



COMMONWEALTH OF AUSTRALIA

# Proof Committee Hansard

## SENATE

ENVIRONMENT AND COMMUNICATIONS LEGISLATION  
COMMITTEE

**Estimates**

(Public)

MONDAY, 1 DECEMBER 2025

CANBERRA

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**ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE**

**Monday, 1 December 2025**

**Members in attendance:** Senators Ananda-Rajah, Cadell, Canavan, Darmanin, Duniam, Ghosh, Henderson, Hodgins-May, McKenzie, McKim, Barbara Pocock, David Pocock, Roberts, Dean Smith, Walker and Whitten

**CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER PORTFOLIO****In Attendance**

Senator Ayres, Minister for Industry and Innovation, Minister for Science

Senator Watt, Minister for the Environment and Water

**Department of Climate Change, Energy, the Environment and Water****Executive**

Mr Mike Kaiser, Secretary

Ms Kushla Munro, Deputy Secretary

Mr Simon Duggan, Deputy Secretary

Ms Rachel Parry, Deputy Secretary

Mr Dean Knudson, Deputy Secretary

Mr Sean Sullivan, Deputy Secretary

Ms Amanda Lee, Acting Deputy Secretary

**Corporate****Finance Division**

Ms Amanda Lee, Chief Financial Officer

Ms Rachel Harris, Branch Head, Financial Services Branch

Mr Kamaldeep Singh, Acting Branch Head, Financial Management Branch

**Property, Infrastructure and Physical Security**

Mr Robert Hanlon, Head of Division

Ms Jill Mand, Branch Head, Property, Infrastructure and Physical Security

**Information and Communications Technology Division**

Mr Dale Naughton, Chief Information Officer

Mr Vincent Cosentino, Branch Head, Operational Services and Infrastructure Branch

**Legal (Chief Counsel)**

Ms Kate Lalor, Chief Counsel

**People Division**

Mr Tim Spackman, Chief People Officer

Ms Melina Saunders, Program Management

**Portfolio Strategy Division**

Ms Anita Aggett, Acting Head of Division

Ms Dana Sutton, Branch Head, Ministerial Liaison and Governance Branch

Ms Miranda Lello, Branch Head, Portfolio Strategy and Integration Branch

Ms Rosa Davic, Acting Branch Head, Communications and Media Branch

Ms Mahani Taylor, Branch Head, Review Taskforce

Mr Rob Scanlon, Acting Branch Head, First Nations Branch

**Outcome 1****Clean Energy Investment and Facilitation Division**

Mr Matthew Brine, Head of Division

Mr Salim Mazouz, Branch Head, Clean Energy Investment Branch

Ms Alison Wiltshire, Branch Head, CIS Delivery and Governance Branch

Mrs Luana Cormac, Acting Branch Head, First Nations and Clean Energy Facilitation Branch

**Climate Change Policy, Adaptation and Risk Division**

Mr Jason Mundy, Head of Division

Dr Nicole Mitchell, Branch Head, National Adaptation Policy Office Branch

Mr Chris Johnston, Branch Head, Climate Active, Risk and Science Branch

Ms Nicole Thomas, Acting Branch Head, Climate Change Policy Branch

### **COP31 Operations Division**

Mr Andrew Hutchinson, Head of Division

Mr Aaron Kirby, Branch Head, Enabling Operations Branch

Ms Louise Perez, Branch Head, Events Operations Branch

### **Electricity Division**

Ms Kirsty Gowans, Head of Division

Ms Electra Papas, Branch Head, Electricity Markets Branch

Mr James White, Branch Head, Consumer Energy Resources Branch

Ms Nadia Rosenman, Branch Head, Electricity Network Policy Branch

Mr Paul Johnson, Special Adviser

Ms Mel Pang, Branch Head, NEM Review Secretariat

### **Emissions Reduction Division**

Ms Kath Rowley, Head of Division

Mr Matthew Ryan, Branch Head, Land and Transport Branch

Ms Kate Lea-Perry, Branch Head, Carbon Crediting Branch

Ms Alannah Pentony, Branch Head, National Inventory Systems and International Reporting Branch

Mr Matthew Searson, Branch Head, Emissions Reduction Assurance Committee Secretariat

