to look at other gas, and that would jeopardise some of those commitments. That's a statement, not a question, Mr Lawrence. I won't drag you into that [inaudible]. Minister, earlier, you said that we would move to a demand based system for the release of offshore acreage. I'm trying to understand—

Senator Ayres: That sounds like the kind of expert thing that one of the officials might have said.

Senator McDONALD: Okay. I'll come back to you on that.

Senator Ayres: Thank you.

Senator McDONALD: Secretary, again, why isn't the government looking to ramp up Australian LNG production through things like additional offshore acreage releases. The last release was in 2022, announced in 2021. What is it that we're doing to encourage the release of future opportunities for LNG gas production to make the most out of this opportunity from near neighbours?

Ms Quinn: I draw your attention to action 1, 'preventing gas shortfalls' in the strategy. My colleague Mr Lawrence did take you through some of these. There is a commitment from the government to update the Commonwealth retention lease policy to encourage more timely development of existing gas discoveries and consider a firmer use-it-or-lose-it policy. Then he talked about a reframe of any future Commonwealth offshore acreage releases to focus on optimising existing discoveries and infrastructure in producing basins, prioritising energy security and aligning with net zero. There are a few more there, including one we haven't dealt with in detail, which is the continued investment in the precompetitive geoscientific data. They're some commitments the government has clearly included in its action plan.

Senator McDONALD: Earlier today, we had a discussion about offshore matters. Will the geosciences work happen offshore as well?

Ms Quinn: They can provide more detail. They'll be here shortly.

Senator McDONALD: Okay.

Ms Quinn: But they'll be using existing analysis to bring it together rather than going out and doing seismic testing.

Senator McDONALD: Thank you. This is a quote from page 59: 'The most notable absence in 2050 is ASEAN demand under a more ambitious emissions reduction scenario. This is because of other LNG exporters and local gas production in the region fulfilling demand. However, it remains possible Australian LNG will play a role in ASEAN's energy mix as South-East Asia transitions away from coal.' On what basis does the government assume that LNG demand in Asia will be fulfilled by other LNG exporters and not Australia, given our proximity and existing trade relations?

Ms Ossolinski: Is that page 59 of the strategy document or the analytical report?

Ms Quinn: It's the analytical report.

Ms Ossolinski: In that case, I can proceed. The analytical report uses the IEA trajectories for three different scenarios—the step scenario, the APS scenario and the net zero scenario. Then we—

Senator McDONALD: Could you just say that again?

Ms Ossolinski: Yes, absolutely. We use three scenarios for our estimates of global demand, which underpin our modelling results. Those are the IEA's three scenarios: STEPS, APS and their net zero scenario. We then look at relative costs across countries, including shipping costs and transport factors, to look at how the relative demand will play out. As with all monitoring, there are limitations on that, and there are some factors we cannot model, such as the strength of existing trading relationships. It is an indicative indication of what will happen to demand based on those three IEA scenarios.

Ms Quinn: That page outlines three paragraphs with three different scenarios. In them, the role of Australian LNG is different. It's up, steady or down. Just having read that high-level paragraph from the team, what would be driving those would be the relative cost scenarios based on the assumed actions in relation to net zero. Ultimately, with the type of modelling that the IEA does to do these scenarios, the relative price of production will influence where gas is sourced from. It looks like the swing variable here is the assumed policy impacts in those different countries and the relative costs of the impact that would have on exports or production. It paints the picture that Australia could go up, down or unchanged in ASEAN depending on what they do on their policies.

Senator McDONALD: I'm just caught on this point where we're predicting a decrease by 2050 of 13 per cent, which would indicate that that would confine the strategy to one plan, which is the reduction plan.

Ms Quinn: We have used the different scenarios quite deliberately to highlight that there are different paths forward. There is quite a lot of work that countries need to work through to achieve their net zero transition, and how they are going to do that is going to have an impact on the role of gas. One of the clear outcomes from the analysis though is that, in all of those scenarios, gas is still used and needed, and additional gas sources are required to assist the transition to net zero. That's one of the global outcomes from the analysis and is one of the headline take-outs. The exact amount and where it goes is a function of individual countries' actions and policies, including what they do on their demand side, as well as their supply side.

I wouldn't take the characterisation out of the multiple scenarios analysis to say it doesn't support a future for gas or set out the case for gas being important in a net zero transition. My take-out is the exact opposite. It sets out that there is uncertainty on the scenarios but that there is a role for gas in the transition, both domestically and internationally, thus the headlines of a role for gas until 2050 and beyond.

Senator McDONALD: I understand what you're saying. The Future Gas Strategy has gone with the 'it's going to decrease by 2050,' yet these scenarios are saying, 'It could increase its LNG exports by 2050.' Alright, so there's—

Ms Urquhart: My colleagues and the secretary have outlined the modelling we did on a set of scenarios. In addition to that, we worked with DFAT posts and we engaged with embassies based in Canberra to get a picture of the net zero transition plans of our major partners in relation to LNG and more broadly. I don't know if Mr Lawrence would like to add a bit more to that engagement.

Mr Lawrence: As all my colleagues have said, these are scenarios. The global gas demand outlooks are uncertain because they depend on a range of assumptions about how the energy transition progresses. The IEA's step processes, which are accepted—the three scenarios—are one view of the world. As my colleagues have outlined, we spoke to our trading partners and to the companies, and all of that was factored into that. We continue to talk to Japan and others, and, as I said, the strategy has been well received. Those trading partners all know that their trajectories are uncertain as well, and they are looking at ways to decarbonise their economies. I believe Japan just this week has looked at co-firing coal-fired power stations with ammonia. We've talked about the idea of mixing green hydrogen with CO₂ and creating e-methane that would then be exported as LNG. Those are uncertainties that are factored into this. It might be a different form of LNG that's exported into the future. They're uncertain, so they're not set in stone in the strategy, because you can't model those as actualities yet.

Senator McDONALD: I understand. We've talked about more modern, more manufacturing based economies like Japan and Korea, but of course there are countries like Vietnam and others who are trying to transition to become more sophisticated economies using less coal. Anyway, I guess my point—I don't need to labour the point—is that there's a whole lot of modelling in the Future Gas Strategy. We've elected to go for LNG reduction by 2050, but it's acknowledged in other parts of the paper that there could be more. Is that what you're saying—that this is just a stab in the dark?

Ms Quinn: It is uncertain. Some of those scenarios that suggest more aren't necessarily consistent with the net-zero emission trajectory for the globe, so part of the uncertainty is what the international policy action will be on meeting emission reductions in the rest of the country. I'm sure you've read the press release from the minister. One of the statements that she made is that it's clear that we, meaning Australia, will need to continue exploration, investment and development in the gas sector to support the path to net zero and for our export partners. That's the take-out from the analytical report that the government has drawn.

Senator McDONALD: Minister, do you want to put your foot on the sticky paper? Is it the position of the government that Australian LNG exports will increase or decrease?

Senator Ayres: The extent to which exports increase or decrease will depend on the demand. It's a simple question of economics, geology and technology. The only thing I object to in what I just heard was you suggesting that the document was a stab in the dark. I think that was an unconscious overreach. It is based upon the best available analysis and is a gigantic piece of hard work across government from experts, and it is a very good piece of work. I know that it's like a reverse Rorschach diagram or whatever it's called: people in the coalition see it and they say that they hate it and that it's anti-gas; the Greens political party say that they hate it and that it's pro-gas. We don't claim it's either. We claim that it's a good piece of analytical work that provides a useful outline of the government's approach to these questions but also is helpful for private sector investment and industry to understand what the future direction of these issues will be.

In terms of our relationship with our partners, particularly in the region, they are all on their own net-zero trajectories. All of them have their own net-zero targets. They have different pathways to get there, particularly in South-East Asia. Some of those economies that you referred to have twin transition challenges: a transition in terms of energy and also moving from low- and middle-income economies to middle- and high-income economies. We are there to work with them on that process. There are very significant advantages for Australian industry in all of that.

Senator McDONALD: It's disappointing then that Victorian Labor voted against the Future Gas Strategy at their state conference. Isn't it? They're the very people that have the greatest shortage.

Senator Ayres: I'm one of the few people on earth who pays a lot of attention to what happens at political party conferences, particularly my own political party around the country, and, while I know that's enormously interesting for a limited range of people, I did notice today—and what seems to me to be more significant—that approvals have come through for a significant project in Victoria. The Premier of Victoria was out there today being pretty clear about the Victorian government's approach, and that no doubt sits within the context of the Commonwealth government's Future Gas Strategy.

Senator McDONALD: I think that was a well that was drilled in 2020 or 2021, so, while we welcome any new approvals from Victoria—we get excited about that—it's hardly an overnight success. It was drilled in 2020. I'm now turning to the offshore acreage release process. I'm seeking some specifics about how the department is used to release offshore petroleum acreage, specifically the elements of the process controlled by the department and the elements of the process controlled by the minister. Can you outline the process used to determine what acreage was to be released for bidding?

Ms Quinn: I'm happy to turn to my colleagues for the detail.

Mr Jeremenko: You're right, Senator. There is a role that the department plays and a role that specifically NOPTA, which is the National Offshore Petroleum Titles Administrator, plays in terms of the process. In terms of how it's done, it is a joint piece of work—that Mr Weeks will go into some of the detail on—that provides advice to the joint authority, which is comprised of the relevant federal minister and the state minister depending on where the title is. That's the higher level view of the process. But, in terms of the release of the acreage, it follows a significant consultation, and, in terms of petroleum, there were 10 areas released for bidding in 2022. Bidding closed 2 March 2023 with three bids over three areas. To hook back to what I just said about the higher level process, assessment by NOPTA, the Offshore Petroleum Titles Administrator, has resulted in those bids being with the joint authority, being the two ministers and the respective departments, for a decision which is a matter for government.

Senator McDONALD: What involvement does the minister have in the selection at that point? Walk me through that part, please.

Mr Jeremenko: Mr Weeks, did you want to add? It's at that point that the minister—

Senator McDONALD: Or the joint authority of the two ministers. Is that right?

Mr Jeremenko: Correct.

Mr Weeks: In terms of the things that the minister considers, there are a range of factors. The things that can be considered are national security, maritime boundaries, environmental regulations, commercial interests, proximity to markets, supporting infrastructure, social licence to operate, other marine users and offshore titleholders, and strategic priorities to government.

Senator McDONALD: So the minister considers all of that. I assume you've done a brief with some recommendations, and then the minister signs off on a selection.

Mr Weeks: That's right.

Senator McDONALD: Once the acreage is released, I assume that the offers go back to the minister for a final determination.

Mr Weeks: That's correct.

Senator McDONALD: With regard to tenements within state jurisdictions, do certain releases have to go to—when we said the two ministers, was it the federal and state ministers or two federal ministers that you're referring to?

Mr Weeks: Federal and state or territory.

Senator McDONALD: That's the joint authority as the state or territory minister?

Mr Weeks: That's correct.

Senator McDONALD: What about if they're further offshore? Or do you still consult with the closest jurisdiction minister?

Mr Weeks: All of this acreage release is offshore. Onshore is just for the state.

Senator McDONALD: With one of the Scarborough projects, for the pipeline, they identified that there was a delineation between the state approvals in the water and then the further out federal approvals. I was trying to clarify that, even once you're outside of that state band, you would still refer to the relevant state minister because I guess you've got to get it back onshore somehow.

Mr Weeks: That is correct. We do it as a joint decision-making process.

Senator McDONALD: Sorry to labour that. That's it for that section, but not for the complete section. This is still offshore regulation, but reform. Secretary, how has the industry responded to the removal of the sole mechanism that allowed for NOPSEMA's consultation regulations to be reformed, that first step?

Ms Quinn: I'm happy to pass to my colleague, but I'm not sure the characterisation as the sole mechanism is correct. It was a mechanism.

Senator McDONALD: To clarify that: industry said to me that they believed that was the first step, the clearest action for the consultation clarification and reform to be resolved. So an important gateway first step.

Ms Quinn: It was the government's intention to use the existing legislative process to facilitate the continued streamlining of regulation. But it is not the only opportunity to explore those issues. I will pass to my colleague.

Senator McDONALD: It has been described to me as the best mechanism to commence that. Would that be reasonable?

Ms Quinn: I don't think I would accept that characterisation from a legislative perspective. What is important is to have a mechanism, and the legislative vehicle that it's in is a different thing to the legislative amendment itself, so I'm not sure whether you're talking about the amendment itself versus the vehicle. But I will pass to my colleague who is closer to the technical component.

Mr Jeremenko: What the secretary is saying is correct. Obviously, what the government put forward in that schedule that was removed from the safety bill in the Senate was government policy, and it remains government policy to achieve that outcome. We are obviously looking at different ways that, as we did before that bill was put forward, the same end can be achieved. The main point I'd like to make is that the government remains very much committed to ensuring that streamlining is maintained.

Senator McDONALD: Have any international governments made representations to the department, the minister or her office or the government broadly expressing views on the removal of schedule 2, part 2?

Senator Ayres: We will take it on notice. I think it's a funny line of questioning. That line of questioning should probably start with an apology. If the coalition cared about this issue, the coalition should have voted for the legislation.

Senator McDONALD: We didn't have the opportunity—

Senator Ayres: The coalition should have voted for it.

Senator McDONALD: It was withdrawn in a dirty deal with the Greens.

Senator Ayres: If you—

Senator McDONALD: That's untrue!

Senator Ayres: approached these legislative questions with any seriousness—

CHAIR: Okay.

Senator McDONALD: We did not have the opportunity to vote for it—

CHAIR: Alright.

Senator McDONALD: so that is an unfair characterisation—

Senator Ayres: You can't go around board rooms in Australia sucking up to people, saying that it was the government—

CHAIR: Okay, Minister. I think we're nearly there, Minister.

Senator Ayres: when you should have voted for the legislation.

Senator McDONALD: Didn't have the opportunity.

CHAIR: Senator McDonald. I think we are nearly there.

Senator Ayres: You spent plenty of time wandering around mischaracterising your position.

CHAIR: I think we are nearly there.

Senator Ayres: Take responsibility for your position.

CHAIR: Minister, please. I think we are nearly there and almost ready to move to NOPSEMA, which we are two hours behind for. How are you going, Senator McDonald?

Senator McDONALD: I'm going well. Senator Smith has a couple of questions and then we'll be finished. And I'm not finished with—

CHAIR: Okay. Senator Smith.

Senator DEAN SMITH: Where do I find the Major Projects Facilitation Agency on the organisational chart?

Ms Quinn: It's in the—I'll get the correct title.

Senator DEAN SMITH: We might have to do this on A3 in the future.

Ms Quinn: It's a complex department with lots of boxes.

Senator DEAN SMITH: The font size is very small for an ageing senator.

Ms Quinn: I feel you.

Senator Ayres: Don't let him suck you in by pretending to be feeble!

Ms Quinn: We all wear glasses. It's in the Strategic Capability and Supply Chain's division, so it's part of that organisational structure. It's a component of itself.

Senator DEAN SMITH: How many people work in the agency?

Ms Quinn: It's not a large number, I confess. I haven't got the exact number, but around 10 would be an approximate number. I'm happy to take it on notice and clarify.

Senator DEAN SMITH: That would be great. Outside the department, how do people make contact with the agency?

Ms Quinn: At some point, you're going to go past my areas of expertise. I've certainly seen an email, but there is also a telephone—on the website, you can go through and provide information.

Senator DEAN SMITH: Do you get the opportunity to speak to someone?

Ms Quinn: Yes. The process is you can speak to people, and they provide guidance on how to facilitate projects. The benefit of being made a major project is that you get a dedicated case manager—I think they call them that—or a project manager who then is your point person to facilitate the process between Commonwealth agencies and state agencies. That's its core role.

Senator DEAN SMITH: What is the process pre the appointment of a case manager? The reason I ask is that I was at a stakeholder forum one morning and someone just happened to make a passing comment when they were leaving about how difficult it was to speak to the Major Projects Facilitation Agency. I thought that was a bit curious, which is why I am asking questions here. Is there an email—do you make the agency aware of your project by email? Is there someone you can make an appointment with?

Ms Quinn: I think 'all of the above' is my understanding. Certainly, we've had facilitation as well from other parts of the ecosystem, so there are referrals from state agencies. Austrade has definitely referred people in. I would be happy to take it on notice to provide more information.

Senator DEAN SMITH: Perhaps someone in the Major Projects Facilitation Agency might give the Chamber of Minerals and Energy of Western Australia a call and introduce themselves to the CME? That would be really helpful.

Ms Quinn: We would be happy to; we have regular engagements with them.

Senator McDONALD: Just to clarify, Minister—I appreciate that you may not have been following this as closely as I was—the coalition voted for the legislation in the House when it included schedule 2, part 2. I contacted the minister previously, conveying that. Even after the environment minister made changes to schedule 2, part 2 with amendments that we were uncertain about, we still voted for schedule 2, part 2 as part of that offshore safety legislation. We then wrote to the minister, assuring her of that. It then came to the Senate, and we did not, unfortunately, have the opportunity to vote for it then, because it was guillotined as part of an agreement to pass the PRRT and emission standards without amendment. We have attempted to get that part of the legislation reintroduced in an amendment to the guillotine. We've tried to do that twice. I am not seeking for you to come back now with a political response; I'm just trying to make sure that the record is very correct and very clear on what happened. In QON AI-12—

Senator Ayres: I won't respond. They're just excuses for not voting for the package.

Senator McDONALD: We couldn't because it was guillotined. In QON AI-12, I asked how Minister King intended on delivering on her commitment to bring 'greater certainty and clarity to Australia's offshore resources regulatory frameworks'. The department's response included a specific reference to the enabling amendment to implement recommendations arising from the offshore regulation review. Secretary, since the government has now pulled this amendment, what does the department propose will be the next steps to provide clarity to reforming the regulations?

Ms Quinn: I'll note that the response is the government's response to the question on notice and pass to my colleague who I think answered your question. We are working through options to provide advice to the government on other avenues to provide the regulatory certainty that industry is seeking.

Mr Jeremenko: To clarify, what the government is aiming to do is to make sure that the consultation requirements for offshore approvals are clarified. Part of the bill was the mechanism at the time that the government was trying to use to ensure that, through the streamlining, as has been discussed. To achieve that end, we are looking at other potential avenues, because the government remains committed to clarifying that consultation for both industry and First Nations peoples.

Ms Urquhart: In the meantime, the work on the consultation aspect is well advanced. In January we released a paper. We had a consultation period between January and March and consulted extensively. I think we emailed 550 groups and individuals, hosted 20 in-person meetings and 19 virtual meetings, had a public online information session and got 106 written responses. We're now in the process of, effectively, forming that up into policy reforms. The government has indicated that it will bring back the streamlining piece, and that will enable us to then advance the consultation reforms.

You'll appreciate that that is one piece of quite an extensive array of regulatory work and a key part of the commitment of the Future Gas Strategy. It goes to the discussion we had earlier about what it is that we are doing to enable a good environment for investment and development of LNG and gas for domestic use. I'd highlight that relevant-persons consultation is the front end of a three-year environmental management review. There's also a parallel CCS review and numerous other what you might term 'continuous improvement efforts' across the array of offshore regulations.