Ms Rachael de Hosson, Branch Head, Net Zero Taskforce

### **Energy Performance Division**

Ms Clare McLaughlin, Head of Division

Dr Kate Boston, Branch Head, Energy Performance Strategy Branch

Mr Chris Videroni, Branch Head, Home Ratings and Disclosure Branch

Dr David Atkins, Branch Head, Industrial and Buildings Energy Performance Branch

Ms Melanie Ford, Branch Head, Greenhouse and Energy Minimum Standards Branch

### **Gas and Liquid Fuels Division**

Ms Paula Svarcas, Head of Division

Mr Cris Cano, Branch Head, Liquid Fuels Operations and Analysis Branch

Mr Hew Atkin, Branch Head, Gas Markets Branch

Mr Andrew Pankowski, Branch Head, Gas Transformation Strategy Branch

Ms Jennifer Anne, Branch Head, Liquid Fuels Strategy and Security Policy Branch

### **International Climate and Energy Division**

Mr David Higgins, Head of Division

Ms Gaia Puleston, Branch Head, Strategic Engagement Branch

Ms Lynda Hayden, Acting Branch Head, Regional Partnerships Branch

Mr Michael Bartlett, Acting Branch Head, COP31 Clean Energy Economy Branch

### **International Climate Negotiations Division**

Dr Sally Box, Head of Division

Ms Ingrid Lundberg, Branch Head, COP31 Presidency

Mr Chao Feng, Acting Branch Head, Negotiations Branch

### **National Energy Transformation Division**

Ms Linda McGrath, Head of Division

Mr Adam McKissack, Chief Energy Economist

Mr Matt Minchin, Branch Head, National Climate and Energy Partnerships Branch

Mr Lachlan Bickley, Branch Head, Energy Security, Resilience and Emergency Response  
**Net Zero Industries Division**

Mr Bruce Edwards, Head of Division

Ms Emma Flanigan, Branch Head, Product and Industrial Emissions Branch

**Outcome 2**

**Biodiversity Division**

Ms Cassandra Kennedy, Head of Division

Dr Fiona Fraser, Threatened Species Commissioner

Dr Ilse Kiessling, Branch Head, Protected Species and Communities Branch

Mr Glenn Block, Branch Head, Natural Heritage Trust Branch

Ms Jackie Raynor, Branch Head, Biodiversity Programs Branch

**Circular Economy Division**

Mr James Tregurtha, Head of Division

Ms Rachel Burgess, Branch Head, Chemicals and Atmosphere

Mr Cameron Hutchison, Branch Head, Waste and Resource Recovery Policy

Ms Cathryn Geiger, Branch Head, Partnerships, Infrastructure and Analysis Branch

**Environment Information Australia**

Ms Maya Stuart-Fox, Head of Division

Ms Lisa Nitschke, Branch Head, Environmental Economics, Science and Reporting Branch

Ms Juanita Pettit, Branch Head, Environmental Data and Analysis Branch

**Environment Law Reform Taskforce**

Mr Shane Gaddes, Head of Division

Ms Jennifer Kay, Branch Head

Ms Anna-Liisa Lahtinen, Acting Branch Head

Mr Blaine Wentworth, Acting Branch Head

**Environmental Permitting and Compliance Division**

Ms Dani Yannopoulos, Acting Head of Division

Mr Sam Hush, Branch Head, Wildlife Trade and Regulatory Capability Branch

Mr Danny McQuillen, Branch Head, Compliance and Enforcement Branch

Ms Kate Elliot, Branch Head, Waste, Environmental Permits and Advice Branch

**Environment Policy, Regions and Markets Division**

Mr Greg Manning, Head of Division

Dr Alison McMorrow, Branch Head, Nature Repair Market Delivery Branch

Ms Laura Higgins, Branch Head, Nature Finance and Market Policy Branch

Ms Daniela Croce, Acting Branch Head, Regional Planning and Landscapes Branch

Ms Katrina Purcell, Branch Head, Environment Policy Branch

**Environment Regulation Division**

Mr Declan O'Connor-Cox, Acting Head of Division

Ms Kylie Calhoun, Branch Head

Mr Tim Wyndham, Branch Head

Ms Rachel Short, Branch Head

Ms Kate Gowland, Branch Head

Mr Mark Say, Acting Branch Head

**Environmental Water and Aquatic Ecosystems**

Dr Simon Banks, Head of Division and Commonwealth Environmental Water Holder

Mr Hilary Johnson, Branch Head, Environmental Water Holdings and Water Science

Dr Marcus Finn, Branch Head, Environmental Water, Northern Basin and Water Science Branch

Ms Rebecca Curtis, Branch Head, Environmental Water Policy, Engagement and Wetlands

### **Heritage Division**

Ms Michelle Dumazel, Head of Division

Dr Wayne Beswick, Branch Head, Heritage Policy Branch

Ms Carmen Dwyer, Branch Head, First Nations Heritage Protection

### **International Environment, Reef and Ocean Division**

Ms Katrina Maguire, Head of Division

Mr John Foster, Acting Head of Division

Mr Adam Clark, Acting Branch Head, Ocean and Wildlife Branch

Ms Suzi Heaton, Branch Head, International Environment Branch

### **Parks Australia Division**

Mr Rob Hanlon, Chief Operating Officer

Ms Jill Mand, Branch Head

Ms Tia Stevens, Branch Head

### **Outcome 3**

#### **Australian Antarctic Division**

Ms Emma Campbell, Head of Division

### **Outcome 4**

#### **Water Infrastructure and Investment Division**

Mr Malcolm Southwell, Acting Head of Division

Ms Tanya Koeneman, Branch Head, GAB, LED and Upper Murrumbidgee

Ms Teresa McMaugh, Acting Branch Head, Water Support and Water Efficiency Labelling and Standards

Ms Christine MacRae, Acting Branch Head, Water Recovery Branch

Ms Fiona Yule, Branch Head, Murray Darling Basin Infrastructure Program Delivery Branch

### **Water Policy Division**

Ms Edwina Johnson, Head of Division

Ms Emma Solomon, Branch Head

Ms Angie McKenzie, Branch Head

Mr Anthony Bennie, Branch Head

Ms Sheryl Hedges, Branch Head

Mr Phil Coates, Branch Head

### **Agencies and Statutory Authorities**

#### **Australian Energy Infrastructure Commissioner**

Mr Tony Mahar

#### **Australian Energy Regulator**

Ms Clare Savage, Chair

Mr Matt Garbutt, Chief Executive Officer

Mr Justin Oliver, Deputy Chair

Mrs Stephanie Jolly, Executive General Manager, Consumers and Markets

#### **Australian Institute of Marine Science**

Professor Selina Stead, Chief Executive Officer

Ms Michelle Noack, Chief Financial Officer

Dr Richard Brinkman, Chief Operating Officer

Dr David Wachenfeld, Research Program Director, Reef Ecology and Monitoring  
**Australian Renewable Energy Agency**

Mr Darren Miller, Chief Executive Officer  
Mr Chris Faris, Chief Operating Officer

**Bureau of Meteorology**

Dr Stuart Minchin, Chief Executive Officer and Director of Meteorology  
Dr Peter Stone, Group Executive, Business Solutions Group  
Ms Nichole Brinsmead, Chief Information Officer and Group Executive, Data and Digital  
Mr Mark Lyons, Chief Financial Officer  
Ms Astrid Heward, Group Executive, Enterprise Services and Chief Operating Officer  
Ms Vicki Manson, Group Executive, Australian Climate Science  
Mr Michael Logan, General Manager, National Production Services

**Climate Change Authority**

Hon. Matt Kean, Chair [by video link]  
Mr Brad Archer, Chief Executive Officer  
Ms Eliza Murray, Deputy Chief Executive Officer  
Mr Joseph Hardwicke, General Manager, Corporate Branch

**Clean Energy Finance Corporation**

Mr Ian Learmonth, Chief Executive Officer  
Mr Andrew Powell, Chief Finance Officer  
Mr Simon Every, Senior Associate, Public Affairs

**Clean Energy Regulator**

Mr David Parker, Chief Executive Officer and Chair  
Mr Carl Binning, Executive General Manager, Scheme Operations Division  
Ms Liza Pegorer, Chief Operating Officer  
Mr Mark Williamson, Executive General Manager  
Ms Michelle Crosbie, General Manager, ACCU Scheme and Nature Repair and Analytics Branch  
Mr Matt Power, General Manager, Renewable Energy Target Branch  
Mr Rizwan Akhund, Acting General Counsel  
Ms Kathryn Smith, General Manager, Carbon Markets Branch  
Mr Dean Smeulders, Acting General Manager, Soil, Emissions Avoidance and Contracts Branch  
Ms Jane Wardlaw, General Manager, NGER and Safeguard Branch

**Department of Industry, Science and Resources**

**Offshore Infrastructure**

Mr Graeme Waters, Offshore Infrastructure Registrar  
Mr Steven Taylor, Director

**Emissions Reduction Assurance Committee**

Professor Karen Hussey, Chair

**Great Barrier Reef Marine Park Authority**

Mr Joshua Thomas, Chief Executive Officer  
Dr Roger Beeden, Chief Scientist  
Mr Richard Quincey, General Manager, Marine Park Operations Branch  
Ms Jameelie Fletchett, Chief Operating Officer  
Mr Fred Nucifora General Manager, Major Projects Branch  
Ms Caroline Turner, General Manager, Strategic Policy and Partnerships Branch

**Inspector-General of Water Compliance**

Hon. Troy Grant, Inspector-General of Water Compliance  
Mr Daniel Blacker, Deputy Inspector-General of Water Compliance

**Murray-Darling Basin Authority**

Mr Andrew McConville, Chief Executive  
Ms Katrina Tonkin, Chief Operating Officer  
Ms Jacqui Hickey, Executive Director, River Management  
Mr Tim Goodes, Executive Director, Basin Plan  
Dr Matt Coleman, General Manager, Science Acquisition

**National Offshore Petroleum Safety and Environmental Management Authority****Offshore Infrastructure Regulator**

Ms Sue McCarrey, Chief Executive Officer  
Mr Owen Wilson, Executive Director

**Snowy Hydro Limited**

Mr Dennis Barnes, Chief Executive Officer

**Sydney Harbour Federation Trust**

Ms Janet Carding, Executive Director

**Committee met at 09:04**

**CHAIR (Senator Ghosh):** I declare open this hearing of the Environment and Communications Legislation Committee into the 2025-26 supplementary budget estimates. I begin by acknowledging the traditional owners of the land on which we meet and pay our respects to elders, past and present. The committee has fixed Thursday 29 January as the date for the return of answers to questions taken on notice.