Senator McDONALD: I'm trying to remember when that Barossa decision was made. Was it at the end of 2022—October 2022? We're now nearly two years after that, which this consultation piece is supposed to clarify.

Ms Urquhart: The court, at the time, went some way in clarifying industry's understanding of expectations. NOPSEMA then worked on guidance, and now what we're seeking to do is to ensure that in regulation we achieve the best clarity we can for all parties concerned.

Senator McDONALD: I think everybody is looking forward to the introduction of those alternatives so that we can progress. Thank you, Chair. That is the end of my questions for program 1.3.

Ms Quinn: Can I quickly go back to the Major Projects Facilitation Agency.

Senator DEAN SMITH: Yes, please.

Ms Quinn: I've just done a Google search. If you put those four words in, it takes you to a webpage which has got an email address. It also provides a link to an online tool, so people should be able to access through—

Senator DEAN SMITH: I did try that before I asked the questions, and it was a bit of due diligence on my part. I got the impression it was going around and around, and the email address struck me as rather—

Ms Quinn: It goes to an inbox.

Senator DEAN SMITH: Which up to or around 10 people then—

Ms Quinn: Monitor and triage.

Senator DEAN SMITH: But there's not an opportunity to pick up the phone.

Ms Urquhart: There is certainly a reference to CME. As the secretary indicated, we are in regular contact with them and will absolutely—

Senator DEAN SMITH: A Western Australian miner who I won't name was also in their company, but it's on the record now.

Ms Quinn: And I'm sure if they went through to the general telephone number, which is also on the bottom of that page, and asked for them—

Senator DEAN SMITH: So does it go into the agency?

Ms Quinn: It would go into the agency through the switchboard.

Senator Ayres: They probably just worked out that you're unlikely to be a major project, Senator Smith.

Senator DEAN SMITH: It depends on perspective, I think. I do have major projects.

CHAIR: That concludes the questions that we have for this part of outcome 1, program 1.3.

National Offshore Petroleum Safety and Environmental Management Authority

[14:26]

CHAIR: We welcome representatives from NOPSEMA: Ms McCarrey and team. We have your opening statement. I think you'll agree, in the interest of time, we'll take it as read.

Ms McCarrey: I'm happy to table it.

CHAIR: We'll table it now. I'll go straight to questions. Senator McDonald.

Senator McDONALD: I'm sorry if any of your answers are in your opening statement. I just haven't been able to cover it off. Can you provide an update on environment plans accepted in calendar year 2024? How many have been received, and how many are awaiting acceptance please?

Ms McCarrey: I'm happy to provide that update. Since our last appearance here at estimates, NOPSEMA has accepted six environment plans. So we've now accepted 14 in 2024 to date, and in 2023 we accepted 24. The majority of those were in December. I can also let you know that, as of 5 June, we have 34 environment plans currently under assessment.

Senator McDONALD: Terrific. I note that that was in your opening statement, so my apologies. What is the average assessment time for the EPs accepted in 2024?

Ms McCarrey: Our average timeframe for assessment at the moment remains around 12 to 13 months.

Senator McDONALD: Congratulations on holding onto that improvement that we talked about last estimates. How many seismic EPs are currently under assessment?

Ms McCarrey: Good question, Senator. I'll hand over to Mr Grebe, who is madly just checking the system.

Mr Grebe: I might have to come back on notice, if that's okay, in order to determine the answer to that question.

Senator McDONALD: If you could, thank you. Somebody might be able to message you while we're talking. I was also looking to see what the average assessment time for seismic EPs is.

Ms McCarrey: We'd have to come back to you on notice, I think. We've got the average for all EPs, but we'd need to separate it out to have a look at seismic.

Senator McDONALD: Thank you. What is the longest period an EP currently with NOPSEMA for assessment has been waiting?

Ms McCarrey: The longest one at the moment is sitting on around—and it's actually been sitting there for some period of time—

Mr Grebe: I can answer it for you.

Ms McCarrey: Yes, over to you, Mr Grebe.

Mr Grebe: Senator, it's the same seismic survey that I gave evidence on previously. Searcher Seismic is the titleholder, and it's been under assessment for 764 days. Of that time, it's only been with NOPSEMA for assessment for 138 days. The remainder of the time it has been with the titleholder for modification and resubmission, and it continues to be with the titleholder as of today.

Senator McDONALD: When we met last, we had a discussion about the number of times that you send something back to a titleholder. Would you know how many times you have gone back with a question to the titleholder on that proposal?

Mr Grebe: I can get the answer to that. It isn't immediately in front of me, but I can find the answer to that.

Senator McDONALD: You know where I'm going with that.

Mr Grebe: Yes.

Senator McDONALD: While I appreciate your point about how many days it has been with the titleholder, I'm just trying to clarify if you've been able to ascertain your questions upfront or if it's—

Mr Grebe: I understand.

Senator McDONALD: Thank you. You said last estimates that NOPSEMA would be updating two guidelines following the Munkara v Santos NA Barossa Federal Court decision. Have those been updated, and, if so, how have they changed?

Ms McCarrey: Yes, they have. The first one that was updated was our guideline in relation to when an environment plan needs to be revised as per the regulations and resubmitted to NOPSEMA. That was actually updated and uploaded just after we met last time; it would have been early- to mid-March. The other guideline that has been updated is the consultation guideline. There was a small amount that went in there which actually updated what the judge found in the Munkara case around the communal or collective aspect of cultural features and cultural beliefs. So we have updated the guideline in relation to that.

Senator McDONALD: What date did you update that guideline?

Ms McCarrey: I think that finally got updated and put on to the website around three to four weeks ago.

Senator McDONALD: Has there been more clarity for NOPSEMA for its assessments following that decision?

Ms McCarrey: Yes, I think every court case does help somewhat. It certainly provided great clarity around when an environment plan needs to be revised under that part of the regulations, where it needs to be resubmitted to NOPSEMA. So I think that was the key aspect of the case, and it has provided some really good clarity for us in relation to that. But it has also provided some clarity around cultural beliefs and the communally held beliefs of people, which I think was useful as well.

Senator McDONALD: Good. Has NOPSEMA had any contact or correspondence with the Environmental Defenders Office since then?

Ms McCarrey: Not to my notice. Generally, I am aware of it when it comes through because it will often come directly to me, so not that I'm aware of.

Senator McDONALD: Ms McCarrey, do you agree that there needs to be 'greater certainty and clarity for Australia's offshore resources regulatory frameworks'? That was a quote from Minister King.

Ms McCarrey: I think we've actually made statements before here that we welcome the government's review that is having a look at the regulations because some greater clarity not just for companies and for the industry but also for First Nations groups, and those groups being consulted as a part of the process, has been requested. So, yes, we've always welcomed that review.

Senator McDONALD: Last estimates, you said that the regulations would still benefit from changes to clarify some of the remaining ambiguities. Does that remain your view?

Ms McCarrey: Yes. We are working closely with DISR at the moment, and, in fact, it's almost a weekly workshop. We're actually working closely with our counterparts in the policy agency around some proposed changes as a result of the feedback and the consultation that was just outlined in the previous session.

Senator McDONALD: Page 6 of the strategy highlights the principles of the government's approach to the gas sector. It states:

Immediate actions arising from these principles include:

.....

- clarifying consultation requirements for offshore petroleum and greenhouse gas storage activities as part of a broader three year review of the offshore environmental management regime.

Do you believe that a clarification of the consultation requirements is needed to fully implement the principles of the Future Gas Strategy?

Ms McCarrey: The comments, I think, made in the gas strategy actually refer to some clarity; but I think it also talks about more than one review. So, yes, there's some clarification around consultation requirements, but the government has also undertaken policy reviews—and I'll defer to the department to talk about that in detail—around things like CCS, carbon capture and storage. There are a number of policy reviews underway, but they're being led, obviously, by our counterparts in the department.

Senator McDONALD: The Future Gas Strategy states:

... the government will introduce reforms that:

- clarify consultation requirements for offshore petroleum and greenhouse gas storage activities—

I think I've kind of just asked you this: do you agree that this is an important pillar for implementing the government's strategy? Sorry, I think that's a duplication of what I've just asked you.

Ms Quinn: And, just to be clear, Mr Jeremenko confirmed that that was the government's intention, and we are working towards that.

Senator McDONALD: Thank you. Do you agree with the answer provided in QON AI-12, highlighting the importance of the technical amendment in schedule 2, part 2 of the original drafting of the OPGGS safety and other measures bill? Does NOPSEMA believe that there are other ways to deliver these urgently needed reforms?

Ms McCarrey: If I understand your question correctly, it's in relation to the part of the safety and other measures bill that related to our streamlining arrangements. They were not the regulatory changes that are coming out of the review that the department is currently undertaking. They were more around dealing with the streamlining arrangements—and there are other ways to achieve that, and I think that Mr Jeremenko spoke about that earlier.

Senator McDONALD: Has NOPSEMA provided advice on what other ways offshore regulatory reform can be effectively delivered without this amendment?

Ms McCarrey: As I said, with the proposal to update the regulations, which is what would be providing clarity around the consultation requirement—so that would be in the regulations—we've worked very closely with the department. As I said, it has been right from the start of this review. It's almost a weekly workshop that our staff are working closely with the policy agency on that review.

Ms Quinn: It might help to clarify the roles of the department and NOPSEMA. As Ms McCarrey said, the department works closely with the regulator on the regulations in terms of how to change them and how they work in practice, to make sure that they're implementable. The strategy around the legislative components and regulations and how to embed them in the legislation is predominantly the work of the department, working with the legislative drafters and the government solicitors. That's core work for the department in terms of how to include things into a legislative framework. We would talk with NOPSEMA, but it's that technical detail about how to change, what package, what bill—those sorts of things—that's work for us.

Senator McDONALD: I appreciate the point that you've made. But, given that NOPSEMA are at the coalface, so to speak, I'm sure that their lived experience would be critical in explaining what's working and what's not working in the regulations—

Ms Quinn: That's right.

Senator McDONALD: and I'm sure that advice would be welcome.

Ms Quinn: Absolutely—in terms of the content of the regulations. In terms of the best legislative mechanism to deliver various outcomes, we rely on the expertise of the Office of Parliamentary Counsel and legislative drafters.

Senator McDONALD: Ms McCarrey, when did you begin work on these discussions on alternative measures?

Ms McCarrey: It's hard to pinpoint a day. We meet with the department on a regular basis over so many different issues, and we're always updating them on the work that we're doing and on any issues we're finding. So, obviously, from the very original court case, the Tipakalippa case—from that moment on—there have been ongoing conversations with the agency around what is working and where we're finding some gaps. As I said,

we've been working very closely with the department during the process that's underway at the moment, which is being led by them.

Senator McDONALD: Terrific. When did NOPSEMA become aware that schedule 2, part 2 of the bill had been removed from the legislation?

Ms McCarrey: Mr Grebe is more closely aligned with the day-to-day workshops.

Mr Grebe: On the day of, Senator.

Senator McDONALD: Thank you. Ms McCarrey, in a speech to the Australian Energy Producers conference two weeks ago, Minister King said:

I know there is some disappointment in this room about that but I want to be very clear: my disappointment is not for the industry but the community that will remain subject to inadequate and inappropriate consultation requirements, for longer.

Does this mean that the reforms will actually increase the amount of consultation needed for offshore projects?

Ms McCarrey: My understanding is no. The reforms are being put in place to clarify the arrangements for everybody, which then gives clarity to allow companies, particularly those with projects, to plan for the consultation required. I would go on to say that I have not had any conversations with any companies where they have suggested they shouldn't need to undertake that consultation. They think it's incredibly important. It is about some clarity about how that consultation can be undertaken. But also, I think, it's not just for the companies involved. We've had many discussions with First Nations groups and representative bodies who would like some clarification around how the process works too.

Senator McDONALD: Do you think this will increase the burden on projects proceeding within NOPSEMA's framework?

Ms McCarrey: What's being proposed or the change to the bill?

Senator McDONALD: What's being proposed.

Ms McCarrey: At this stage we haven't seen the final proposals, but they will at some stage, I'm sure—I can throw to the department—be put out for public consultation on what's being proposed.

Senator McDONALD: I think we've gone over this with the department. They don't have anything to tell me in this regard, but thank you for the suggestion. Has industry made any representations to NOPSEMA regarding the disappointment with the lack of a pathway to deliver these reforms that everyone has said were so urgently needed?

Ms McCarrey: I've not had any specific conversations, but there are those who have perhaps expressed concern—that they thought it would be going through in the bill. But we have had conversations around the fact that the work is continuing on what may be required to be changed in the regulations, and it's the work to change the regulations which will give greater clarity to the industry and other stakeholders.

Senator McDONALD: Ms McCarrey, last estimates we spoke about NOPSEMA's KPIs and your willingness to reform them. How's that process going?

Ms McCarrey: It's going very well. We've now got our final draft of those KPIs, which is going to our advisory board. So they will be built into our future corporate planning documentation and annual report moving forward.

Senator McDONALD: Well done. How are you reforming NOPSEMA internally to reduce the severe delays to progressing EPs?

Ms McCarrey: We did a lot of work internally—and I think I mentioned this at the last Senate estimates—to first of all ensure that we are filling vacancies that existed within our establishment. The first priority was to make sure that we had filled those positions. Over time, of course, people move on and change, so we have vacancies again, so we're constantly trying to make sure that we continue to have the expertise and the staff available. When we're looking at our budget and issues that we're dealing with within that space we have had a look at ways that we can monitor our expenditure internally, but that has never been with any reduction of regulatory staff whose work it is to undertake these sorts of assessments. I think we mentioned last time that we've also brought in a couple of people who are part of a consultation team, and they very much have the expertise around good procedure and methodology for First Nations consultation.

Senator McDONALD: Terrific.

CHAIR: I'll—

Senator McDONALD: Final question?

CHAIR: Yes, and then I'll share the call.

Senator McDONALD: Thanks, Chair. We had a discussion earlier today about the \$29.7 million allocated across three years to improve environmental and safety outcomes for the resources sector, of which \$20 million was identified as going to NOPSEMA. Given that you've got a cost-recovery mechanism, can you tell me how you're spending that \$20 million—how it has been allocated—and if it means there will be a recouping of that \$20 million for applicants down the road?

Ms McCarrey: I think I mentioned last time that we actually monitor our budget very carefully. The executive team monitor the budget monthly to see how it is tracking. The thing with our cost recovery model at the moment is that it does have a number of fees and levies which are variable. The system that we have internally is a lot of our cost are actually fixed costs. I think I mentioned last time that, with the downturn in the number of environment plans that were actually progressing through, that our revenue coming into the organisation therefore dropped. In the very short term, we ensured that we put some measures in place—as I mentioned before—to manage that internally, without any reduction to regulatory staff, but we then instigated conversations with government as part of the normal budgetary process to ensure our sustainability moving forward in the medium term. So the appropriations are there not for any particular program or target but to ensure that we as a regulator can continue to operate in the way that we do so we continue to have the expertise internally during this medium term, where we've had that slight downturn in revenue coming in. In the longer term, we're actually working closely with the department on a review of our fee and levy framework and the cost recovery model that's in place so that it perhaps is more sustainable in the longer term.

Senator McDONALD: Just to clarify—

CHAIR: Is this a follow up on question?

Senator McDONALD: Yes, on that point. You've seen a downturn in industry levies, I assume, because of a decrease in investment. Do you feel confident that that will return? Or is that review you're doing with the department about reviewing your costs and fixed overheads more a reflection that you're not sure that income will return?

Ms McCarrey: Firstly, I'd say our downturn in revenue for our fees and levies is purely about documentation coming in. It's about the approval of the EPs; it's not necessarily about investment. It's actually about the slowdown in the EP approvals, which we've talked about, because a lot of our revenue are fees and levies are associated with that documentation and those EPs being processed. What we do see is that perhaps there are other options for models. We're in the very early stages of reviewing the framework of our fees and levies and the cost recovery model for NOPSEMA.

CHAIR: I'm aware that there are senators online who would like to ask questions as well. We'll go in ten minute blocks, starting with Senator Pocock, then we will come to those online.

Senator DAVID POCOCK: Thanks for your time this afternoon. I've got some questions about the reported rupture in the pipeline connecting the West Kingfish platform to the Kingfish A platform in the Bass Strait. I was interested if Esso have verified the cause of the pipeline rupture from which the reported sheen emanated on 6 April 2024.

Ms McCarrey: Thank you for your question. It's a good opportunity to clarify that it was not a pipeline rupture that occurred, in relation to the Esso facility. It was a minor release at a pipeline connection, and, yes, they have actually been rectifying that issue. I go through it. At the time of incident 2, the production at the facility had been offline for two weeks. So it was not a facility that was under production. The pipeline contained, at the time, 95 per cent inhibited seawater, and the surface sheen was likely some residual hydrocarbons that were in there. The actual sheen that was in was reported to us, although, it was at such a low level, it was on the borderline of what was reportable but, under their environment plan, they followed their procedures and made sure they reported it. Also, the sheen that existed, particularly on the first day, dissipated very quickly within the water because it was such a low-level incident.

Senator DAVID POCOCK: In terms of it being low level, what was the estimated volume of the release that caused the sheen?

Ms McCarrey: Esso have estimated to us that they see it as being around 10 to 100 litres.

Senator DAVID POCOCK: Have Esso verified the cause of this rupture which was reported?

Ms McCarrey: Yes. I'm probably also going to hand over to Mr Blair, who is very close to the detail on this one. Yes, they have identified the cause, which then allows them to check any other similar connections on any of their other facilities. We will be overseeing that as the regulator.

Senator DAVID POCOCK: Did they provide evidence to back up their claim of the cause of it?

Ms McCarrey: Yes, they do. We go out and have conversations with them to confirm, but I'm also happy to hand over to Mr Blair, who's across a fair bit of the detail.

Mr Blair: The source of the leak was a connector towards the end of the pipeline. So, rather than being in the middle of the pipeline midway between the platforms, is where the platform comes into the equipment that then connects up into the platform itself through the jacket. The piece that is connected is where the pipeline meets the spool, and spool is a generic name for prefabricated pipework. That connector is required when the pipeline is installed, and the pipeline is hauled towards the platform for that final connection on a sled. It locks in and connects and it's that junction which has been leaking. That can be identified from the platform itself, through monitoring the pressure within the pipeline and there was a sheen seen on the surface. Subsequently, an ROV was sent down to make a visual inspection. What Esso had done was put dye into the water, which makes it possible to identify the location of the leak.

Senator DAVID POCOCK: Are you able to provide that evidence to the committee?

Mr Blair: I certainly can, yes.

Senator DAVID POCOCK: Esso reported the deployment of what they called a remotely operated vehicle on Monday 8 April to the ruptured pipeline. I'm interested in the outcome of this deployment? Did they report back on that?

Mr Blair: Yes, they did report on that. There were two deployments because on one occasion there was a failure of the ROV. If I remember rightly it got nibbled by a seal, so they had to send one down on a subsequent day. They reported back with both the visual inspection evidence that they've got for that, which is the location of where the dye is coming out of the leak.