The committee's proceedings today will begin with corporate matters and general questions of the Climate Change, Energy, the Environment and Water portfolio. Under standing order 26, the committee must take all evidence in public session. That 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 position of the departments and agencies which are seeking funds in estimates are relevant questions for the purposes of estimates hearings. That is a broad test of relevance. 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 a discretion to withhold details or explanations from the parliament or its committees unless the parliament has expressly provided otherwise. The Senate has resolved also that an officer of a department of the Commonwealth shall not be asked to give opinions on matters of policy and shall be given a reasonable opportunity to refer questions asked of the officer to superior officers or 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, and I incorporate the public interest 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:** My colleagues would be aware that one of my roles as committee chair is to ensure that proceedings are conducted in an orderly way. That is not intended to prevent rigorous questioning of witnesses but to help ensure that senators exercise their rights and privileges in a civil and responsible manner. I remind senators of their obligations under the Behaviour Code for Australian Parliamentarians to treat witnesses with dignity, courtesy, fairness and respect and, as chair, I intend to uphold these standards.

### Department of Climate Change, Energy, the Environment and Water

[09:07]

**CHAIR:** I now welcome Senator the Hon. Tim Ayres, Minister for Industry and Innovation and Minister for Science, representing the Minister for Climate Change and Energy. Minister, do you wish to make an opening statement?

**Senator Ayres:** No, thank you.

**CHAIR:** I also welcome Mr Mike Kaiser, the Secretary of the Department of Climate Change, Energy, the Environment and Water. Welcome, Mr Kaiser. Do you wish to make an opening statement?

**Mr Kaiser:** No.

**CHAIR:** Before we commence with corporate matters and general questions, I remind senators that this part of the program relates to matters concerning central departmental administration, such as building services, ICT staffing levels and media procurement. Questions relating to individual policies and programs should be addressed to officials when specific programs are considered in subsequent sessions. On that note, I hand the call to Senator Henderson.

**Senator HENDERSON:** I want to start by asking about COP30. Mr Kaiser, how many ministerial staff attended COP30 with the minister and the assistant minister?

**Mr Kaiser:** This is a time in the agenda for corporate questions and so, as the chair outlined, we can answer questions in relation to broad issues of corporate matters across the entire department.

**Senator HENDERSON:** This goes absolutely to corporate, because I'm asking about attendance. This is a corporate matter, Mr Kaiser.

**Mr Kaiser:** You don't have long to wait. That agenda item is on at 9.30, so you don't have much time to wait. We can tell you, overall, how many staff there are in the department, and the travel budget.

**Senator HENDERSON:** Yes, that's what I'm going to be asking about.

**Mr Kaiser:** No. You've asked specifically about a particular area of the department and a particular activity which comes under a different outcome.

**Senator HENDERSON:** Mr Kaiser, I'm asking about departmental matters in relation to attendance at a conference. Strictly speaking, this comes very much within the remit of corporate matters, so could I please ask you to address that. I'll be asking about travel costs and other matters in relation to the department's attendance at the conference.

**Mr Kaiser:** Yes, and you'll be doing that at 9.30. In the corporate session, we can tell you, overall, how many people have attended conferences and how much the cost of conferences is for the department.

**Senator HENDERSON:** Mr Kaiser, in all my time in Senate estimates, never have I had a secretary refuse to answer a question in the corporate section about attendance at a conference, so I would ask you if you could just address my question, please.

**Senator Ayres:** Senator, I think what the secretary has done is indicate to you which bits of your questions he can deal with now and which bits he can deal with in a few minutes time. It is not unprecedented to try to make sure that there is some discipline in the process from the beginning because it means that, later in the day, if we go through things sequentially, senators will be able to deal with all of the issues rather than find out later on that officials aren't available.

**Senator HENDERSON:** Minister, thank you for your assistance.

**Senator Ayres:** So, if you can follow the secretary's lead, there is no part of this that we're not happy to talk about over the course of the day.

**Senator HENDERSON:** Minister, within this section, I'm seeking to address these questions. Mr Kaiser, I would again put to you: how many ministerial staff and how many departmental staff attended COP30, please?

**Mr Kaiser:** I'm letting you know that the people who can answer that question very specifically for you will be available from 9.30.

**Senator HENDERSON:** So you don't have that information?

**Mr Kaiser:** No, and the officers who have it may not even be here, because we seek to get people here in accordance with the agenda.