Senator DAVID POCOCK: So they used fluorescent dye and confirmed that it was at the connector?

Mr Blair: That's correct. It was at about 75 metre water depth, which is pretty murky. The fluorescent dye is green in colour and has a UV luminescence to it, which means it's possible to see.

Senator DAVID POCOCK: Do you know when the last corrosion mapping of this pipeline was undertaken with an intelligent pig system?

Mr Blair: I do not know the answer to that.

Ms McCarrey: We'll have to take that on notice.

Senator DAVID POCOCK: Thank you. If that has happened can you provide that information on notice?

Ms McCarrey: Yes, we'll have a look at that on notice and see what we can find.

CHAIR: I believe Senator Whish-Wilson has questions?

Senator WHISH-WILSON: Could I confirm whether Senator Pocock was asking about what was reported in the media around the West Kingfish pipeline rupture?

Senator DAVID POCOCK: Yes, I was.

Senator WHISH-WILSON: I had some similar questions. In terms of the inhibitor water that's used, is it just one type or are there several types, and what's the key chemical composition of the inhibitor water?

Mr Blair: We would have to take the key chemical composition on notice. We have the brand name of what's used and it is a chemical inhibitor which works, if I understand correctly, through anodic protection of the internal steel of the pipeline.

Senator WHISH-WILSON: Could you take that on notice for me? Regarding the research on known safety issues in the marine environment or to marine wildlife and inhibitor water, do we know if it has impacts on marine life if fish and fisheries in the area are exposed to the corrosion inhibitors?

Mr Blair: It depends on the concentration. That product, when undiluted, has some potential impact to the environment if spilled. In this context it's already diluted within the content of the pipeline. When the content of the pipeline escaped to the sea it very rapidly becomes diluted even further, to the effect that the impact of the environment is expected to be minimal.

Senator WHISH-WILSON: 'Expected to be minimal.' A second ago, you mentioned a seal chewing on something, which caught my attention. Are you or the operator required to do any marine fauna interactions or reports at the time of the rupture?

Ms McCarrey: Sorry; is that us as the regulator?

Senator WHISH-WILSON: Yes—you or the company involved, Esso ExxonMobil.

Ms McCarrey: Obviously, under their legislation, Esso was responsible for managing the incident at the time of the incident, but then any follow-up—and that will include any follow-up where they might see any similar connections. I think you heard Mr Blair explain that it actually was not a rupture of a pipeline but a connector at the end of the pipeline.

Senator WHISH-WILSON: I've heard that. But that wasn't my question. To be clear: I just wanted to know if you required them to provide details of any marine fauna interactions around it.

Mr Grebe: There is a requirement to report incidents involving injury or other interactions with marine fauna where there are impacts. In this instance, there were no observations or reports of that. I think Mr Blair's explanation is that the concentrations wouldn't be predicted to cause them either.

Senator WHISH-WILSON: 'Wouldn't be predicted'—but they weren't tested; you're just relying on their predictions of dilution. Do they provide modelling for that kind of thing, or is it just someone on the ground saying there's not much in there? How do you verify that?

Ms McCarrey: Part of their responsibility is obviously to monitor when something like this occurs. That includes monitoring any sea life or ocean life that is around the incident. I think Mr Blair mentioned that they had used ROVs as well. If there were any direct impact on marine life, it would be seen. But there is also modelling there, and it's required as part of titleholders' oil spill response. That modelling is there to be able to predict where any oil spill is likely to be moving. In this particular case, as was mentioned, it was such a minor amount and dissipated so quickly that there wasn't anything there to model and test.

Senator WHISH-WILSON: Did the minister's office get notified about this connector rupture, or was it deemed to be too minor?

Ms McCarrey: Yes, we generally notify the minister's office of any major incident but also if there's any incident that is attracting media attention. That's standard practice.

Senator WHISH-WILSON: Great. Could you take on notice what date you notified the minister's office? On that point about ruptures or what might attract the media's attention: could you confirm to me that a more recent undersea pipeline rupture has been reported to you? This was offshore Esso ExxonMobil rig *Marlin A*?

Ms McCarrey: Mr Blair may have some information on that.

Mr Blair: Yes. Can I clarify: you mentioned a subsea pipeline? I have no knowledge of a subsea pipeline that is leaking. I do, however, have information about a spill from the *Marlin A* platform that occurred on 29 May. Is that the incident you are referring to?

Senator WHISH-WILSON: Yes, possibly. Could you tell us a little bit more about that?

Mr Blair: On 29 May, Esso notified us that they had identified that, at the Marlin platform complex, which, of course, is within the Bass Strait, there had been a release of what is currently estimated to be up to 200 litres of condensate—condensate being the liquid drop-out that occurs from gas production.

Senator WHISH-WILSON: Okay. What was the cause of that pipeline rupture at *Marlin A*?

Mr Blair: Again, it's not a pipeline rupture; it's a line that's on board the platform itself.

Senator WHISH-WILSON: Sorry; could you say that again? Apologies.

Mr Blair: Yes. It's not a pipeline. 'Pipeline' is commonly used as a term for transporting liquids. This is used as a line between equipment or plant on the platform. This particular line was a fuel line. Part of what occurs on that platform is that some of the gas that's produced is tapped off to be used as fuel gas to power the platform. Condensation of that natural gas leads to the natural condensate, which has accumulated in one of those lines, and it has leaked.

Senator WHISH-WILSON: What was the cause of that?

Mr Blair: The underlying cause?

Senator WHISH-WILSON: It might be the underlying cause, yes.

Mr Blair: That's still being investigated, so I'm unaware of the underlying cause. What I do know is that when the leak was identified it was quickly investigated by Esso staff and reported to NOPSEMA and the source of the leak was blocked, by which point actual loss to the environment had already ceased. That was the estimate of 200 litres.

Ms McCarrey: Probably more importantly, that remains under investigation.

Senator WHISH-WILSON: It remains under investigation—no problem. Did you notify the minister's office about that as well? If so, on what date?

Ms McCarrey: I think we actually notified the minister's office on Sunday or Monday.

Senator WHISH-WILSON: And you're confident it was only 200 litres?

Mr Blair: That's the current estimate, and that's the best estimate that we have. That's reported by the facility operators, so we wouldn't have any view as to whether it would be more or less. But that's the best estimate that's available.

Senator WHISH-WILSON: For something like 200 litres, are you required to produce an Australian Marine Oil Spill Centre modelling of where this condensate would have dispersed or been distributed?

Mr Blair: I'm unaware of whether it's a requirement to do that. What I do know is that the nature of the fluid—being condensate—means it would have evaporated off or dispersed very, very quickly, and its maximum extent would be very limited.

Senator WHISH-WILSON: When do you think you'll know about the underlying cause? The reason I'm asking this is that there are other rigs in the area, like the Esso ExxonMobil *Bream A*, being proposed to be repurposed for future carbon capture and storage facilities. I'm interested in why we've now seen two situations in the area and whether you're confident that these structures are being maintained well enough to be safe.

Ms McCarrey: The answer to your first question, about when we'll know the underlying cause, is that it's very hard, as we've discussed here before, to actually predict with an investigation, but that investigation remains ongoing. What we do as part of our wider process, because we have had a number of these incidents occur, is that our inspectors are working very closely with Esso. As a regulator, we probably would do around one inspection a month at the moment with Esso, in order to be monitoring a whole range of activities. But certainly a key part of that has been ongoing maintenance and structural integrity, which is a focus for us right across the industry. So we'll continue to do that.

In order for any equipment or facilities to be reused for a purpose such as CCS, there is a process they need to go through. First of all—and we've discussed this here before—there is an approval process that must be dealt with through the minister and the department. That's not our role. Once that's actually occurred, once again they would have to submit environment plans et cetera, a safety case and WOMPs, if it involves that, in order to demonstrate that they are able to reuse any equipment or facilities for that purpose.

Senator WHISH-WILSON: Okay.

ACTING CHAIR (Senator Bragg): Do you want to ask a last question?

Senator WHISH-WILSON: Yes, if you don't mind. Who was that?

ACTING CHAIR: This is the acting chair, Senator Bragg. Do you remember me from the Senate? We've done lots of things together.

Senator WHISH-WILSON: Yes, I remember you very fondly, Senator Bragg. Here's the last question—I suppose you've probably just answered it. I wanted to ask you what action NOPSEMA is taking to increase regulatory oversight of ExxonMobil's Gippsland infrastructure. But you just mentioned one inspection a month. What would you normally do, if you're doing one a month at the moment?

Ms McCarrey: It depends. It's really hard to answer that. As to what we are focusing on as an organisation at the moment, we've talked before about our focus on decommissioning, but we also, as a regulator, have quite a focus on structural integrity, particularly structural integrity as it relates to ageing infrastructure. But, of course, structural integrity is not just an issue for ageing infrastructure. So it is very much a focus for us.

As a risk based regulator, we actually respond to information that we receive, either through incidents such as this or reports through health and safety representatives, for example, or through unions who notify us. That will give us additional information as to where we focus our time. Certainly, because of the amount of infrastructure that Esso owns in Bass Strait and also the age of that—yes, we have a high regulatory input into that.

Senator WHISH-WILSON: I'll put some more questions to you on notice. Perhaps I could ask one more; you could take it on notice. You mentioned the estimate for *Marlin A* was about 200 litres of condensate. At what volume would it peak your attention? Is there a cut-off? If it were 1,000 litres or 10,000 litres or 20,000 litres—is there something in particular that would trigger you to take immediate action?

Ms McCarrey: Minister—sorry; I did this in our practice session.

Senator WHISH-WILSON: Maybe one day.

Ms McCarrey: My apologies. Senator, Their environment plans actually stipulate when notification needs to occur. Generally, there are lower level incidents. Then above a certain amount—I can come back to you with more detail around the reporting arrangements—it's the titleholders' responsibility to undertake any modelling in a

major incident event, where they need to model in order for them to be able to rectify and address any major oil spill. The two particular examples that we've talked about today are quite minor in the sense that they've dissipated so quickly within the ocean environment. You don't have anything that remains to model once it dissipates very quickly.

ACTING CHAIR: Thanks very much. Senator Thorpe, I believe you're ready to ask some questions. You have the call.

Senator THORPE: I sure am. I want to start with a general question about how NOPSEMA assesses impacts on cultural heritage. The information on your website states that you require proponents to reduce or minimise impacts 'to levels that are acceptable and as low as reasonably practicable'. How does NOPSEMA assess what an acceptable level of impact to cultural heritage is? It relies on the consultation that proponents do themselves. Is that correct?

Ms McCarrey: Yes. The responsibility actually sits with the proponent, the titleholder. As you're aware, they need to undertake the assessment of any impact or risk to the environment. A component of that is ensuring that they consult with a whole range of stakeholders where the environment may be impacted, from fishery organisations to many others. Of course, a key component of that is to actually consult with First Nations people.

A lot of the information that we actually assess is, particularly, on a case-by-case basis because every single project is different. It is different because of the distance from the coastline. It is different because of the activity being undertaken. So each one has to be assessed on a case-by-case basis, but a good part of the information that's actually used is the information that has come in from that stakeholder engagement that the titleholder has done, which must be built into their environment plan. They must then outline in the plan how they're addressing those issues that have been raised by the stakeholders they've consulted with, including First Nations people.

Senator THORPE: Thank you. So is 'acceptable impact' what is acceptable to a minister in Canberra? Is it what's acceptable to a departmental officer in a capital city? Is it what's acceptable to a traditional custodian? If it's acceptable for the ministers and not acceptable for traditional custodians, what happens then? In whose eyes is it meant to be acceptable?

Ms McCarrey: I will pass to Mr Grebe, because Mr Grebe has dealt with this in a great deal of detail over many years. Essentially, we are looking at the impacts on the environment and whether the impacts on the environment are deemed to be acceptable. Certainly, internally at NOPSEMA, that's why we employ a whole lot of people with environmental science backgrounds, a whole range of different backgrounds. I mentioned earlier that we have now brought into the organisation people who have expertise in good methodology for First Nations consultation. So has the title holder undertaken—

Senator THORPE: Are they First Nations people?

Ms McCarrey: No, they're people who have had experience in good consultation methodology with First Nations people, because it certainly would not be our responsibility to actually determine the potential cultural beliefs. That is for the First Nations people to put forward as part of the consultation process. But I will pass over to Mr Grebe, who has spent a lot of time in this area.

Mr Grebe: Thank you for the question, Senator. Perhaps a bit of context first: NOPSEMA makes decisions under the Environment Regulations under the OPGGS framework, and the decision-making authority for approving or refusing to approve environment plans and offshore project proposals is assigned to the chief executive or a delegate. So the minister is involved in decision-making. The definition of 'environment' in our scheme includes cultural features of the environment, in the same way that the EPBC Act does. Through the streamlining arrangements that are in place under the EPBC Act and our regime, we have regard, clearly and predominantly, to the cultural heritage protections that are in place through the EPBC Act and other legislation, including ATSIHPA. Cultural features obviously haven't been traditionally thought by many stakeholders to fall under the banner of environmental impact, but clearly our regulations do include them, and they do include a traditional connection to the environment in the Commonwealth area, such as histories, practices and beliefs. Historically, cultural heritage values have not featured predominantly in environment plans. Most commonly—

Senator THORPE: Could you provide that on notice, because it's a lot of information and taking up a lot of time, and it's kind of skirting around my question. So could you put the rest of that on notice.

Ms McCarrey: We are happy to.

Senator THORPE: It was about what was acceptable, and I think there are two different explanations there. I would like to get on to my next question, so can you please provide the rest of that detail on notice.

Mr Grebe: Certainly, Senator.

CHAIR: Senator Thorpe, I just got back into the room, and I need to take a brief suspension for a private meeting. We'll resume shortly.

Proceedings suspended from 15:12 to 15:16

CHAIR: The committee resumes. We're with NOPSEMA, and Senator Thorpe has the call. Just while you're sorting out your audio there, Senator Thorpe, I'll go to Senator McDonald.

Senator McDONALD: Previously we were talking about NOPSEMA's budget. I didn't check your annual report if your annual budget was in that document.

Ms McCarrey: Our annual report also includes our financial statements, so you can check it there.

Mr Grebe: I have an answer to a question earlier from Senator McDonald about the extended timeframe environment plan. We have gone back to the titleholder requesting further information. The most recent one was on 5 July last year. That's a significant amount of time, and at this point in time the company plans had the environment plan under assessment for so long that under the regulations we would be required to consider another public comment period for that environment plan when it was submitted.

Senator McDONALD: On notice, could you provide me with the dates of first lodgement and go back with requests, response, requests, response and so forth so I have a timeline to understand?

Mr Grebe: I can take that on notice.

CHAIR: Are you back, Senator Thorpe?

Senator THORPE: I hope so.

CHAIR: Yes, you are. Great. Go ahead.

Senator THORPE: When assessing what level of impact is acceptable, does NOPSEMA require proponents to demonstrate that the principles of free, prior and informed consent have been adhered to?

Mr Grebe: The environment regulations as they currently stand require that NOPSEMA only accept an environment plan where it demonstrates that the impacts are to an acceptable level and to ALARP and that the risks are to an acceptable levels of ALARP and a range of other requirements. In relation to the views of third parties and relevant persons, the regulations only require that we provide an appropriate response. There isn't anywhere in the regulations or the policy background that require the consideration of that matter, no.

Senator THORPE: So you don't need free, prior and informed consent from traditional custodians or the people whose land or water it is?

Ms McCarrey: Certainly the law and the regulations don't require that.

Senator THORPE: Wonderful, isn't it? So when assessing whether proponents have met their consultation requirements, how does NOPSEMA ensure that adequate information has been provided to respondents in a culturally appropriate manner so that they can understand the potential impacts on cultural heritage, which is an integral part of the principles of free, prior and informed consent? So how do you make sure it happens, or not?

Mr Grebe: I go to the point you're making about how we assess the consultation and exchange of information. In our assessment process and the regulations it's about a written form of submission. That does present challenges because quite a lot of the consultation that occurs between titleholders and relevant persons and First Nations representative bodies or individuals can be in meetings and discussions in all kinds of locations. Those are generally described in written form. The environment regulations require that the full text of engagement between a titleholder and a relevant person is provided in a submission to us, but it is required to be kept in a confidential and sensitive information part and therefore isn't published with the rest of the environment plan.

Senator THORPE: I refer to the assessment of Woodside's environment plan for the Scarborough and Pluto operations. I note that the consultation information sheets that have been published on these projects by Woodside conveniently do not even mention impacts on the Murujuga cultural heritage. So how can Murujuga custodians or others concerned with these irreversible impacts on ancient cultural heritage be consulted adequately if the information provided does not even disclose what the impacts will be?

Mr Grebe: To clarify, you referred to LNG projects there, Pluto and Scarborough. Both of those gas plants are in state jurisdiction in Western Australia. We don't have jurisdictional responsibility over the operation of those plans or the types of impacts that you were talking to there. I would also say, in relation to fact sheets, they're things that a company chooses to put out. What we focus on when considering assessing environment plans for offshore petroleum is the submission on the offshore petroleum activity and its environmental impacts and risk. Sometimes information such as fact sheets are included, but as I pointed out earlier, a lot of information arises during consultation with relevant persons that's also in the sensitive information part.

Ms McCarrey: But particularly in relation to the issue you raised around the expansion of the Pluto gas plant, that sits with the WA government for approvals.

Senator THORPE: Good old WA Labor government. So Woodside will have to submit EPs through to NOPSEMA. When assessing impacts of these impacts on Murujuga rock art, can you tell us what level of impact NOPSEMA considers will be acceptable? How much ancient rock art has to be destroyed for you consider it unacceptable?

Ms McCarrey: I just clarify that in relation to the Woodside Scarborough project, they have been putting in environment plans as part of that project. The operations EP, which is that final part of that, is at this stage not under assessment, so we're not assessing that particular environment plan. But there will be requirements in the environment plan to look at certain environmental impacts. Mr Grebe can give you more detail.

Mr Grebe: Just to clarify, the environment plans that would come to us are only those that are in Commonwealth waters. They would end at the three nautical mile boundary between state waters and Commonwealth waters.

Senator THORPE: Great. Thank you. Back in 2018 the Department of Environment and Energy heritage division provided official advice that the Murujuga petroglyphs were under threat from industrial emissions and that proposed extension of LNG processing was likely to have a significant impact on the national heritage values of the Dampier Archipelago. I provided to the committee documents on this that were released under FOI. Is NOPSEMA aware of this previous advice?

Ms McCarrey: I would probably just revert back to our comments that the expansion of the LNG facility is a Western Australian government approval so, again, we're not dealing with that. We deal with the projects that are in Commonwealth waters.

Senator THORPE: My question is: are you aware of that advice? Regardless of your jurisdiction, you all talk to one another. Are you aware of the advice?

Ms McCarrey: We read a lot of information, and we also talk to, and meet with, many First Nations groups, including the group up in the Dampier Archipelago. I was actually up there in February, meeting with MAC and having discussions. So we're very aware of their issues and concerns.

Senator THORPE: So you're aware of that advice?

Ms McCarrey: In terms of that specific advice, I've seen what you sent through this morning. Yes, we are aware of the issues and concerns. The Western Australian government has the jurisdiction to do approval of the expansion of the gas plant.

Senator THORPE: Thank you, I'm aware of that as well. So nothing has occurred in the meantime to reduce the impact that was already considered significant six years ago, and the projects that NOPSEMA will be assessing soon will result in even greater pollution on the Burrup than the department was considering at that time. Is that correct?

Mr Grebe: I'll just clarify again that we aren't assessing the impacts from facilities onshore. There are other regulators responsible. Ms McCarrey has already identified the state government.

Senator THORPE: I know that. I know you've got to say what you've got to say, but this is simply yes or no. Six years ago, you said it was considered significant. You're assessing it again. Is it greater now or—

Ms McCarrey: We did not make that statement six years ago that we thought it was significant, and we're not considering that now because we don't consider the expansion of the gas plant. That's not our approval.

Senator THORPE: Do you consider indirect impacts when assessing?

Ms McCarrey: Yes, we do look at indirect impacts from the Scarborough project, and the operations EP for the Scarborough project will need to address those. As I said, that's as yet not been submitted and is not yet under assessment.

Senator THORPE: The WA government's own monitoring program for the Murujuga rock art shows highly elevated acidity levels on the petroglyphs at Murujuga. Are you aware of that?

Ms McCarrey: Yes.

Senator THORPE: With 75 per cent of the rocks being monitored having a surface pH of five, which is 100 times more acid than the neutral pH of seven, is NOPSEMA aware of this monitoring, and does this meet your criteria for an acceptable impact?

Ms McCarrey: We're aware of the monitoring.

Mr Grebe: And, I think, as Ms McCarrey identified earlier, the consideration of indirect consequences of activities is something we would consider. It's on a case-by-case basis, and we don't have a submission to consider for Scarborough operations at this point in time.

Senator THORPE: These are all questions from the people themselves. I'm not making these up out of my office. This is the community that you say that you talk to and that you get all this information from. One of the indirect impacts of the Scarborough project is the construction and operation of the Perdaman urea facility, which will be a hundred per cent dependent on supply of Woodside's gas. Is NOPSEMA aware that the construction of the Perdaman facility has already resulted in the destruction of heritage sites, including sites that were recommended for protection in a report under the ATSIHP Act, even though they'd already been damaged?

Mr Grebe: I want to make a point to clarify that might assist here, given some of your questions earlier. NOPSEMA is in the Department of Industry, Science and Resources portfolio. I think a lot of the questions you're raising relate to DCCEEW—having just mentioned the ATSIHPA, for example, and also the EPBC Act approvals relating to some of the projects you've mentioned, which don't involve NOPSEMA. I'm not trying to avoid answering questions. It's just that they're perhaps not best put to us.

Senator THORPE: Well, I asked DCCEEW about this also. So everyone passes the buck, I suppose, when it comes to free, prior and informed consent of any sort in this country. But are the impacts from the construction of the permanent facility factored into NOPSEMA's assessment of the Scarborough environmental plans?

Mr Grebe: That's something we'd have to consider when we had a submission, and I wouldn't want to speculate on a submission that hadn't yet been made and our assessors had not had time to consider. When we consider environmental impacts under our environment regulations, we have to have regard to EPBC policies and statutory instruments; one of those is the section 527E 'indirect consequences' policy, but that is on a case-by-case basis and we would have regard to that at the time of making an assessment. We would also, obviously, have regard—I think that this might assist—to how those issues and impacts that you're referring to are considered under the regimes and the other regulators and other legislation that are in place to provide those protections. They're not in our regime, but, if we're talking of the theory of 'indirect consequence' impacts and the process, typically we would look towards whether those impacts were being managed appropriately in those regimes that were outside of our jurisdiction.

Senator THORPE: Chair, I've got two questions left. Can I just ask the last two?

CHAIR: Yes, Senator Thorpe.

Senator THORPE: Thank you. How can you claim that your system of assessment results in the protection of Aboriginal heritage when you have actively given approvals for projects that were already leading to desecration of sites at Murujuga and when you did nothing to address those impacts in your assessment? Try me!

Ms McCarrey: I'll start by saying: as a statutory authority, we operate under the legislation and the regulations, first of all, that create us as a statutory authority, but when we undertake any assessments of environment plans we do so against the regulations and the criteria outlined within those regulations, and that's what we use for those assessments—of course, including any of the court cases that have happened that actually give some clarity on and some interpretation of some of those parts of the regulations. So our assessments have changed over time, as those court cases have been there, and certainly there is a much greater, increased focus on titleholders undertaking that consultation with a First Nations group and making sure that they actually address those in their environment plans.

In relation, particularly, to the Scarborough project: the environment plans that we have approved thus far have included things like their seismic survey drilling et cetera. We do not yet have an operations environment plan under assessment, which is where they'll need to address some issues that Mr Grebe outlined around indirect impacts.

Senator THORPE: I've got one final question on this, and then hopefully I will get another round later if there's time. There are Murujuga custodians watching this and listening to the reasoning behind the destruction of country which is a part of who we are as Aboriginal people. We are part of the land; we are part of the water. So, when you come to estimates and you hear the departments coming up with the reasons why they need to destroy your country and everything that you are a part of being, it's very difficult. I hope you understand that. It must be a very difficult position to be in. Given that we have custodians watching all your answers today, rather than hiding it in a report, Minister, please tell the Murujuga custodians directly that their sacred heritage, which is being considered for World Heritage listing—something that we should all be proud of; something that brings this country together to celebrate and acknowledge this beautiful cultural heritage and the fact that we have the oldest

continuing living culture on the planet—is not as important as protecting your donors in the fossil fuel industry and their gas exports?

Senator Ayres: There are two messages from me. One is that it was a good question right up until the end—until the pejorative and entirely baseless proposition was put at the end and that diminished the question. More broadly, I can say that the government is going to approach these questions in the same way that it always has. We will have regard to the law. We will have regard to the rights of traditional owners. Indeed, as we approach future legislative reform in this area, we'd rather strike the balance in a way that requires less litigation and provides more clarity for everybody engaged in the process. That will rely upon the parliament doing its work.

CHAIR: Thank you, Minister; thank you, Senator Thorpe.

Senator THORPE: [Inaudible] Does that mean you don't take donations from mining companies on the side?

Senator Ayres: It just means that the inference that you draw and continue to make in relation to this and a series of other matters are as baseless as they were before.

CHAIR: Thank you very much, Minister; thank you very much, Senator Thorpe. I note that I neglected to have a break a little while ago. Apologies to everyone for that. We will take a 10-minute break and resume at 4.47. The committee is suspended.

Proceedings suspended from 15:37 to 15:47

Geoscience Australia

CHAIR: The committee resumes, and we welcome Dr Johnson and the Geoscience Australia team. Thank you for being with us. Did you have any opening remarks or an opening statement?

Dr Johnson: No, I'm not making an opening statement today.

Senator McDONALD: I'm unsure if it really is Dr Johnson, given he's not wearing a Geoscience tie, something we discuss at every estimates. I'm just checking he's not a substitute!

CHAIR: Continuing your form of being straight in with those incisive comments and questions!

Senator COX: The fact you know that there is a Geoscience tie, Senator McDonald, troubles me!

Senator McDONALD: There are people wearing Geoscience ties further back. I think we should see them modelled.

Ms Quinn: There is also a scarf, for those who don't wear ties.

CHAIR: For the benefit of those watching at home, I'll proceed to Senator Cox.

Senator COX: I'm not going to start with the tie, but thank you, Senator McDonald. This morning, I asked some questions of the department on strategic materials. We've been given some definitions around 'critical minerals' and 'strategic materials', so we know the kinds of resources that are being mapped through the project, the \$561.1 million over 10 years. But I want to ask Geoscience Australia specifically—and I don't know if you know. If you weren't watching this morning—I would have expected you to have been, but anyway. Are there any other resources that might be part of that mapping, like forests or water?

Dr Johnson: It's a holistic program, and the focus is squarely on critical minerals and strategic materials. However, there are three streams of data acquisition: the first I won't dive into, but it's national scale datasets, and that's the broad infrastructure of data that everything else depends on; the second is mineral potential maps of the nation, which include all of the strategic materials and critical minerals; and the third is, when we identify areas of high potential, we will do regional assessments that holistic, and they will cover, again, the full suite of critical minerals but also groundwater, potential for carbon capture and storage and any other commodities that we believe have high potential in that region.

Senator COX: So that did include CCS, did you say?

Dr Johnson: Yes.

Senator COX: I didn't get that answer this morning. What kinds of methodologies will be used in order to get this data? Is it mostly satellite remote imaging?

Dr Johnson: It will be a broad suite of data acquisition types. It will include some satellite imagery; surveys where the data is acquired from aircraft and instruments on aircraft, be they fixed wing or helicopters; and also ground based surveys, from those as basic as geological mapping but also geochemistry. So it will be a full suite of all the tools at our disposal.

Senator COX: That's great. Are you working with any foreign governments to use satellite networks?

Dr Johnson: Insofar as none of the satellite systems are owned by Australia, yes, we are, but, for the other data types, it's all within country.

Senator COX: Can you give me a breakdown on notice, if you don't have it on hand, of how much of this budget allocation will go towards working alongside some of those foreign governments and arrangements?

Dr Johnson: Strictly speaking, as part of the Resourcing Australia's Prosperity program, probably none. It's how you define where the partnership sits. We have clear-cut partnerships with the US but under a different funded program, the Landsat Next program, and existing programs that we do with our Digital Earth Australia program.

Senator COX: So Landsat is a different budget measure; is that correct?

Dr Johnson: That's correct.

Senator COX: From memory, it's about \$440 million?

Dr Johnson: Over 11 years, I believe so—

Senator COX: I've got you all googling, but I'm just using the top of my head because I did have some recent—

Ms Quinn: It's \$448.7 million over 11 years.

Senator COX: So that's a separate measure?

Dr Johnson: That's separate.

Ms Quinn: That's the Landsat Next.

Senator COX: Is that in collaboration with Geoscience?

Dr Johnson: Yes, that's Geoscience Australia collaborating with the United States Geological Survey.

Senator COX: Will the information that's important for land management, in particular, be publicly available?

Dr Johnson: Yes.

Senator COX: Looking at data in different datasets, are there specific breakdowns that you'll be doing to make that a little bit more accessible for First Nations communities, farmers or rangers, or will these datasets be primarily for the use of the mining industry?

Dr Johnson: They are by no means exclusively or even primarily for use by the mining sector. They will certainly be beneficiaries of it but so too will any form of natural resource management. It's all about understanding changes in what you can observe at the land surface over time. One of the key benefits of the techniques we use is that you can view them in time series for the full duration of the satellite archives. That's of the order of 30-plus years of data acquisition, and it's ongoing. So, yes, we are engaged with different First Nations groups and ranger groups. We're just at the starting line, if you will, in that endeavour, but, to expose them to the usefulness, the utility, of these datasets, we want to maintain continuing engagement so that we are delivering the data that we provide in as meaningful a way as possible for the end user. That equally applies to the agriculture sector and a range of sectors. It's for everyone.

Senator COX: Is there then a plan that you have around those specific subgroups? Or is it just—

Dr Johnson: The First Nations groups?

Senator COX: First Nations, agriculture—is there a document you could provide around how you intend to do that? Is there a strategy?

Dr Johnson: We're still on Landsat next, yes?

Senator COX: Yes, that's right.

Dr Johnson: I'll bring my colleague Mrs Rose to the table to speak to that question.

Mrs Rose: That's a fantastic question. We do have an extant satellite imaging program called Digital Earth Australia. One of the end-user segments that we're quite actively engaged with is the agriculture community. In fact, we have a number of engagements, whether that be with government or with small, medium and large industry, to be able to uptake satellite imagery and put it to use for agriculture. By way of example, there is one small-medium business that takes our free and open satellite land imaging and uses it for biomass indicators. They then onsell that to farmers, most recently to Landsat Next, the US government's next-generation satellite land imaging program. We recently held a Landsat value-adders forum in Sydney, where we engaged across industry to understand how they could leverage this new satellite imagery that we'll be receiving from 2030. In our agricultural sector, we have a number of different reports and studies that have been done into it. One was commissioned, I believe, by Geoscience Australia a number of years ago but equally by the earth-observing

community that looks at how satellite land imaging and in particular earth observation can support. There are a number of studies that we'd be happy to take on notice and provide feedback on. But I will go back to my first point, which is that through our extant Digital Earth Australia program we're very actively engaged with the agricultural sector. Necessarily, in advance of this next-generation satellite land imaging, we're also engaging on future opportunities for the agriculture sector. Hopefully that answers your question.

Senator COX: It does. Thank you.

Dr Johnson: In addition, the program will also support coastal zone mapping and management. It will also provide near-real-time bushfire and flood mapping and the mapping of surface water for a range of purposes, principally agriculture but also in the event of firefighting.

Senator COX: Great. I did hear this morning that nothing is off the table, so are we planning to map undersea resources? If so, in how much detail?

Dr Johnson: The offshore component of the Resourcing Australia's Prosperity program is relatively minor; it's less than 10 per cent of the expenditure. We will not be looking for fossil fuel resources. The work will be primarily around mapping the sea floor where appropriate for offshore wind potential, understanding the shape of the sea floor so that project proponents know some of the data for making a wise choice about where they would like to take up that ground, so to speak. Also, it's about utilising existing data on current hydrocarbon fields—anywhere there is data, actually—to understand the potential for carbon capture and storage. There won't be any new data acquisition for that purpose.

Senator COX: Thank you, Dr Johnson. Minister, can I ask a question of government. There's a recent study in energy research and social science that shows that 58 per cent of known critical mineral deposits are located on First Nations land, and they have the right to negotiate. That includes native title, which makes up 79.2 per cent of the critical minerals projects that this government will embark on. Is there any plan to make sure that this mapping work leads not into a rush on First Nations land but towards First Nations people getting some equality and equity in relation to these projects?

Senator Ayres: Certainly what you said is correct. First Nations people have rights and interests in over 78 per cent of the northern Australian landmass, and a very large part of our known critical mineral deposits are there. Sixty per cent of resources projects across Australia operate on land covered by a native title claim or determination. One of the important steps toward achieving the kinds of outcomes that you foreshadowed in your question is of course having a public, known outline of what resources and what capabilities are there, not just in terms of critical minerals but also in terms of water and other resources that are significant. Like all of these things, it provides a significant set of risks in terms of making sure that there is proper consultation but also benefits in terms of making sure that economic benefits are disbursed in a fair and reasonable way, and that is part of the government's approach here.

Regional communities, First Nations communities should share in these benefits. That goes to our approach not just in terms of consultation at the beginning of the value chain when mining projects themselves are established but also of course in the production, processing and value adding of these kinds of products. As we move to what is the biggest transformation in our industry and our economy since the industrial revolution, as we move to decarbonise our economies, there are significant economic opportunities as well—and you have asked questions about this—at the start of the value chain and where the National Reconstruction Fund and the Future Made in Australia agendas sit. There is some careful thinking going on about making sure that First Nations communities and regional communities more broadly benefit from that work.

Senator COX: Also importantly, there is a Closing the Gap target around the return of land and sea country and linking to that. I'm keen to understand the Indigenous data sovereignty principles that Geoscience are hoping to embed across their work, because that's obviously an important conversation.

Ms Quinn: I'll go first. You mentioned the Closing the Gap element and there are strategic priorities there, one of which is about the department and all of its components, including Geoscience, thinking about how we contribute to closing the gap through our ongoing operations; data management is one of those. An Australian government Indigenous data strategy has been worked through across the Public Service to address issues of how to engage with First Nations about data use and storage. That has been a whole-of-government process which would apply to both the department and Geoscience Australia. That process has been accepted in principle by the secretary's board and we are working through implementation plans within the Public Service. That's the overarching umbrella under which individual agencies will respond.

I'm sure you are aware of the First Nations economic empowerment alliance and Peter Yu at the ANU. We are working with that organisation to work through their recent policy proposals which address economic

empowerment and working with that organisation and others in the Public Service to work through the proposals and see what we can do to support both the aim of economic empowerment and the policy options for government to consider. I just wanted to flag those two before you move to Geoscience.

Dr Johnson: Under the Resourcing Australia's Prosperity program one of the changed initiatives that we're going to implement is the establishment of a First Nations advisory board for the program which will bring First Nations representatives and their perspectives into continuous communication with us as we design individual programs. That is an effort to address exactly the cultural concerns that I believe you were alluding to.

I will pass to my colleague Dr Heap to elaborate on the rest of what we're doing relative to First Nations and the Resourcing Australia's Prosperity program.

Dr Heap: In addition to what Dr Johnson was saying about the First Nations advisory board for the program, other additions or augmentations of what we're doing as part of our Exploring for the Future program, which is terminating in June, to move beyond that and bring those into the new program. On the other things we are doing: we have base and reference groups or deep dive reference groups. They're basically groups that will bring together, for each of the 12 deep dives that we will do over the life of the program, representatives from community groups, including First Nations peoples, from where the deep dives will be happening. That is to provide an avenue for listening for us, and also for co-investment and co-design of the programs, and also for us to make sure that whatever products we are producing are going to be useful and fit for purpose for the people—not just for the industry, but also for the communities and for government.

We are also embarking on a cadetship program, where we will offer opportunities for First Nations Australians to come and visit Geoscience Australia, get training and be skilled up in various things that they might want to do. That includes science, data acquisition, sample analysis—whatever it is. There is an opportunity there for them to come and visit us and work with us for capacity building and then hopefully take those skills back onto country and help them with the management of their country.

Senator COX: Dr Heap, are you able to provide more information about the advisory groups on notice?

Dr Heap: Sure.

Senator COX: I'm just curious to make sure that we're not just going to the usual suspects within that. Sometimes, particularly in this sector, we are getting the wrong people speaking for wrong country and we are getting people who are not allowing information to come back into communities. So I would be very interested to know who is on your advisory group and providing advice to such an important area and piece of work that will inform many different things. It's something that, particularly in northern Australia, is a considerably significant issue. It's the reason Senator McDonald and I are working together around food and energy and water security. Most people in this place would really like to hear that we are getting that right and we are bringing the right people to the table to inform that. So thank you.

Dr Heap: We will take that on notice.

Senator COX: Thanks, Chair.

CHAIR: Thank you, Senator Cox. I'll go to you, Senator McDonald.

Senator McDONALD: Thank you. Best time of the day: Geosciences. Sorry about my crack about your being undercover without your Geosciences title, Dr Johnson.

Dr Johnson: I expect that every time now, Senator!

Senator McDONALD: Exactly! I would be unpredictable if I didn't do it, wouldn't I?

I want to ask questions further to what Senator Cox has been speaking about. Of the \$566.1 million for the Resourcing Australia's Prosperity program, is that going all to Geosciences?

Dr Johnson: Yes, it is.

Senator McDONALD: Terrific. Sometimes we have found a little bit has gone off here or there or whatever, so that is good news. Are there any ASL associated with this program, or will you use existing staff?

Dr Johnson: It's predominantly existing staff, but there will be some additional. For specifics, I will go to my colleague Dr Heap.