**Senator Ayres:** You'll get better information in 19 minutes.

**Senator HENDERSON:** Minister, I don't need your assistance. Perhaps you could just let me continue. How many Commonwealth—

**Senator Ayres:** Hang on a second.

**Senator HENDERSON:** Minister, can I please continue?

**Senator Ayres:** I'm obliged to respond when it's my job to respond. I don't need a snarky aside about whether you need my assistance. What I am indicating is that, in 19 minutes, the officials who are able to answer your questions will be here.

**Senator HENDERSON:** Thanks, Minister. Perhaps I could just—

**Senator Ayres:** We're in corporate, so let's just work as suggested, because you will get to what it is that you need to get to irrespective of—

**Senator HENDERSON:** Thank you, Minister.

**Senator Ayres:** how you've choreographed the sequence of these questions. Let's let the officials who are actually responsible answer the questions for you.

**Senator HENDERSON:** Mr Kaiser, what was the total cost of travel, accommodation and other expenses for the Australian delegation regarding COP30?

**Mr Kaiser:** Again, this is a very large department. The corporate section within the department does the accounting for the entire department, and the people who are able to answer your question will be available at 9.30 to do that specifically. It's a very large agency. The people who run the climate change group within the department will be available at 9.30; they are accountable for the expenditure within that area and will be able to answer your questions about COP30.

**Senator HENDERSON:** Mr Kaiser, travel costs have always been strictly a matter for the corporate section of the program.

**Mr Kaiser:** Overall for the whole department.

**Senator HENDERSON:** You don't have a breakdown?

**Mr Kaiser:** The people at the table at the moment don't, because we're not up to that agenda item.

**Senator HENDERSON:** Is it possible to call to the table those people who are relevant to the travel costs?

**Mr Kaiser:** They may not be here.

**Senator Ayres:** They'll be here in 18 minutes now. That's the way this works. This is an additional week of estimates. Now that an additional week has been loaded upon all these public servants who would otherwise be doing their work, it is even more important to adhere to the agenda so that they can sequence their appearance in order to minimise the amount of time they have to spend here. It is not only useful for the efficiency of the committee but also important in these public servants being able to discharge their other responsibilities on behalf of Australians.

**Senator HENDERSON:** Thank you, Minister. Mr Kaiser, are any of the people who could answer that question here in the building or, more specifically, in the room at the moment? I can see one person nodding.

**Mr Kaiser:** Yes.

**Senator HENDERSON:** Is it possible to call that person to the table so that we can have these questions answered?

**Mr Kaiser:** She has no responsibility for matters in this agenda item. She has a responsibility for matters in the agenda item that begins at 9.30.

**Senator HENDERSON:** There's clearly a lot of sensitivity about these costs.

**Mr Kaiser:** No. We're fully prepared to answer them; we just want to stick to the agenda that we were given.

**Senator Ayres:** They will be available in 17 minutes. Honestly, if you've run out of questions in corporate, you could hand the call to some of the others—

**Senator HENDERSON:** Thanks, Minister, but—

**CHAIR:** Senator, I am going to take the call back just for one moment to indicate that we have a long day and I would really appreciate it if people wouldn't speak across each other. I appreciate that there will be relevant points where the questioning is robust but, if there is a practical way to move past this particular issue just at the moment, I would appreciate it. Senator Henderson.

**Senator HENDERSON:** Thanks, Chair. I'm disappointed, Mr Kaiser, that you're not able to address this question now when travel costs are very much a matter for corporate. But I will ask you now: what are the total travel costs of the department, and can you please provide a breakdown in relation to those costs?

**Mr Kaiser:** What do you mean by 'breakdown'? We can certainly give you the total travel costs, but what do you mean by 'breakdown'? Do you mean overseas compared to domestic?

**Senator HENDERSON:** That's right; overseas, and for which conferences these costs were incurred.

**Ms Lee:** For the period of July to 30 September 2025, our domestic travel costs have been \$4.4 million, and that's broken down by \$1.7 million in airfares, \$1.5 million in accommodation and then \$1.2 million in other costs. Other costs are things like ground transport, taxis, car hire, other booking fees, meals et cetera. Our total international costs for that same period are \$2.4 million. So that's \$1.2 million in airfares and \$1.1 million in accommodation, and then the other costs for that one are a lot smaller at \$100,000. Overall, that brings our costs for airfares to \$2.9 million, accommodation to \$2.6 million and other costs to \$1.3 million. So our total costs in that period from July to September are \$6.8 million.

**Senator HENDERSON:** How are the overseas costs incurred, please, and where did officials travel to?

**Ms Lee:** Our officials travelled to a range of places. I have some of that detail.

**Senator HENDERSON:** Could you give me a breakdown?

**Ms Lee:** I have a little bit of that detail

**Senator HENDERSON:** Did that include COP30?

**Ms Lee:** No. Apologies; these are our costs until September. There is one element of COP30 in those costs. Over that period, our officials travelled to a range of places for a range of international forums. Some of the key forums that were attended during that time were an Australia-Japan workshop on Antarctic science, a Committee for the Conservation of Antarctic Marine Living Resources, a World Heritage committee meeting and an attendance at the United Nations General Assembly in Climate Week in September.

**Senator HENDERSON:** Could I ask whether you could provide, on notice, the full list. What about the costs since September until now?

**Ms Lee:** I only have up until September in terms of how we reconcile, so I'd have to take on notice the costs later in October and November.

**Senator HENDERSON:** Since September, what costs were approved for travel?

**Ms Lee:** I would have to take that on notice.

**Senator HENDERSON:** So you don't have any—

**Ms Lee:** No, I don't. In terms of how our systems work, we've pulled out up until September.

**Senator HENDERSON:** Is it possible to ask someone in the department to bring those costs back to the table for the next—

**Ms Lee:** I'll take it on notice to see what information we can pull out, in terms of where we're up to with our reconciliation.

**Senator HENDERSON:** You've said that, of the \$2.4 million incurred in overseas travel, a small amount was for COP30?

**Ms Lee:** I didn't say 'small amount'. Some of that was for COP. We had a whole-of-government contract for accommodation; we paid the deposit of \$600,000 for that contract.

**Senator HENDERSON:** Of \$600,000?

**Ms Lee:** Yes, \$660,000. But that's the deposit; and that's not only our cost but part of the whole-of-government.

**Senator HENDERSON:** What percentage of the total accommodation fee was required by way of the deposit?

**Ms Lee:** I don't know. The people in the next—

**Senator HENDERSON:** Was it 10 per cent?

**Ms Lee:** I really don't know. I just have the number because I know it's in my September—

**Senator HENDERSON:** Could you find that out, please.

**Ms Lee:** I will find that out and send it.

**Senator HENDERSON:** Are the costs since September approved through the department?

**Ms Lee:** Yes.

**Senator HENDERSON:** So you've got information about those costs?

**Ms Lee:** We've got information about the approved budgets, yes.

**Senator HENDERSON:** Could we please have the approved costs brought back to the table.

**Ms Lee:** I'll ask my colleagues.

**Mr Kaiser:** I'm sorry; I'm not certain what you're asking for there. Could you repeat the request perhaps with a little more specificity.

**Senator HENDERSON:** I am asking for the costs of all travel since September; what information regarding travel do you hold in the department, including what was approved?

**Mr Kaiser:** We'll see what we can get. If that were available, we would have it in our briefing notes. It's likely that it will not be available because we've not completed all the reconciliations.

**Senator HENDERSON:** Mr Kaiser, you are required to answer these questions if that information is within the department. What I'm asking is whether you could ask one of your officials to find that information and bring it back to us.

**Mr Kaiser:** Yes, we will endeavour to do that. At the moment, we're taking it on notice.

**Senator Ayres:** Senator, if we can assist you, we will. As the secretary has described, these matters are accounted for in the normal way, but they will either help you later today or on notice. If those figures are not available, because they take some time to work through and become available, we will just deal with that in the normal way.

**Senator HENDERSON:** Minister, I'm not asking for the reconciliation of those costs, I'm actually asking for information which currently exists within the department as to the approved travel costs. That is information held by your department, and I don't appreciate the ducking and weaving, Mr Kaiser, in relation to critical information. Our job is to scrutinise the expenditure of your department. I would ask that you find that information, please, and bring it back to us this morning.

**Senator Ayres:** It may be that Mr Kaiser and his team have information that is consistent with what you've asked for and it's available now; no doubt, if that's the case, they'll provide that when they are able to. I think the conference that you and some of your colleagues—not all of them—are so singularly obsessed with is still being reconciled, so those figures may not be available. It's not possible to go and collect all of the receipt stubs and bring them here in the back of a ute and sort off—

**Senator HENDERSON:** Minister, I'm not—

**Senator Ayres:** Don't interrupt me, Senator. I'm answering your question. Do not interrupt me. You've done that already. We've been in here for 21 minutes and you've talked over the top of the secretary and the officer.

**Senator HENDERSON:** You are talking over me, Minister.

**Senator Ayres:** I was answering the question and you talked over me.

**CHAIR:** Minister and Senator Henderson, let me take this back for one moment. At this point, I think it is important that the minister be allowed to answer. Senator Henderson, you've characterised the behaviour of the department in a certain way and there's a response coming from the minister to your question. So it is important that he be given a chance to finish that response, and then you'll get a chance to ask further questions. Minister.