Dr Heap: There is some additional ASL that will be associated with the program. It starts off at a relatively low level and then ramps up to the full amount over a five-year period. After the five years, there will be an additional 33 ASL above and beyond what we're currently putting into our existing staff.

Senator McDONALD: Could we get a yearly breakdown of that ASL increase, and could I also ask for a medium-term funding profile past the forwards, please.

Dr Heap: Yes, definitely. I'll take that on notice. I can give you the yearly breakdown of ASL now, if you like.

Senator McDONALD: Let's do that and then take on notice the funding profile.

Dr Heap: Sure. For the financial year 2024-25, there's an additional nine ASL. For the 2025-26 financial year, there are an additional two, and for the following financial year there are an additional 13. The year after that there's an additional one, and the year after that there are an additional eight.

Senator McDONALD: Terrific. Yes, that is 33.

Dr Johnson: The headline number, as listed in the PBS, is to an extent misleading because there was a terminating measure in Exploring for the Future, and so the folks whose salaries were drawn from Exploring for the Future will now be funded from Resourcing Australia's Prosperity, so there's an offset there. It's not an increase of 150, as the PBS would indicate.

Senator McDONALD: I understand. Can you give me the total ASL for Geoscience—the people who were previously funded under Exploring for the Future plus the additional—for each of those years.

Dr Heap: It's 91 plus an additional 33.

Senator McDONALD: Right. I understand. I'll turn to the \$111.8 million per year from 2034-35 to 2058-59. How will that funding and the delivery of the program differ from the first \$566.8 million over 10 years?

Dr Heap: In putting together the program, obviously we were working with inflationary pressure in terms of the costings out to the end of the program. So it'll change year on year, depending on the activity. Some years it'll be a bit less than \$111 million, and other years it'll be a bit higher. We also factored into the equation the additional costs of doing business—for instance, doing drilling or an electromagnetic survey will be more expensive into the future. So it's hard to give you a year-by-year account or even a decade-by-decade account because it'll depend on the amount of work that we do each year, and we haven't done the detailed planning out that far yet. We've done planning obviously for the next 12 months, over the forwards and probably out to 10 years, so we've got a good indication of what that profile looks like. Beyond that, it's a little bit more rubbery, if I may say, because of those factors of inflationary cost pressures for doing business. But, also, we haven't done the detailed planning beyond the 10 years to really understand where we're going to sit.

Senator McDONALD: I think that's very sensible. So you've worked in an inflationary number, and hopefully you don't have to go back to Treasury and ask them to look at it again.

Ms Quinn: It is a significant adjustment to the profile for Geoscience Australia, whereby they're being funded for this program out to 35 years. It's quite uncommon.

Senator McDONALD: How long has Geoscience already been funded for? How long have you been going?

Dr Johnson: As an organisation, we've been extant since 2001, but our predecessor organisations go back to 1946, on the resources side, and 1911, on the surveying side.

Senator McDONALD: So it's not a new idea.

Ms Quinn: No, but new programs are not normally funded beyond the forwards or slightly longer. This is a 35-year funding profile.

Dr Johnson: That is a fundamental change insofar as previously we've always had to optimise our resources related programs over a four-year period. This enables us to plan far longer term and stream things more sensibly because we've got that certainty of funding.

Senator McDONALD: Did you ever feel uncertain? Did you think that the government was going to cut geological surveys?

Dr Johnson: We've always enjoyed the feeling of having bipartisan support. But, as a CEO, I believe the numbers written on the page, and sustainability for the organisation is one of my key metrics, so this is an extraordinarily helpful development.

Senator McDONALD: Terrific. I'll just turn back to the annual figures. Did you say that you have the medium-term numbers available?

Dr Heap: Yes, we've got them for probably the next 10 years—that we can be reliably confident of because we've done the planning. Beyond that, it would be a little more rubbery.

Senator McDONALD: I understand. Can you provide those to me this evening?

Dr Heap: Yes, we can do that and take it on notice.

Senator McDONALD: Thank you. That increase of 33 by year is quite a specific number. Do you have any breakdown of the associated ASL across the later period from 2034-35 to 2058-59?

Dr Heap: It flatlines. It's 124 from year 5 through to year 2035.

Senator McDONALD: Thank you. If we assume a spend of approximately \$56 million per year for the first 10 years, it then doubles to \$111 million for the remaining 25 years. You're saying that for the first few years you'll have a buffer for inflation, and do we think that's going to run out by the end of—

Dr Heap: No, I'm sorry if I misled you. For the first few years we're confident of what the costs are. Beyond that, we've built in an inflationary factor of about five per cent per year out from year 10 through till 2035. What I'm saying is that we're quite confident about what the costs are for the first 10 years, but beyond that it's a bit more difficult to go on a year-by-year basis. We do have estimates of what that looks like, but it will really depend on the detailed planning we do over the next few years to work out what we do in those out years, in terms of the activities that we're going to do over that time period.

Senator McDONALD: Sure. Whilst I applaud clawing money from the cold, hard hands of Treasury, you do double it straight off.

Dr Robinson: We're applying an inflationary figure of five per cent year on year. To give you an idea of how that rolls out over a 35-year program, \$1 million today will be \$1.6 million in 10 years time and \$5.5 million in 35 years because of how inflation compounds. For example, our first year of the program has a budget of \$37.1 million. By the time we get to the 35th year of the program, with that compounding five per cent inflation that comes out at \$204 million. They're effectively the same activities, but it's 35 years of five per cent inflation.

Senator McDONALD: Okay. For the \$566.1 million, we're going to split out the ASL and ASL costs, and then for the \$111.8 million we're doing the same. Sorry, did you just say \$36 million per year?

Dr Robinson: It's \$37.1 million for the budget of the first year of program.

Senator McDONALD: Which program?

Dr Robinson: The Resourcing Australia's Prosperity program.

Senator McDONALD: That's the one you're splitting out for me, in terms of what's ASL and what are activities.

Dr Robinson: That's correct, yes.

Senator McDONALD: Okay. Are you expecting that mapping the entirety of Australia will take 35 years in its entirety, or is this just a good start?

Dr Heap: No, the goal is to map the entire country, as stated in the announcements about it. We've got a great track record of doing this sort of work, and we've got a good handle on how long it takes to do the certain things we need to do under the program. If you add all those things together, it'll take about 35 years.

Senator McDONALD: How are you going with land access in order to get access to property? Are you ending up with patchwork or with quite a smooth regime of discovery?

Dr Heap: We've been pretty good with land access up until now. We've obviously spent a lot of time and effort on consultation and community engagement. As part of the Exploring for the Future program we engaged with over 26,000 individual stakeholders. We take that very seriously. We want to move to a partnership model with the community groups and the landholders so that we can facilitate land assets but also make sure that we're providing information that they can utilise later. We think that model works. Of course, as part of the new program, we we'll do more of that, but we'll also look to augment it so that we make sure that we're doing the right thing and getting access to the ground. It will be, at some point, necessarily a patchwork. We're clearly not going to be doing work in urban areas and national parks, but we have very good people back in our office who can fill the gap, so to speak, when it comes to the knowledge for those areas, if we have to, or we'll just excise them from the maps.

Senator McDONALD: I was fascinated when I went out on site at Nolans Bore, Arafura, and they were explaining that they made the discovery by overlapping the work of the groundwater agency—which I've just misnamed a bit—and geosciences. It was the interaction of the water and the resources that identified to them that there was something special in that location. I thought that was fascinating. In this program, you're going to do more about groundwater mapping?

Dr Heap: Correct. Yes, definitely. The idea, after the 35 years, is to map all of our groundwater systems across the entire country.

Senator McDONALD: How will you intersect with the office of groundwater?

Dr Robinson: That's the Office of Groundwater Impact Assessment?

Senator McDONALD: That's it. Thank you.

Dr Robinson: They're also known as OGIA. Their remit is a subsection of the Surat Basin, particularly where the coal seam gas is most—

Senator McDONALD: It's a Queensland government agency, sorry.

Dr Robinson: Yes. However, having said that, we do have a very close relationship with OGIA. A couple of years ago, we delivered a detailed program on the Great Artesian Basin. The Great Artesian Basin includes the Surat, and OGIA were a partner in that delivery and a part of our project steering committee.

Senator McDONALD: That is terrific. If we go back to some of the specific programs, some of which you've already discussed with Senator Cox, are there any specific resources or minerals excluded from this program? Or is it that whatever you find, you map?

Dr Heap: The plan, Senator, is to get a full picture of the resource potential for the geographical area or geological province as part what I mentioned before, the deep dive studies that we do. Clearly, the amount of work we do on each of those commodities might be slightly different depending on what sort of data we get to. The targeting of particular commodities is to be as fulsome as possible, and, as Dr Johnson said earlier, it's the critical minerals and strategic materials that will be the main criteria by which we choose those areas.

Dr Johnson: I'll supplement that answer. Andrew was referring to the deep dive areas, which are where we will do holistic assessments of whatever resource potential is there. We will do national mineral potential assessments, specifically, for the 31 critical minerals and five strategic materials. At the national scale, we won't be targeting other commodities in terms of potential.

Senator McDONALD: Not targeting them but, obviously, if you discover them, you discover them.

Dr Johnson: Absolutely.

Senator McDONALD: I'm fascinated by copper in particular. It's not a critical mineral, but it is in huge worldwide demand, and it is on so many of our trading partners' lists. You're going to come across more copper as you do critical minerals regions like the North West Minerals Province, or places like that. I can remain optimistic that there's more copper in the future.

Dr Johnson: Indeed, and we will be specifically targeting copper because it's on the strategic materials list.

Senator McDONALD: Terrific. Were you going to add something, Mr Robinson—something that I will be fascinated by?

Dr Robinson: Sure, but I think the CEO has covered it. The way we will target many of the critical minerals is by actually looking for the mineral systems that generate them. Often those mineral systems will be generating multiple minerals at the same time. We fully expect to get a very comprehensive understanding of a large suite of minerals by targeting our focus at looking for critical minerals.

Senator McDONALD: Did you see the article recently about Utah, where they've discovered the amount of critical minerals, particularly in depleted coalmines? They seem to be talking about some minerals in tailings and in the stockpiles, but they are also in the surrounding ore body, which I thought was fascinating.

Dr Robinson: I have seen that article and many like it.

Senator McDONALD: Anyway, I won't get into that detail. I'll ask you about that another time. I thought it was very interesting that this is an ore body that we weren't looking for critical minerals in, particularly if in the geological demonstration, where coal is formed, there's some link to where these other minerals are found.

Dr Johnson: You've hit on a key point. A lot of what we do is really focused on understanding the process by which a given concentration of a mineral or some commodity was focused. But that same process will always have implications for other things that were mobile in the same fluids or magma. We are always on the lookout for those.

Senator McDONALD: Previously, before you arrived, we were talking about the offshore component of the summary of the program. I think where we got to, Ms Quinn, was that there wouldn't be seismic activity, it would be—

Witness interjecting—

Senator McDONALD: But there will be seismic work done for offshore wind farms in those regions.

Dr Johnson: It won't be seismic work; it'll be mapping the bathymetry—basically the elevation of the sea floor. It essentially uses sonar, which, again, is vibrations through water but nowhere near as strong as seismic.

Senator McDONALD: Once those projects have to go ahead, they'll have to do their own seismic for anchoring to the sea or whatever way they're going to manage their—

Dr Johnson: It'll probably be a technique called sub-bottom profiling, but, again, it's analogous to seismic but not as intense.

Senator McDONALD: You've already been through what exploration methods you'll use onshore: satellites, aircraft, ground based and geochemical.

Dr Johnson: Yes.

Senator McDONALD: I had a terrific meeting with a group in Cairns the other day who are using some new technology which you will be aware of but I wasn't. I've just reminded myself to put them in touch with you about using the 'smoke rather than the fire' discovery, particularly in old riverbeds and that sort of thing. I'm sure you're all across it.

Dr Johnson: I look forward to talking with them. I just realised one notable omission from the suite of techniques. When we get further down the track we will do some stratigraphic drilling.

Senator McDONALD: How do you intersect with existing core samples that are scattered in core libraries and whatnot across the country?

Dr Johnson: We will always seek to know what has been drilled prior and access the core or the data as we plan our programs. We don't like to spend any funds until we've got the totality of the existing information and integrated that.

Senator McDONALD: And digitising all of those existing pieces of material?

Dr Johnson: Ideally, yes.

Senator McDONALD: What is the difference between this program and the Exploring for the Future program—apart from its length, obviously? Are the fundamentals the same, or am I missing something?

Dr Johnson: I'll start off and then hand to my colleagues. The fundamentals are the same. It's actually built on the success and the successful methodologies of Exploring for the Future and the impact that that program has had. The planning for the new program is actually based on our process understanding of putting the Exploring for the Future program together. Because it had a successful eight years—two lots of four years of funding—we've got into a pattern of working, but I think at that point I'll hand over my colleagues to expand.

Dr Heap: There are a variety of differences. We canvassed with Senator Cox some of the governance arrangements around the program, which are to make sure that we're delivering fit-for-purpose data to the widest possible range of stakeholders. There are a number of other pivots that we've done as part of the Exploring for the Future program. In the last few years we've pivoted to make sure we're looking at multi-commodity assessments—which are those deep dives—to get a fuller understanding of what the resource potential is. That's pretty new for us, because we haven't traditionally targeted critical minerals as part of the program. For the new program, Resourcing Australia's Prosperity, that will be a key component to it. So that's a big difference. Making sure we fully integrate the groundwater component into the resource assessment is something new, as well, and it's definitely needed. We're seeing other countries around the world doing that sort of work. We're definitely looking at not just a rebadge but actually an accelerated and expanded program under the new funding.

Dr Johnson: One of the commodities we've neglected to mention is that there will be a focus on hydrogen and hydrogen storage potential as well.

Senator McDONALD: Gold hydrogen—is that what you're looking for?

Dr Johnson: Probably mostly green and natural.

Dr Heap: Gold and green.

Senator McDONALD: Gold is the one. I love the rainbow of hydrogens.

Dr Johnson: I can't keep up with them. I confess to not knowing what gold was.

Senator McDONALD: That's natural, I understand, but correct me if I'm wrong. I note the very detailed Deloitte Access Economics report on the benefits that Exploring for the Future has brought both to the resources sector and to the Australian economy. Will there be an update to this report after the completion of the current round of Exploring for the Future?

Dr Heap: No, we're not planning to do another return-on-investment study for the Exploring for the Future program. There will be a summary report that comes out of the program that goes to the benefits but not necessarily a return-on-investment analysis.

Senator McDONALD: Why wouldn't you take the opportunity to keep measuring these things? The measures encourage government to give you money.

Dr Heap: Exactly. We will be doing more return-on-investment studies as part of the new program, but for Exploring for the Future we've called it, because it ends at the end of this month. Then we'll do more of that sort of work as we move into the next phase of our expanded program.

Senator McDONALD: I'm disappointed, I have to tell you, because I thought there was going to be another iteration. I'm sorry, Dr Robinson; I've cut you off.

Dr Robinson: I'll add to Dr Heap's answer. We will continue to monitor tenement uptake, which is one of the key indicators that industry is moving off the back of some of our data releases. Often they'll be using data that's released from the EFTF program or perhaps even some data we've released earlier. As new products come on board, I expect them to be using the latest products as well.

Dr Heap: I didn't mean to say we weren't going to measure the success of the program. It was just the return on investment—that particular style of study. We'll move to other measures of success. We will do a return-on-investment study, maybe after a few years, of the new program.

Senator McDONALD: I think those measures are really valuable in continuing to demonstrate why this is important. I'm fascinated by the tenement uptake report. Is that something that you release publicly?

Dr Heap: Yes, we do. That information does come out, not as an official report, but we can provide the statistics. We collect them relatively routinely. We have a business intelligence function—for want of a better term—that talks to industry, canvasses all of the ASX reports and looks at where the industry activity has been essentially based upon the work that we do. We use that for our planning purposes, but we also use it as a measure of success for the program.

Senator McDONALD: This is hiding your light under a bushel. You should be telling people about this. If you'd send me some, that would be terrific. I'm sure the minister won't mind that kind of data being distributed—the tenement uptake data?

Senator Ayres: It's a matter for the officials.

Dr Heap: Yes, we can provide that.

Senator McDONALD: Has a cost-benefit analysis been completed on the Resourcing Australia's Prosperity program?

Dr Robinson: No, I'm not aware of it.

Senator McDONALD: Is one expected? When might it be completed?

Dr Heap: It wasn't part of our original planning, but we'll take it on notice and consider that.

Dr Robinson: Could I clarify? The return-on-investment product that we just talked about is largely a cost-benefit analysis.

Senator McDONALD: What I was looking for was an expansion of that Deloitte Access Economics report on the benefits of the previous program and whether or not you'd utilised some modelling of that to model the Exploring for the Future program.

Dr Robinson: Oh, I see. I think Dr Heap has said that we almost certainly would revisit that kind of analysis, but probably a little bit down the track, after we've released some of the Resourcing Australia's Prosperity products.

Ms Quinn: I'd just note that the focus on evaluation of programs will require programs to have that sort of evaluation analysis as a matter of default.

Senator McDONALD: Terrific. Do you think it might be sooner than a couple of years?

Ms Quinn: The team can have a look, but all the new policy proposals considered by government have to have a plan for evaluation and set that out as part of the program implementation. When and how to do that evaluation will be different for each program, but each program has to have an evaluation plan.

Senator McDONALD: It sounds like that would be sooner rather than later so that it fits within the government's requirements for evaluation.

Ms Quinn: It depends. This is a long-term program, so there would be a series of evaluations, I'd imagine. But perhaps the team could take the timing on notice.

Senator McDONALD: Thank you. Will Geoscience publish or commission any reports similar to the Deloitte Access Economics report on the Resourcing Australia's Prosperity program.

Dr Robinson: We've committed that we will look at that kind of study again.

Senator McDONALD: Yes. I think you've answered that.

Dr Robinson: The only additional thing I can add is that to a large extent the return on investment that was calculated by Deloitte was based on the volume of data that we had available. So, as a rule of thumb, we would certainly expect—and the program is designed that way as we move into more areas and provide more higher-detailed data, particularly in those deep dives—that we're targeting similar industry take-ups, and we expect those numbers to grow, for that return on investment to grow.

Senator McDONALD: Terrific. Turning back to the future modelling, you said you used a five per cent inflation rate. I hope you're wrong, but where did you get that from? Was that from Treasury? Did they give you that number?

Dr Robinson: I should clarify that. In the Finance process there are some inflationary figures that are locked, and there are some others where we can choose. The application of the five per cent is an estimate. Of course, it would be very nice to be wrong. But if we look at the life of the Exploring for the Future program, that is not a bad estimate, particularly given that some expenses have grown significantly more than at a five per cent annual rate over that time.

Senator McDONALD: That's more recent, though, isn't it? You wouldn't expect that sort of increase every year normally?

Dr Robinson: Well, we are very susceptible to fluctuations in fuel prices, for example, given the large expanse of the country that we're covering, and also we ran through COVID. So yes, there were some unique circumstances through the Exploring for the Future program.

Ms Quinn: I might add that, while the RBA is targeting inflation of 2½ per cent on average over time, that is entirely consistent with some subcomponents of the economy running at five and others running at one, because it's 2½ per cent on average over time. So, it is the case that some components of the economy always operate at a higher inflation rate.

Senator McDONALD: Okay. Well, bad news that you're in a sub-basket that's very expensive. Can you describe Geoscience's approach to land access, which we started to talk about, and engagement in exploration in the existing Exploring for the Future program? For example, is compensation provided to landholders?

Dr Heap: I'll start and then perhaps hand over to Dr Robinson. We operate on the principle of free, prior and informed consent for land access. As I said previously, we take that very seriously, and we try to give as much notice to people we've been engaged with on the ground about wanting to access their ground and for what reasons and to provide as much information as possible in a non-technical way to get across what we're doing and why it's important. We've spent quite a bit of time in that regard getting that preparation work done first that will allow us to move into the next phase of data acquisition. I will ask my colleague to talk about compensation.

Dr Robinson: Generally we don't seek to provide compensation for the land access, but what we will do is work with the landholder around the access itself. In particular, in some circumstances, if we need to do things like grade roads or strengthen overpasses over waterways and things like that to get the equipment in, it becomes part of our responsibility to make sure we can do that but then also to make sure that we're rehabilitating the site afterwards.

The other thing that is tangential to your question is that, when we're working with First Nations communities, we will often look to engage cultural heritage monitors for the work that we do. And, wherever possible, we're looking to employ people in the local community as part of the activity.

Senator McDONALD: I'm hearing from graziers, particularly in highly prospective regions, that they have a level of land access agreement fatigue because those exploration leases are changing hands frequently—being traded—and each one requires a new agreement, and geologists may or may not turn up. I give you the feedback that the more prospective the region, the less enthusiastic, perhaps, the landholders will be to talk.

Dr Robinson: Thank you.

Senator McDONALD: But, hopefully, that means there's more data available, too, from existing operators. So you're not having any problems with gaining access to certain areas in the field; that's going smoothly?

Dr Heap: In general, no. Of course, there are a variety of responses that we get when we talk to landholders about what we want to do. But, as I said, we try to go to a pathway where we explain in non-technical terms what we're trying to do to see if they're comfortable with things. Where we have encountered some resistance—it depends also on what you're going in there for. Water seems to be okay in most cases, but then there might be differing opinions on minerals or energy development. If we say we're doing science, that tends to be more readily

accepted. On occasion, when we have, perhaps, had an opportunity to talk to a landholder or traditional custodian group about things and they've not been very comfortable with it, either we've then pivoted the program to make sure they are comfortable or we've had to go to a different place.

Senator McDONALD: Specifically up on the Atherton Tablelands and out past Mareeba, Croydon and Georgetown, it's my understanding that the fossicking community in particular doesn't like people coming on, and, yes, you've experienced that. Terrific.

Geoscience Australia, do you expect similar issues with the rollout of the Resourcing Australia's Prosperity program? Again, regarding issues of access, whether it be for native-title holders or landholders when undertaking exploration work, do you think it'll be a flatline of similar issues?

Dr Heap: Again, it's hard to say. It's usually on a case-by-case basis when you talk to local communities about what you want to do. We're spending a lot of time and effort communicating what we do, the benefits of what we do and why it's important to the nation and also to local communities. Through the Exploring for the Future program we've put a variety of resources into educational materials. We have a mobile laboratory that goes out to various country shows and things like that to demonstrate the importance of what—

Senator McDONALD: Really?

Dr Heap: Yes.

Senator McDONALD: Is that new?

Dr Heap: In the last couple of years of the program.

Senator McDONALD: Very cool!

Dr Heap: We do what we can to make people comfortable about what we're doing. We operate on full transparency and disclosure. For us, it's about building that trust and relationship, and we're trying to move the dial so it's not just about us coming onto the land—getting access, doing our thing and going away. We're spending a lot of time also following up with community groups and with landholders about what we've found on their land, what it means for them, how they might be able to use it and why it might be beneficial for them and also the country.

Senator McDONALD: What about school groups when you do that—will you go and see the local schools in communities?

Dr Heap: Yes; we have two examples of where we've had demonstrations of what groundwater is, how groundwater's formed and how groundwater comes to the surface and how you utilise it. We did that at two schools in Bourke and Wilcannia.

Senator McDONALD: Terrific. I'd love to see you do it, if I could suggest it, in highly prospective regions where the kids are used to seeing a lot of activity in their town but perhaps don't know how to engage or how that might be a career for them, and in the mining space as well.

Dr Heap: I'm very happy to do that.

Senator McDONALD: Terrific. When Geoscience gets all of this geoscientific data, once you've collected it, how do you interpret it? I'll give you a heads up: I'm going to ask about AI.

Dr Heap: To put it simply, we get as many datasets together as we possibly can and we do use sophisticated software. We are dabbling in AI a little bit. We have started a process with that, particularly in modelling the different types of geological units between the datasets that we have. To come to the point of your question, we are trying to be as sophisticated as possible when analysing the data and value-adding. As I said, we have a great team of people who are up with the latest developments in quantitative geoscience—that's what we call it—which is using those types of techniques and applications. It is something we are doing in trying to keep ahead of the game.

Senator McDONALD: Just going back to your point earlier about predictability of where different minerals occur, it would make sense that AI would start to be able to map and predict.

Dr Heap: We're definitely in the early stages of that. We also have international collaborators that we work with. Some like-minded countries are doing similar sorts of things, so we're definitely benefiting from their experiences and they're benefiting from what we've learnt as well.

Senator McDONALD: Who do you think is world-leading in this space—after Australia, of course.

Dr Heap: Of course, Senator! If you look at it in terms of the applications of the resources sector and style of work we're doing, there is definitely some world-leading expertise coming out of Canada. They are definitely

leading the way in using artificial intelligence to mine their datasets, but also value-add in interpreting them to understand what the resource potential might look like.

Senator McDONALD: I'm hearing a lot of noise out of South America, particular Ecuador and Brazil, around rare-earth discoveries. Do you think they're doing anything unique that we could learn from?

Dr Heap: Personally, I'm not aware of those, but I'm happy to take it on notice to have a look and see what they're doing. I'm sure there are experts in our organisation who would be more au fait with what they're doing there.

Senator McDONALD: Terrific. We've covered a bit of country this evening. The fundamentals are that we're doing a lot more spending on geosciences in exploration, extending the period of commitment, so that will allow you more coverage of Australia in a faster time with not very many more people. I mean, 33 is not that many. What about better technology? Is there new technology around that's driving how you're doing that?

Dr Heap: I'm sure, over a 35-year period, new technology that we probably haven't thought about will come online. We've seen advances over the last decade, certainly in computing power, and also the low-impact technology for a lot of the datasets that we collect. For instance, when we do seismic surveys, not putting cables out and using wi-fi to talk to each other and that sort of thing, so we're definitely seeing a lot of that.

There are definitely going to be advances, again in computing power and the ability of AI machine learning, to support our scientific value-add and interpretations. There will also be a trend towards more data in smaller spaces, more localised datasets, so more dense data. That's something we will definitely be keeping track of. Did you want to add anything, David?

Dr Robinson: I'd add that through the Exploring for the Future program we have trialled a number of new techniques that have proven to be very successful in imaging the subsurface in different ways. That's an example of the innovation we have brought forward already, and the Resourcing Australia's Prosperity program will allow us to roll those out across more of the country.

Senator McDONALD: What about this group I was talking to in Cairns? They were talking about onsite assaying so that you can understand—move left, move right, whatever. Is that something that's a new technology?

Dr Heap: It's not necessarily new. As part of our mobile laboratory, we have—we like to call it the laser gun—what is essentially a hand-held device that gives you a quick indication of what the mineralogy of the rock is. I think the point that they're perhaps making is a lot of that analysis has become portable and will become increasingly portable over time. Having a laboratory system that you can actually take out into the field will allow you to make much more informed and quicker decisions, rather than having to bring everything back to an in-house laboratory. That function will still exist, but you'll be able to get a much clearer understanding of what to do next in terms of your science or where you want to take your exploration activities in the field with the increasing portability of a lot of these analogical devices.

Senator McDONALD: I'm fascinated that the regional heads of BHP and Rio are both ex-chemists, assayists. That might be a job that's in less demand in the future if it's replaced by technology.

Dr Heap: Certainly chemistry is an area where we're seeing a lot of that portability happen.

Senator McDONALD: So does that also—

Dr Robinson: If I may, Senator, I might add an additional point. In parallel to the EFTF and the Resourcing Australia's Prosperity program, we're actually a member of the Minerals Exploration CRC. They do have some very active projects bringing together the research community around the kind of real-time chemical analysis you were talking about, and how that can be incorporated into making decisions around the drilling in real time.

Senator McDONALD: When was the Minerals Exploration CRC established? They usually have a limited life, don't they? They're like seven years or—

Dr Robinson: Approximately five to six years ago.

Senator McDONALD: Somebody's muttering behind you.

Unidentified speaker: If you give me a moment, I might be able to find it.

Senator McDONALD: Terrific. I will go and talk to them. I've been talking to some mines where they're using drones, Australian technology, to scan underground to assess resource availability and where to mine next—and mapping. Is that something that Geoscience would be adopting?

Dr Heap: That's probably at a scale that's too local for the work that we do. We tend to look at the regional to national scale. Certainly, if the companies doing that work want to make their data public, of course we would then be very grateful to see it, but that scale is probably too small for where we operate.

Ms Johnson: The corollary of that is we'll deploy any technology we think can work for us. We just have a different scale of purpose than the actual individual companies.

Senator McDONALD: And that's a fascinating part of it. When you have ore bodies that slope away unexpectedly or in a direction you hadn't planned, you might have some very big, deep ore body that you'll only be able to access or understand with core samples and a big drilling program.

Ms Johnson: In general, that's absolutely correct. Even with the shallow ones, by the time you've detected it with some of these clever new technologies, if you want to generate an ore resource that you can actually sell, if you will, on the ASX to investors, you have to drill it and assay it; you have to have pretty rigorous criteria for saying, 'We have this asset and you should invest in it.'

Senator McDONALD: And then of course it's up to the state jurisdictions to ensure that the mine plan is maximising the resource and not just maximising the share price.

Ms Johnson: That's right; they've got that role.

Senator McDONALD: We could talk all day. Has anybody else got questions, or am I just going to keep—

CHAIR: Not for Geoscience.

Senator McDONALD: I will put on the public record that I would really love a Geoscience scarf. I don't know how much more overt I can be now. I've suggested; I've hinted; I've—

CHAIR: You missed out at PDAC, then?

Senator McDONALD: Right! The minister said: 'I can't believe you don't have a scarf. You're so keen on them.' Anyway, there you go. I've just put it out there.

CHAIR: Do you know what you've done, Senator McDonald? You've got us exactly back on time.

Senator McDONALD: I'm here to serve.

CHAIR: I shouldn't have said it out loud.

Senator McDONALD: I really appreciate having longer. We don't usually get as long with Geosciences, so it's really terrific to have a great conversation about this incredibly important work, and the only thing that funds Australia into the future that I can see for the moment.

Dr Johnson: Thank you for your interest. It's a pleasure.

CHAIR: The committee releases representatives of Geoscience Australia with our thanks.

Department of Industry, Science and Resources

[16:58]

CHAIR: The committee now resumes with the Department of Industry, Science and Resources, outcome 1, program 1.3, including the Australian Radioactive Waste Agency, and then program 1.4, which is the nuclear powered submarine program and the Australian Nuclear Science and Technology Organisation. We will start with the department and then proceed to questions. We are breaking at 5.05 for a very early dinner, and I just remind everyone that we're working to the 10 pm hard marker. Senator McDonald?

Senator McDONALD: To start with, I have questions specifically for you, Mr Usher, at the Australian Radioactive Waste Agency. I'd like to talk about the additional funding in the latest budget. Firstly on the \$38.8 million to assess options around alternative pathways for disposal. Can you provide any specifics on what exactly this funding will be used for?

Mr Usher: In response to your question, there's \$36.4 million. There's been a movement of funds from this financial year to the out years: financial year 2027-28 and beyond. That was due to the change in the work scope following the decision to move away from Kimba this week. There's also been \$43 million that's been reallocated for this financial year and the following year. That's to cover a number of activities. That's to include the options assessment process to review the process for disposal pathways for the Commonwealth's low- and intermediate-level civilian waste. It's also to progress the development and implementation of those disposal pathways, including a range of technical work activities. It's also to include the decommissioning and remediation—the disposition—of the site at Kimba.

Senator McDONALD: Is that reallocation from the existing roughly half a billion dollars in funding? Where was that reallocated from?

Mr Usher: It was reallocated from the existing funding to new authorities following the government's decision to move away from the site at Kimba.

Senator McDONALD: Will it be used to support the storage or disposal of any of the Commonwealth's waste?

Mr Usher: As I said, it's to undertake options assessment work. There's a range of technical activities. This includes developing a generic safety case and licensing work, updating work on the inventory, progressing intermediate-level waste disposal options assessments and environmental work as well.

Senator McDONALD: So it's policy work, not actual disposal work?

Mr Usher: It's not physical work. The only physical work is associated with the remediation of the site in Kimba.

Senator McDONALD: I understand. Thank you. Will a paper, report or recommendations be delivered at the conclusion of the funding?

Mr Usher: That funding is for the next two years. There will be papers and reports that are produced in the natural course of that work.

Ms Quinn: And that work will inform, obviously, decisions by government. Then, if any work were to be published, that would be a matter for government.

Senator McDONALD: This is my least favourite answer of the night. So will they be made public? Probably not? Is that where we're going?

Ms Quinn: The work program at the moment, consistent with the government's statement, is that we are relooking at options and the government is considering its position. As part of that process, I'm sure the government will be providing information. At the moment, we're in the assessment stage for the government consideration stage, so it's a little early to be definitive either way.

Senator McDONALD: Given that, as Senator Kim Carr used to point out, for 50 years we've been trying to find a site, I would have thought it was in the national interest for everybody to have a bit of transparency on this. What process will the government implement to find a willing host community for a new site?

Mr Usher: We have been asked to review the options for disposal pathways for both storage and disposal for the Commonwealth civilian low- and intermediate-level waste. Depending on those disposal pathways, and as part of that, we will be looking at a future siting process. No decisions have been made on that siting process yet. But we will, of course, be reflecting on the lessons that have been learnt here in Australia and also looking at experience overseas. I think we recognise that it's critical that you have broad community support from the whole community, including traditional owners, to do that. So we'll be looking to develop a siting process that can deliver those aims.

Senator McDONALD: Is the government committed to the premise that the facility will not go to a community that does not want it?

Mr Usher: I think the government was clear in its statement of August last year that broad community support, including that of traditional owners, is a necessary part of the siting of any disposal site.

Senator McDONALD: I was fascinated when I was in Canada the other day that I drove past what must've been a low-level radioactive waste site off the side of the main highway by the capital. I thought it was extraordinary. They don't have any problems at all finding sites.

Ms Quinn: In Canada, with Minister King, we visited the organisation exploring siting processes for their other types of nuclear waste, and they have been on as long a journey as Australia has and don't have a permanent site yet in Canada.

Senator McDONALD: Interestingly, though, the nuclear energy plant that I went to stores theirs onsite because they believe the technology is changing. Given the rods are only 10 per cent depleted when they're changed over, they want to keep them close to hand to rework them as the technology progresses. It's fascinating, isn't it? There's a lot to learn in this space.

CHAIR: I'll just pause there, and we'll go to our scheduled early dinner break.

Proceedings suspended from 17:06 to 18:05

CHAIR: The committee resumes after the dinner break with DISR outcome 1, program 1.3, and ARWA. I give the call to Senator McDonald.

Senator McDONALD: Thank you very much, Chair. Mr Usher, you started to tell us about the work you're undertaking to explore the potential for an intermediate-level waste facility in Australia. Can you provide an update on that for me, please.

Mr Usher: As I indicated, we've been asked to look at proposals for storage and disposal of both low- and intermediate-level Commonwealth civilian waste. I think it's recognised that intermediate-level waste should be disposed of in a deep geological repository. That's in line with international experience and practice. We are currently undertaking a piece of work to look at the kinds of options. There are different models of deep geological disposal. For example, do you do a deep cavern and bury the waste, perhaps a kilometre underground? Do you use a deep borehole, which might be deeper, perhaps three, four or five kilometres underground, or could you make use of an existing mine and repurpose that? These are issues that we're looking at at the moment.

In parallel with that, we are doing work to look at the social licence, learning the lessons both from the Australian experience and from overseas as to how you ensure you get the social licence so that you can run a siting process which ultimately will deliver you a willing host community, including traditional owners. So there's a range of work that we're looking to do in terms of intermediate-level waste disposal.

Senator McDONALD: Is it right that you're partnering with the CSIRO on some of that research?

Mr Usher: We have a contract with CSIRO, who are undertaking that work on considering the options for deep geological disposal.

Senator McDONALD: Terrific. How's that going?

Mr Usher: It's going very well.

Senator McDONALD: What is the associated funding for that work?

Mr Usher: We have three contracts with CSIRO; two of which been completed. The total contract value for all three of those contracts was \$4.685 million, and the remaining contract balance we have is \$2.7 million.

Senator McDONALD: What's that one for?

Mr Usher: That's for research professional advice, and it's for helping support the work that I indicated earlier on deep geological options.

Senator McDONALD: So they're not actually trialling some sites? I understood they were trialling some sites and using canisters and so forth.

Mr Usher: The work that they're doing for ARWA is just desktop work.

Senator McDONALD: For \$2.7 million?

Mr Usher: Yes.

Senator McDONALD: And the \$4.685 million was for the three contracts in total?

Mr Usher: Yes.

Senator McDONALD: If I deduct \$2.7 million from that I get roughly \$2 million.

Mr Usher: That's correct.

Senator McDONALD: What was that for?

Mr Usher: CSIRO have been doing work for us on looking at intermediate-level waste disposal options, building up to this. They've been working on that for some time.

Senator McDONALD: So are they more desktop studies or actual trials in borehole locations?

Mr Usher: No, it's all desktop work.

Senator McDONALD: Right. I wonder why I thought they were doing some borehole technology. I'll go back and talk to my peoples. Thank you. As part of question on notice returned AI-55, ARWA advised there were no construction costs associated with the Kimba facility. Is that correct?

Mr Usher: We confirmed that construction had not commenced on site, so then no costs would have been spent on building at the site.

Senator McDONALD: How then is there \$4.2 million allocated for remediation works at the site?

Mr Usher: We have committed to reversing and remediating the site following the site characterisation works that were undertaken following the site being declared. We've committed to remediating the site to the state it was before the site was declared. Whilst there wasn't any construction on site, there were a number of site characterisation activities, and we've committed to remediating that.

Senator McDONALD: The site characterisation work was, I assume, drilling some holes and surveying work.

Mr Usher: That's right. There were a number of activities, including drilling of boreholes and trial pits, seismic testing and installing some equipment.

Senator McDONALD: How much did you spend on that sort of characterisation work?