**Senator Ayres:** As I've indicated, if the information that you seek is available in a format in which it can actually be provided and that is available to the secretary and his team in a way that they can provide it over the course of the day then, of course, they will. As the secretary indicated at the outset, the team who are responsible for this particular area will be able to answer your questions, both in a quantitative and qualitative sense, very shortly; in fact, that is eight minutes away now. If they need to take it on notice, they will do so. As I've said, this is an additional set of estimates that was not planned for. There will be more additional estimates at the very beginning of next year. There is no ducking and weaving, and it is not necessary to characterise the evidence of officials in that way. This information will all be provided in the normal sequence of events.

**Senator HENDERSON:** Ms Lee, you mentioned that all of the costs for every bit of travel are approved through the department. What was the approved travel budget for COP30?

**Ms Lee:** I don't actually have that with me. As I say, I've got up until September, so I would need to see whether we can find that for you.

**Senator HENDERSON:** At this point, I will hand the call back.

**CHAIR:** Senator Smith.

**Senator DEAN SMITH:** I might just continue Senator Henderson's line of questioning. How many individual flights for officials does the \$1.2 million in airfares account for?

**Mr Kaiser:** For international travel?

**Senator DEAN SMITH:** Correct.

**Ms Lee:** For international travel during that period, it accounts for 81 travellers.

**Senator DEAN SMITH:** There is an accumulated \$1.2 million in international airfares?

**Mr Kaiser:** That is 91 trips and 81 individual travellers.

**Senator DEAN SMITH:** What is the list of destinations travelled to by those 81 individuals?

**Ms Lee:** I don't have the full list with me. Some of them went to Tokyo for Antarctic science, South Korea for energy ministerial missions, Switzerland—these are some that I have—and Norway. I think we had a question on notice and our answer had a list of all the travel from the last time.

**Senator DEAN SMITH:** It would be most helpful if you could update your answer to that previous question on notice.

**Mr Kaiser:** I think it's really important to understand the context of this department and its exposure to international affairs.

**Senator DEAN SMITH:** Mr Kaiser, if you can add context to the figures that have been delivered in the corporate section, you're very welcome to do so. So, if you would like to provide some broader context to the questions that Senator Henderson has asked you about international travel, please do.

**Mr Kaiser:** Yes, I'm attempting to. This is a department that has enormous exposure to international affairs through its energy division and environment division. We manage international treaties and relationships in the energy space, the environment space and the climate space. We often do that in the context of assistance from and in partnership with DFAT. This is some of the context for what will seem like very high international travel numbers. We represent the nation internationally in a range of forums in relation to environmental treaties and other matters.

**Senator DEAN SMITH:** Mr Kaiser, all of that information would have been in the annual report.

**Mr Kaiser:** Yes, all of the information is in the annual report.

**Senator DEAN SMITH:** So what you've shared with me is not actually new.

**Mr Kaiser:** No. But I thought it would be helpful context because some of the figures that my colleague has provided seem quite high for a Commonwealth department, and I was simply providing, for the record, context for the amount of international work that we do often in partnership with DFAT.

**Senator Ayres:** International travel is expensive, and domestic travel is expensive too. Your party organisation has just revealed—I think news.com describes it this way—the inexplicable decision to hold another sort of Friday-night fight night about net zero and climate and energy policy costing the Liberal Party \$136,993.

**Senator HENDERSON:** It's amazing how you can be so specific about the Liberal Party.

**Senator Ayres:** TA for the 70 MPs who came to stay one night in Canberra to feed themselves ahead of this orgy of self-indulgence cost \$22,540. That's not a cost to the Liberal Party; that's a cost to taxpayers.

**Senator HENDERSON:** Point of order.

**Senator Ayres:** It's another example of the cost of your unspeakable incapacity over the course of 15 years to be able to resolve an approach to energy policy. So, yes, all of these things—

**Senator HENDERSON:** Chair, point of order.

**CHAIR:** Minister, we've had a point of order from Senator Henderson. Senator Henderson, what's the point of order?

**Senator HENDERSON:** Chair, I wonder whether you could direct the minister to be relevant. We are here to scrutinise the expenditure and operations of his department.

**Senator Ayres:** You're all beyond scrutiny, are you? You're all beyond it. We're not allowed to talk about you. We've just got to—

**CHAIR:** Minister and senators, please come to order. I think the minister has reached the natural conclusion of his answer, and we will now move along.

**Senator HENDERSON:** You're saving him from—

**CHAIR:** Senator, I don't agree with that characterisation either. Let's all bring the politeness level up and the temperature level down, and we'll go back to Senator Smith.

**Senator DEAN SMITH:** Ms Lee, just for my curiosity, when ministers or staff attached to ministerial offices travel, does that cost come out of departmental budgets?

**Ms Lee:** No.

**Senator DEAN SMITH:** So that's not reflected in these figures?

**Ms Lee:** No, that won't be reflected in these figures.

**Senator DEAN SMITH:** Where are those figures and data reflected?

**Ms Aggett:** Essentially, costs or policies governing ministerial travel are looked after by our colleagues at the Department of Finance, the Independent Parliamentary Expenses Authority or the Department of the Prime Minister and Cabinet.