Mr Usher: The expenditure that we undertook from financial year 2022-23 and 2023-24 was about \$6 million.

Senator McDONALD: That included seismic photography et cetera.

Mr Usher: That's right, yes—the characterisation work that was undertaken on site.

Senator McDONALD: I'm interested in how we've got to \$4.2 million allocated for remediation works, given that, I assume, you're going to fill some core holes. What else? That's a lot of money.

Mr Usher: Those costs do include the decommissioning and the remediation of the site. They also include the supervision of the site and land management activities whilst the Commonwealth still has ownership of the site. It also includes the disposition costs associated with disposing of the site once the remediation has been completed.

Senator McDONALD: How long do you think it'll take you to remediate the site?

Mr Usher: We're anticipating that that remediation work will be completed in the next financial year.

Senator McDONALD: Have you sent that to tender?

Mr Usher: We've followed our procurement processes in order to be able to tender for that work, yes.

Senator McDONALD: But it won't be until next financial year?

Mr Usher: We're expecting it to be within the next financial year.

Senator McDONALD: The decision not to proceed with Kimba was made 18 months ago?

Mr Usher: No, in August 2023.

Senator McDONALD: I understand that the land value when you acquired it was about \$900,000, so the remediation is coming up to five times the market value of the site. What's the biggest remediation cost in the \$4.2 million?

Mr Usher: The largest sum of that is for the remediation and decommissioning of the site. There are a number of activities within that.

Senator McDONALD: Describe the biggest one. You see where I'm going. I have been criticised in the past for being a little overzealous with taxpayers' money, but I'm just struggling to see \$4.2 million on a site that didn't progress—that had a bit of survey work done. You don't have to rehab seismic. You don't have to rehab the surveys. The test holes I get, but I want to make sure that we're being judicious with the money.

Mr Usher: As I said, there are a number of activities that we need to do. It's very important that we do that work properly, in compliance with both Commonwealth laws and state laws. That includes ensuring that cultural heritage is managed appropriately in that, and that's what we are committed to doing. Of course, we're also committed to doing this work as efficiently and effectively as possible.

Senator McDONALD: Mr Usher, you have this terrible habit of never really answering my questions. I find it quite frustrating. I'm a practical person. I'm looking for practical answers that I can communicate to the community.

Ms Quinn: I'll just note that the \$4.2 million is spread across six years.

Senator McDONALD: But we think it will be finished by next year?

Ms Quinn: In which case, if all the work is finished and the site is disposed of, there may well be money left in the kitty.

Senator McDONALD: That's helpful. We'll ask about this again next year.

Ms Quinn: We are looking at making sure that everything is done within our PGPA responsibilities.

Senator McDONALD: What is the plan for the site post-remediation? Are you going to sell it?

Mr Usher: The government has committed to disposing of the site. Detailed decisions on that process have not yet been made. However, we will be following Department of Finance policies and guidance for the disposition of Commonwealth land.

Senator McDONALD: What is that process? Is it first offered to the original titleholder?

Mr Usher: As I say, no decisions have been made yet. There's quite a set of guidance for a range of different scenarios. No decisions have been made yet, but we will be following Department of Finance guidance.

Senator McDONALD: So I'll just ask about the Department of Finance guidelines. Is one of the early options selling it back to the landholder? I don't know if the landholder wants it or is interested.

Ms Quinn: There are a series of triaging measures, as you could imagine of a government guideline of the sort, where the intent and aim is to maximise returns for taxpayers. One of the things that we need to make sure of

is that we've tested the market to meet that aim. There are a range of options. It depends on how deep the market is, the use of the land, the valuation agreements and those sorts of things. There are no legal or contractual requirements to put it back. We will be testing the market, thinking about the options, getting advice on possible uses and those sorts of things.

Senator McDONALD: Mr Usher, is ARWA still providing advice to the Australian Submarine Agency about radioactive waste disposal?

Mr Usher: Yes, we continue to work to support the ASA.

Senator McDONALD: Do you provide advice to ASA about the establishment of a new temporary waste facility at the HMAS *Stirling* defence base?

Mr Usher: We have provided technical input and experience to inform the team that has been developing the plans for the waste facility.

Senator Ayres: Senator, if you've got interest in questions around AUKUS, I'm very happy for you to ask them, but defence estimates is—I mean, they're probably just about to go to their dinner break.

Senator McDONALD: No, these are more boring questions, not on defence, AUKUS and so forth.

Senator Ayres: I think you're overstating how interesting defence questions are and understating how interesting the questions are here!

Senator McDONALD: Fair enough. Is it fair to say that one of the principles of the Australian Radioactive Waste Management Framework—in fact, it's international best practice—is the consolidation of temporary waste management sites to a central disposal facility?

Mr Usher: I think implementing permanent disposal is the internationally accepted practice. That would normally be surface or near-surface disposal for lower-activity waste or deep geological disposal for higher-activity waste.

Senator McDONALD: My question was: is the consolidation of temporary, not permanent, waste management sites to a central disposal facility international best practice—not yet permanent disposal, but temporary disposal?

Mr Usher: If you're looking to consolidate temporary storage facilities, I think internationally there are probably some examples of where that's happened, but I wouldn't say that is consistent overall. It depends on the circumstances, to do that. It is recognised as best practice that, ultimately, all waste should be disposed of.

Senator McDONALD: Indeed. The framework states:

The move away from multiple storage sites is aligned with international best practice for the long-term management of radioactive waste as recognised by the Commonwealth radiation protection and nuclear safety regulator, ARPANSA.

Is that correct?

Mr Usher: As I say, going back to taking waste from temporary storage facilities and putting it in a central disposal facility is best practice. That would be recognised by ARPANSA, I'm sure.

Senator McDONALD: Would you then say that creating a new, temporary waste management facility, for an indefinite period, is consistent or not consistent with international best practice and your own Australian Radioactive Waste Management Framework?

Mr Usher: I think we need to be careful what specifically we're referring to there. Which specific temporary storage facility are you—

Senator McDONALD: My understanding is that you're advising ASA on establishing a temporary facility at HMAS *Stirling*, which is a new site.

CHAIR: I'm just checking: are you asking the witness for an opinion?

Senator McDONALD: No, I'm not. I'm trying to work with the Australian Radioactive Waste Management Framework. Perhaps it's an opinion. He's a professional; I'm trying to get an understanding.

Ms Quinn: I know. You're asking about a facility that's actually a Defence facility, who they have policy responsibility for, and I think it's probably more appropriate for Defence actions and decisions to be put to Defence officials.

Senator McDONALD: Are you receiving funding to assist with this project, or are you just providing advice?

Mr Usher: We have received funding from the Australian Submarine Agency. We received I think about \$5.2 million over two years, including this financial year and next financial year. That's for the provision for a range of advice to support the Australian Submarine Agency.

Senator McDONALD: Given that ARWA is providing this advice, would it be right that you would have followed the Australian Radioactive Waste Management Framework in your advice and told them that establishing a new, temporary intermediate-level radioactive waste management facility is not consistent with the national standard?

Senator Ayres: We should take that on notice.

Senator McDONALD: For \$5.2 million, I reckon I can ask this question.

Senator Ayres: I reckon that the agency has obligations. It would not be normal to provide the basis of advice. I think it's reasonable to ask a set of questions, but I think the officials should take it on notice and see what they can reasonably provide. I just think, given the issues that surround this, and the tangential nature of the agency's responsibility here, that that's the right course of action.

Senator McDONALD: I reckon \$5.2 million deserves some skin in the game.

Ms Quinn: To provide advice to another agency that has policy carriage of the issue, typically we would direct questions to the agency that has policy responsibility.

Senator McDONALD: Except this is the Australian Radioactive Waste Agency.

Ms Quinn: It is providing support to a whole-of-government activity that is owned and operated by the Department of Defence.

Senator McDONALD: I understand. Did ARWA advise ASA to build new temporary radioactive waste storage facilities for low-level waste at HMAS *Stirling* for visiting US and UK submarines?

Ms Urquhart: The advice being provided by ARWA to Defence would be informing decisions of government in the Defence portfolio, and so we really feel that we should take this on notice and come back to you out of session.

Senator McDONALD: What advice have you given ASA on its proposal at HMAS *Stirling*? Advice on waste characterisation?

Senator Ayres: We'll do the same there, I think.

Senator McDONALD: Okay. Geological suitability of Garden Island as a location for a radioactive waste storage facility?

Senator Ayres: Just in addition to what was just said about the nature of the advice, I'm not even sure that advice has yet been provided. This is activity that's being funded over the course of the next two financial years. It may conclude at that point; it may not. We'll take it on notice. If there's anything we can provide you that assists, we will.

Senator McDONALD: Mr Usher has already said that he is providing advice to ASA. So it's commenced and—

Senator Ayres: I don't doubt that, but, in terms of the work that is being done, when the advice is being provided and what form that advice takes, it's very early in the piece. We'll take that on notice. I think you'll have a much better discussion with colleagues in Defence.

Senator McDONALD: But it's ARWA that's been funded, and this is a Senate estimates process.

Senator Ayres: They've been funded to provide advice for a decision that government will make, and the policy authority for making those decisions rests in Defence.

Senator McDONALD: I'll ask one more question on notice, and then Senator Smith might have a few questions. Was it ARWA's advice for ASA to create yet another temporary radioactive waste facility with no defined end at HMAS *Stirling*? You're taking it on notice. On what basis would you advise them to do that?

CHAIR: Senator Smith.

Senator DEAN SMITH: Welcome, Mr Usher. Can you just explain to the committee the role that ANSTO plays in supporting Australia's health and medical system?

Ms Quinn: That question would best be put to ANSTO themselves, who are here. Mr Usher is from ARWA.

Senator DEAN SMITH: I'm getting ahead of myself. Wishful thinking! We'd like to beat the 10 pm hard marker.

Senator Ayres: I'm very happy to provide ANSTO right this very minute if we can discharge the other witnesses and get on with the evening.

Senator DEAN SMITH: I'll wait!

CHAIR: ANSTO can be brought to the table now.

Senator McDONALD: Can we finish with ARWA first rather than having to bring them back?

CHAIR: If you reckon you can.

Senator McDONALD: Mr Usher, I know you haven't yet selected a site for a national facility, but, given Kimba was cancelled last year, based on your own experience and expertise can you give the committee a rough estimate of how long it would take for a new facility to be operational?

Ms Urquhart: That would depend on when different decisions were taken by government and the progressing of business case development. I think it's a difficult question to answer.

Senator McDONALD: We do have a commercial site that has gone through this process in 12 years. This is what I am trying to understand. What would the Commonwealth's view on establishing a Commonwealth facility be?

Ms Urquhart: These are matters that are under consideration by government. To answer the question with any certainty would be to get ahead of those decisions.

Senator McDONALD: Ahead of what decisions?

Ms Urquhart: Decisions that government might take.

Senator McDONALD: Has ARWA engaged a communications firm following your tender in late March and early April of this year?

Mr Usher: That procurement process is ongoing.

Senator McDONALD: So how much are you budgeting to spend on communications?

Mr Usher: I can't comment on that, because there's an ongoing procurement process at the moment and I don't want to make any comment which could jeopardise or risk that procurement process.

Senator McDONALD: Given you've said you don't have a site and/or waste facility project, what project will this communications firm actually be working on?

Mr Usher: As I said, we're looking at developing proposals for future waste disposal pathways. Part of the work that we're doing is to understand and develop a social licence strategy that will help us inform a future siting process. So there's a lot of preparatory work involved with that, and we're looking to bring in specialist expertise to supplement our own capability in order to develop those plans.

Senator McDONALD: So you don't think this communications firm is a little premature?

Mr Usher: I think it's important that we have access to the specialist skills and capability that we need. These are long-term plans that we are looking to develop. As we know, they need to be well founded and grounded with the best expertise, so I think it's important that we're building up that overall capability.

Senator McDONALD: So, rather than bring in permanent staff, you'll put on contractors?

Mr Usher: Our bias is towards strengthening it with APS people within ARWA, but there are certain specialist skills that make it not effective to bring in staff full time. That covers a range of issues, including technical, environmental, safety casework and communications issues.

Senator McDONALD: Are you predicting another \$36.4 million underspend in the 2024-25 budget year?

Mr Usher: The reason for the \$36 million underspend is a movement of funds that recognised that there was work on the Kimba facility which did not go ahead following the minister's decision. That includes, for example, site-specific engineering, design and safety casework and also the site characterisation work.

Senator McDONALD: So won't the next year be the same because you won't have that work to do?

Ms Quinn: All of this very much depends on—because we're in the process of formulating options for the government to consider—what path the government goes down. We'll then look at the financial implications for the agency. At the moment, the government has wanted to make sure that there is funding available so that, once proposals have been considered, there's funding available to move forward. They've been very prudent in ensuring that it is available. But none of this is being forward-contracted et cetera; it's all available, subject to flexibility of government decisions. So it's not in the contingency reserve, but it's certainly not pre-committed until we've got more clarity on the government's position on how they want to take forward this policy area.

Senator McDONALD: I think we're all pretty much on the same page about the potential to secure another site within the next 12 months.

Ms Quinn: We are working through the options, and there will be a policy discussion that the government has.

Senator McDONALD: Sure.

Senator Ayres: This is work that has to be done, and—

Senator McDONALD: But there is no work to be done. There's only work to be done if there's a site.

Senator Ayres: There are decisions for government to make.

Senator McDONALD: Yes, I know. Minister, please don't intervene if you don't have anything to add to the answer.

Senator Ayres: It's less likely that I'll have something to add if—

Senator DEAN SMITH: We are not looking for fillers!

Senator McDONALD: No, we don't need fillers. We're on track for an early finish.

Senator Ayres: we don't get the commentary at the end of the line of questioning, Senator McDonald.

Senator DEAN SMITH: Don't let the team down.

Senator McDONALD: Yes, don't let the team down.

Senator Ayres: I'll do my very best, and I'm looking forward to you doing the same.

Senator McDONALD: Snap! No commentary, hey? How's your staff turnover going, Mr Usher? Can you provide an update on staffing numbers and what your new hires are doing for ARWA?

Mr Usher: As of the end of March this year, we have 70 total employees. Our retention rate has been improving over the last 12 months. We have brought in a number of new people into the organisation. These include people with technical skills and environmental skills and people with experience in geological disposal. We've also brought in people with expertise in social licence and are also developing our program management capability.

Senator McDONALD: What is your retention rate? You said it's improving. What are you up to?

Mr Usher: For the 12 months to the end of March, it was a 26 per cent turnover.

Senator McDONALD: At the last Senate estimates hearing—what's it down from, sorry? What was it previously?

Mr Usher: I think in the previous 12 months it was 29 per cent.

Senator McDONALD: At the last Senate estimates hearing, you told me that Tellus are:

... not able to take nuclear waste or intermediate-level waste. They're not able to offer a full service, due to a range of waste acceptance criteria, legislative and policy issues.

Did you ever seek or receive legal or other advice that Tellus was unable to dispose of the Commonwealth's low-level radioactive waste material?

Mr Usher: We've got a range of advice. We don't comment on the legal advice we take, but, as I set out at the last estimates, there are a number of factors that need to be taken into consideration if waste were to be disposed of at the Tellus facility.

Senator McDONALD: The Commonwealth has numerous temporary storage facilities for low-level radioactive waste—numerous. I've been part of Senate inquiries into it. Having been out to the commercial site, I'm intrigued as to why that site is suitable for low-level radioactive waste, chemical waste that requires a permanent solution—and that is underway—and yet this agency can't tell me why it's not suitable for the low-level radioactive waste that the Commonwealth is storing in 44-gallon drums and so forth in hospitals and other places around the country.

Ms Quinn: We are looking at all options to provide advice to the government, which was the evidence also provided at last estimates.

Senator McDONALD: It has been months since the last estimates.

Ms Quinn: February, yes.

Senator McDONALD: There is a facility that would take the waste—that would take all of the Commonwealth's waste. It would take a corner of the pit—all of the Commonwealth's low-level radioactive waste. And yet we are going to go through this dance every time. We're going to give ARWA millions of dollars to continue not providing a solution when there is a commercial solution available. I want to know why.

Senator Ayres: Because issues around nuclear waste are not going to be treated in a cavalier way by this government.

Senator McDONALD: No, but commercial facilities are able to use it for low-level radioactive waste.

Senator Ayres: We will take advice from experts to protect the community, to protect the environment and to ensure that this important waste, which is, as you say, all about health care and particularly nuclear medicine for Australians, is dealt with appropriately.

Senator McDONALD: I appreciate that. That is very wise. But I wonder how many years we will continue to store low-level radioactive waste in temporary storage facilities when we have a facility that could grant a section to the Commonwealth.

Senator Ayres: There'd be a lot less years involved in this process if this government hadn't had to make decisions because of the bungling of the previous government.

Senator McDONALD: In 50 years, I think there have been a lot of governments.

Senator Ayres: That's why we are in this position.

Senator McDONALD: Fifty years.

CHAIR: We were all starting to have some hope there!

Senator McDONALD: We would have hope if the minister didn't have to get political at every turn. Fifty years!

CHAIR: I won't adjudicate that one.

Senator Ayres: It's hard to avoid the reality of the position that the previous government has put the country in.

Senator McDONALD: You can't not get political.

CHAIR: Are we in a position to move to ANSTO shortly?

Senator McDONALD: Not yet, thank you. We've got no visibility about why the Commonwealth won't utilise an established commercial facility. I think the community will become very frustrated when they understand how much money the Commonwealth is spending to not provide transparency. Mr Usher, your agency told me that using a national radioactive waste management facility was not mandatory for Commonwealth radioactive waste holders. Is that still true?

Mr Usher: We're considering a range of options, as I've said, for all of the low-level—

Senator McDONALD: That's not my question.

Mr Usher: and intermediate-level waste. For each of those options, there are a number of considerations that must be taken into account. This includes Commonwealth legislation and potential interaction with state legislation. Commonwealth waste is regulated by ARPANSA, and there are potential interactions with state regulations that are based on waste acceptance criteria and the acceptance of a safety case. There are liability issues. The Commonwealth has liability for the waste, and so those issues need to be addressed. If you are considering using the private sector, there are a range of probity, commercial and financial issues which need to be assessed.

Senator McDONALD: Are you assessing those?

Mr Usher: All of those factors are relevant to all of the options that we're looking at. These are the factors that we're taking into account as we're looking to provide advice to government.

Senator McDONALD: I feel like I'm in an episode of *Utopia*. I just asked you—don't worry. Don't worry; that's fine. Can you describe what this low-level radioactive waste is? It's been described to me as rubber gloves and personal protective equipment—anything that the hospital staff dispose of after treating a patient. Is that correct?

Mr Usher: That can be included as low-level waste. There are other kinds of low-level waste. For example, you might have contaminated soil from historic operations that I think some other Commonwealth owners such as CSIRO have. I think the Department of Defence has some legacy low-level waste which includes luminous striated dials. I think ANSTO will also have a range of other materials that come from maintenance activities or metal or other processes. So there can be a range of materials that are classified as low-level waste.

Senator McDONALD: I've seen advice from ARWA's ex-general counsel that says there are no legal barriers to Tellus disposing of Commonwealth radioactive waste provided it isn't reactor waste—I assume that's the vast majority of this low-level radioactive waste. Can you explain what you meant when you referred at the last estimates hearing to legislative and policy issues that prevent Tellus from being able to accept low-level radioactive waste?

Mr Usher: As I said, there are a number of factors there in the interface between Commonwealth legislation and state prohibition acts. That includes the use of material that could be classified as nuclear waste, for example. There are liability issues associated with Commonwealth waste, and there are also regulatory issues that need to be assessed in the interaction between Commonwealth and state regulators. These are—

Senator McDONALD: But you won't tell me what they are.

Mr Usher: I think they're—for the regulator, Commonwealth waste is regulated by ARPANSA. The private sector facilities are regulated by state regulators. There are a range of regulatory issues—

Senator McDONALD: But they're not required to be assessed. They take advice. The state regulator takes advice from ARPANSA. You said, 'Yes; this is all tickety-boo'. It's a technical term.

Mr Usher: Waste today is regulated by ARPANSA. There are issues that would need to be addressed as part of the handover and the liability for that to be disposed of in a facility that's regulated by the state.

Senator McDONALD: I hope your advice to government is a little bit clearer than the advice you give to me, Mr Usher. I am wondering—

CHAIR: Senator McDonald, I have not said this before, but there have been a few occasions where you are very close to the line of—

Senator McDONALD: Of what line?

CHAIR: Of criticising the witness and making reflections on the witness.

Senator McDONALD: I am frustrated by the lack of clarity.

CHAIR: I'm just calling it out. We're listening. Continue, ask your question.

Senator McDONALD: I get that. Part of the process of estimates hearings, as you know, is that the Senate gets to ask questions of government expenditure. The responsible expenditure is what I'm seeking to understand. I feel that Mr Usher's responses are not aiding me in that understanding me. That's all I'm trying to explain.

Ms Quinn: I believe Mr Usher is trying to help the committee to the best of his ability within the constraints witnesses face before senate estimates. I feel the characterisation that he's being unhelpful is somewhat unfair. He is operating within the constraints in which public servants operate in the Senate, trying to be helpful in providing information. Much of what you are asking is about a policy process that's ongoing within government. Our role is to provide that policy advice to government, take it on notice if the government would like to share it with the Senate, not for public officials to provide the advice unhindered to Senate estimates.

Senator McDONALD: But what you are going to now is a public indemnity issue, because in the opening statement we talk about the fact that there is no matter beyond the remit of the Senate.

Ms Quinn: Public servants are not required to provide opinions on matters of policy.

Senator McDONALD: I understand that.

Ms Quinn: And asking about the legislative constraints or not is asking for opinion on a matter of policy, in one interpretation. I do think it is in the area where we have a contested discussion within estimates, and I think it is incumbent on me to support Mr Usher. He is trying to be helpful within the constraints of witnesses before the estimates hearing.

CHAIR: Without continuing the discussion, I would say I was multitasking and I will listen more closely as you continue, Senator McDonald.

Senator McDONALD: At the last estimates hearing Mr Usher said:

At ARWA we fulfil a range of functions for government. We provide advice to government. We are looking at developing and implementing disposal pathways not only for low-level waste but also intermediate level waste and we are developing plans fully within the lens of social licence as well.

Ms Quinn, do you think there is a conflict of interest for ARWA? On one hand they're tasked with advising government on what to do with low-level waste, and on the other hand ARWA has been given a budget of around \$500 million to work on building its own waste facility.

Ms Quinn: ARWA is part of the department. We provide advice on a regular basis to government on both activities we may undertake and activities others do. We're all employed under the Public Service Act to provide advice to government on the best ways. As the accountable authority, I have obligations under the PGPA Act. There may be potential in a very long bow, but we have a professional public service that provides advice on options and will do so to the best of our ability.

Senator McDONALD: What I'm trying to draw out is this conflicted position. Is it possible to provide unconflicted advice if you have a half billion dollar budget to build a facility that would fund public servants and activities and a new facility, hopefully, and advice as to whether or not it is a good idea. Do you understand where I'm coming from?

Ms Quinn: I do understand the question, but the issue is that public servants are quite regularly being asked to provide advice. We ask public servants to set up programs. We then ask public servants to provide advice to close programs. We ask public servants to do activities and then to reverse them. It's not dissimilar to that sort of policymaking ethos. That's why we have the code of conduct and the obligations on public servants to provide advice in a robust and professional way. I understand the concern you're raising, and we've got arrangements within the organisation to ensure that we're supporting our policy officers to be able to provide a broad range of advice based on evidence.

Senator McDONALD: Thanks, Chair. I'll leave it there.

CHAIR: Thank you. We will now bring ANSTO to the table, and we can discharge ARWA.

Australian Nuclear Science and Technology Organisation

[18:50]

CHAIR: Welcome, Mr Jenkinson and team. I've got your opening statement, which I believe I've distributed to the committee and which we will table. Do you want to make any opening remarks?

Mr Jenkinson: In the interests of time, I'm happy if it's been tabled and I'm very happy to take questions this evening. Thank you.

CHAIR: Thank you very much. Senator Smith.

Senator DEAN SMITH: Thank you very much, ANSTO, for your participation this evening. We're all hoping this won't take too long, so brevity will be rewarded. Could you explain, for the sake of the committee, the role that ANSTO plays in supporting Australia's health and medical system.

Mr Jenkinson: Sure. Thank you for the question. ANSTO plays a role across a number of areas, but I suppose the one that most people would be aware of is the production and distribution of life-saving nuclear medicines. ANSTO produces and distributes around 12,000 to 12,500 doses per week of these medicines, which are used at both the diagnosis stage and in the treatment of diseases—often cancers and also heart disease. We distribute to around 250 clinics and nuclear medicine centres around Australia. Importantly, we make sure that there's equitable access across the cities and the regional and rural parts of Australia.

In addition to our work in nuclear medicine, which is probably what you're aware of most, we also have very able researchers that work on future technologies relating to health. We currently have some work going on around targeted therapy in radiotherapy. We have work going on around imaging for breast cancer. In addition to that, across our scientific infrastructure, both at Lucas Heights in Sydney and at Clayton in Melbourne, we host around 5,000 to 6,000 visiting researchers per year, of whom a number would be performing early-stage work on possible new medical technologies. As part of that, we have products and pharmaceutical development that then go back into industry. So there's quite a breadth of activity around supporting health care in Australia.

Senator DEAN SMITH: Great. Thank you very much for that. Earlier you mentioned that there were between 12,000 and 12,500 of something. What are those 12,000 things?

Mr Jenkinson: We called it a dose. It is effectively a dose.

Senator DEAN SMITH: A dose? Okay, I understand. If that's between 12,000 and 12,500 a week, what is that annually?

Mr Jenkinson: With some shutdowns, it's getting close to half a million.

Senator DEAN SMITH: Of the 250 locations that you distributed to, do you have a breakdown of how many are metropolitan locations and how many are rural and regional?

Mr Jenkinson: We do have a full breakdown. I don't have that information with me, but I could take it on notice.

Senator DEAN SMITH: That would be fantastic. You mentioned scientific infrastructure. Can you expand on that point?

Mr Jenkinson: ANSTO operates quite a lot of scientific infrastructure. Many of you will be familiar with the OPAL reactor, which is used for irradiating targets for nuclear medicine. In addition to that, we have neutron beam instruments that come off the OPAL reactor, and those neutron beam instruments can be used for research. The synchrotron down in Melbourne is a light source and, again, there are a number of beamlines there. We

currently are installing an additional eight beamlines and they're used for multiple areas of research, of which some would be around early-stage drug discovery.

Senator DEAN SMITH: How many Australians access medical treatments or medical interventions using nuclear source technology or nuclear applied technology?

Mr Jenkinson: I'll use nuclear medicines as produced at ANSTO rather than look at other technologies such as X-rays and radiation delivered in hospital; that's a different area. We have a calculation and have worked out that on average each Australian will probably have two doses of nuclear medicine during their lifetime.

Senator DEAN SMITH: Could you expand on that, perhaps using me as a guinea pig so to speak? Could you explain that?

Mr Jenkinson: Looking at the population and the number of nuclear medicines we produce, if someone is diagnosed with cancer, for instance, nuclear medicine would be used for diagnosis, and they'd probably have a follow-up where there is staging of the cancer to understand how it has progressed or whether or not any treatment is mitigating it. Nuclear medicine may also be used for very targeted treatments, and again to see whether or not that has worked. So there may be five particular doses for an individual. But on average for every Australian it works out at about two per person in their lifetime.

Senator DEAN SMITH: On average it works out to two per person but the range of that could be two to five or beyond—

Mr Jenkinson: Beyond that and, for some people, none at all.

Senator DEAN SMITH: depending on the nature of the—

Mr Jenkinson: Yes, correct.

Senator DEAN SMITH: Thank you very much for that. For the record, could you explain the Synroc project?

Mr Jenkinson: Yes, of course. Synroc is a technology developed in Australia, originally at the ANU—

Senator DEAN SMITH: Is Synroc technology different from scientific infrastructure?

Mr Jenkinson: Yes. Synroc is a technology we've developed. We're building a current facility at ANSTO taking waste from the production of nuclear medicine. That waste gets dried out and we add what we would call, I suppose, the 'special herbs and spices' to it and, under heat and pressure—

Senator DEAN SMITH: It sounds like a secret recipe!

Mr Jenkinson: It's very much the secret recipe, and the IP, in terms of what has been developed. We add the secret herbs and spices and under heat and pressure we can develop a waste form that will not deteriorate over geological timeframes. So this is a very novel waste form that is produced. ANSTO is currently in the middle of building the first-of-a-kind facility that will take the waste from our production of molybdenum-99, the most frequently used nuclear medicine, and that will be locked away into this very stable waste form ready for eventual disposal at the National Radioactive Waste Management Facility.

Senator DEAN SMITH: Because it is stable waste, does that change the nature of the storage requirements?

Mr Jenkinson: It will still need deep geological storage.

Senator DEAN SMITH: Is it accurate to describe Australia as a nuclear nation?

Mr Jenkinson: I talked a bit about that in the opening statement. We have had 70 years of experience. We've operated three nuclear reactors in that time. And while we may be a relatively small nuclear nation we have, because of our geographical location, been required to develop a very sophisticated capability. I'm very proud of the team that we have at ANSTO, and we command a very good presence on the world stage.

Senator DEAN SMITH: Just to be clear, in your opening statement you said, 'This has led to Australia being seen as a small yet highly sophisticated nuclear player operating complex nuclear facilities with strong nuclear stewardship.'

Mr Jenkinson: Correct.

Senator DEAN SMITH: Excuse the ignorance of this, but every nuclear reactor is a net zero emissions reactor, isn't it?

Mr Jenkinson: That's a very difficult question to answer, because I cannot comment on every reactor.

Senator DEAN SMITH: Of course. Okay.

Mr Jenkinson: The reactor that we operate at Lucas Heights is a research reactor that is generating neutrons. It doesn't generate energy. It is generating neutrons for science, for the production of nuclear medicines and for the support of industry. In the context of net zero, it's a very difficult question to answer.

Senator DEAN SMITH: Could we say that Australia has been operating a net zero nuclear reactor for the last 70 years?

Mr Jenkinson: We've operated three small research reactors. And those reactors are designed, as I say, to produce neutrons. Those neutrons are designed for science and research. They're not power reactors.

Senator DEAN SMITH: I haven't had a chance to read the whole opening statement, so you may well—

Mr Jenkinson: It's a cracker.

Senator DEAN SMITH: It was a very good start, I thought in the third paragraph. I was so impressed with the first three that I couldn't go beyond the first two and a half.

Mr Jenkinson: I'd give it a read later if I was you.

Senator DEAN SMITH: My next question is—and, if the answer is in the opening statement, please point me to it—can you explain how ANSTO works with other nations and partners around the world, and which are our key international partnerships?

Mr Jenkinson: It's not spelled out in there, but we have a number of international relationships. ANSTO plays a key role in representing Australia at the IAEA. We have a number of partners globally that we work with on nuclear medicine. Our researchers also work across multiple jurisdictions, in terms of research collaborations. It would be very difficult to name them all, but we very much play in the international space, in terms of our nuclear interactions. Most recently, we're taking a leadership role in the Asia-Pacific region, leading some regional collaborative agreement projects to support the understanding of coastal erosion and environment with our colleagues in Southeast Asia. We work closely with many countries.

Senator DEAN SMITH: On notice, can you elaborate and provide some detail on those international relationships, and also on that regional cooperation aspect?

Mr Jenkinson: We could.

Senator DEAN SMITH: I just want to turn to the matter of waste management. How does ANSTO manage its waste?

Mr Jenkinson: We're managing waste onsite at ANSTO from our 70 years of operations. We do that safely, in temporary storage. We have both low-level waste and intermediate-level waste. It's a very difficult thing to describe in a small room here in Canberra. We'd be very happy to show anyone who wants to come to ANSTO how we manage that, how we make sure we maintain that safely, and how we understand our inventories.

Senator DEAN SMITH: How would we describe Australia's regulatory arrangements around waste? Are they well-developed? Are they tight?

Mr Jenkinson: We come under the national regulator, ARPANSA. Of course, all of our storage facilities are licensed, and they are operated under a licence that is granted by ARPANSA.

Senator DEAN SMITH: Have there ever been any issues with the management of spent fuel in Australia?

Mr Jenkinson: Not that I'm aware of. If you say 'issues', that's kind of a big statement.

Senator DEAN SMITH: But you're very—

Senator Ayres: I think Mr Jenkinson is in a position to—

Senator DEAN SMITH: You're going to push us to 10 pm. You're going to be such a party pooper!

Senator Ayres: Whether we're at 10 o'clock or not, I'm in the committee's hands. But I am going to insist that the witness isn't asked for opinions about what might have happened outside the scope of ANSTO's activity. It's not something that he can answer.

Senator DEAN SMITH: In your experience, have there been any issues with spent fuel management in Australia?

Mr Jenkinson: We've had 10 shipments of spent fuel over the period of 70 years, which covers the period of the two previous reactors. We've had one spent fuel shipment going to and coming back from France, for the OPAL reactor. And we have one due in the next four or five years. All of those have been managed safely and within regulatory guidelines.

Senator DEAN SMITH: Thank you.

CHAIR: Senator Smith, Senator Roberts is committee hopping. To assist him with that—I'll give you the call, Senator Roberts, if you're ready to go.

Senator ROBERTS: Yes, I am. Thank you, Chair. Thank you for being here tonight. I'd like to return to the historical case of Garners Plumbing. I appreciate that I'm going back a while here to question on notice BI-52

from November 2022. I appreciate the detail you gave in your answer to that question. As a reminder, ANSTO engaged Watpac for the design and construction of your nuclear medicine production facility. Watpac subcontracted Garners Plumbing for hydraulic and plumbing works. There were variations to the scope of work to make it compliant with standards, but Garners Plumbing has never been able to get compensation for those variations, in large part because the failure of Watpac to pay in the first place put them in a precarious position. Your answer is that because you didn't have a contract with Garners—you only had a contract with Watpac—it's got nothing to do with you. It was your project, though. Don't you feel some responsibility to investigate and make sure the subcontractors on your projects are treated fairly by the prime contractor?

Mr Jenkinson: I have to say that I'm not aware of that situation, and I might have to take that question on notice in terms of the situation and what happened. I don't have a full understanding.

Senator ROBERTS: I'd appreciate a full answer, so I'm fine with that. So that you're aware, the situation caused millions of dollars in losses to what I understand is a relatively small operator which has financially sunk due to the compounding effects of it. I'd also like to know whether or not you have some sense of duty to subcontractors that are engaged on your projects.

Mr Jenkinson: What I can say is that, in terms of understanding how we pay operators that we work with, we behave in the most appropriate way in terms of the speed at which we pay people. I'm not aware of the relationship with that particular subcontractor and, again, I'd have to take that question on notice to give a fuller answer.

Senator ROBERTS: My understanding is that it's not you who should be paying them; it's Watpac who should have paid them, and Watpac—

Mr Jenkinson: That would be my understanding, but I'm not aware of the relationship with Watpac and what happened.

Senator ROBERTS: If you could take that on notice, too, I'd like to know how you see your sense of responsibility.

Mr Jenkinson: Sure.

Senator ROBERTS: This is my last question, Chair. What do you have in place that ensures that, for your future projects, if a subcontractor has a complaint they're able to raise it with you?

Mr Jenkinson: Again, I would have to take on notice what our procurement policy is and how we take those details, but there certainly is an opportunity for people to contact us, and we would obviously take account of any information people send to us. But I'll have to take that on notice.

Senator ROBERTS: Thank you. If you could, tell me what it is now, whether or not you think it's adequate for preventing a recurrence of something like this and, if it's not adequate, then what you would do to make sure it is.

Mr Jenkinson: Certainly, Senator Roberts.

Senator ROBERTS: Thank you, Chair.

CHAIR: Thank you, Senator Roberts. Back to you, Senator Smith.

Senator DEAN SMITH: What is required for Australia to effectively manage high-level waste?

Mr Jenkinson: That may be a good question for our colleagues in ARWA.

Senator DEAN SMITH: Yes, I thought so. Moving to the matter of a permanent storage facility and site, have you been approached by the government for your views in regard to an alternative to the Kimba site, now that that's been ruled out?

Mr Jenkinson: Again, that's really a question for ARWA in terms of developing a future site. Currently, our responsibility is to safely manage the waste from our operations in temporary storage at ANSTO until such time as there is a national facility.

Senator DEAN SMITH: You haven't been asked for a view or been consulted?

Mr Jenkinson: No.

Senator DEAN SMITH: Would you expect to be?

Mr Jenkinson: We would not expect to be consulted about alternative sites, but we would expect to be consulted about what inventory we hold, how it's conditioned, the waste acceptance criteria and how that would work.

Senator DEAN SMITH: I understand. Provided that the information and then alternative sites are identified, would you expect to be engaged in a discussion around the suitability of various alternative sites?

Mr Jenkinson: If there is technical expertise that ANSTO can provide to support government decisions, we will of course always be willing to provide that. It may be that they would ask us questions around that, but that would be the only time.

Senator DEAN SMITH: Government would come to you first, though, given that you're the primary or chief—

Mr Jenkinson: They may start with ARWA—I would have thought—as they are the waste agency, but we certainly have expertise we'd be happy to share if required.

Ms Quinn: ARPANSA, the Commonwealth regulator, is the other source of expertise.

Senator DEAN SMITH: Great. Thank you very much.

CHAIR: Thank you very much, Senator Smith. There being no further questions at this time, the committee's consideration of the 2024-25 budget estimates will conclude. I thank the minister—

Senator DEAN SMITH: Excellent work, Senator Ayres. You got us there in the end!

CHAIR: and officers of the Department of Industry, Science and Resources portfolio who've given evidence to the committee today.

Senator Ayres: Just imagine how much longer it would have gone—

CHAIR: Thank you to Hansard—the interruption that I'm getting when I'm trying to finish this hearing!—Broadcasting and the committee secretariat.

Committee adjourned at 19:10