**Senator DEAN SMITH:** You don't keep those records at all?

**Ms Aggett:** No.

**Senator DEAN SMITH:** And no minister is included in the group of 81 individuals who travelled in the period July through to the end of September?

**Ms Agett:** That's correct. That's department officials.

**Senator DEAN SMITH:** Also no people employed under the MOP(S) Act are included?

**Ms Agett:** Correct.

**Senator DEAN SMITH:** Thank you very much.

**CHAIR:** Senator Duniam.

**Senator DUNIAM:** In terms of IT support to ministerial offices, is that something we can talk to? For the current financial year, what was the cost of IT support to ministerial offices?

**Mr Naughton:** The current costs for support are \$255,472.87.

**Senator DUNIAM:** That's for the financial year to date?

**Mr Naughton:** Yes, that's the full financial year.

**Senator DUNIAM:** But we're only just into December. Is this July to December? Or is it to September, like the travel accounting?

**Mr Naughton:** Can you rephrase that?

**Senator DUNIAM:** Is the \$255,000 figure for July to December?

**Mr Naughton:** The ministerial costs are from 2024-25. To 3 October 2025, they were \$236,388.92. Since then, from the last estimates, they've increased to \$255,472.87.

**Senator DUNIAM:** That is for this financial year to date in effect?

**Mr Naughton:** Yes.

**Senator DUNIAM:** Do we have a breakdown by office where those costs are spent?

**Mr Naughton:** I can take that on notice.

**Senator DUNIAM:** Can you refresh the committee on the cost of IT for the last financial year for ministerial offices?

**Mr Naughton:** It does cover from 2024-25.

**Senator DUNIAM:** Sorry, it's not this July just gone; it is July 2024?

**Mr Naughton:** Correct.

**Senator DUNIAM:** We'll move to legal costs borne by the department. I'm not going to ask about any legal advice today because I know that gets us nowhere. Has any cost been borne by the department this financial year or over another period? If it's another period, could you just specify for me what period that is and what the costs were?

**Ms Lalor:** Yes. I can tell you that external legal services expenditure for the period 1 July 2025 to 30 September 2025 was \$4,627,406.65.

**Senator DUNIAM:** Billing systems are working beautifully. On notice, are you able to break that down by item for which those bills have been paid and to whom?

**Ms Lalor:** I can tell you now that the expenditure was across 198 discrete legal matters outsourced to external legal providers, including AGS and other firms on the panel.

**Senator Ayres:** I'm guessing, but in terms of how specific you can be about those questions, where there are matters still ongoing it might not be in the Commonwealth's interest to indicate where costs become a material question.

**Senator DUNIAM:** I'm going to leave that.

**Senator Ayres:** Thank you. I just wanted to help.

**Senator DUNIAM:** You are a very helpful man.

**Senator Ayres:** I understand there's a divergence of views about some of these questions.

**Senator DUNIAM:** Some parts of questions. I don't know if everyone's happy. So, that's to date. What proportion of that in excess of \$4 million relates to funds paid to the AGS?

**Ms Lalor:** I can. For the same period it is \$1,635,350.14.

**Senator DUNIAM:** Do you have a figure relating to external costs for the previous financial year, 2024-25?

**Ms Lalor:** Not in front of me. I'm sorry.

**Senator DUNIAM:** On notice?

**Ms Lalor:** Yes.

**Senator DUNIAM:** My final set of questions relates to external consultancies for the financial year to date?

**Ms Lee:** For the financial year to date, we've entered into new consultancy contracts worth \$6.4 million for the financial year until 30 September.

**Senator DUNIAM:** That is for services for the financial year or for a longer period?

**Ms Lee:** No, that's just for the total value of the contract that we've entered into.

**Senator DUNIAM:** For what period is that contract?

**Ms Lee:** That will be from 1 July until 30 September. That's the timing. But the contract timing—

**Senator DUNIAM:** Yes, the contract timing?

**Ms Lee:** All of those contracts will have a different amount of time, so that is spent and it might be over a number of years.

**Senator DUNIAM:** Perhaps you could provide that figure on notice? That would be great. That's all you've expended this year?

**Ms Lee:** So far.

**Senator DUNIAM:** With whom are the contracts made?

**Ms Lee:** Some of these are some of our key ones. We have a contract with the Boston Consulting Group related to environmental regulation. We have a contract with NOUS in relation to modelling for gas strategy. We have a contract with ArborMeta related to national forest and sparse woody datasets. We have one with the AEMO in relation to energy security and one with Deloitte in relation to cash flow analysis, fuel security services. They are some of our larger ones we've entered into and there will be smaller ones in that time period as well.

**Senator DUNIAM:** Just so I'm clear, we talked about a \$6.4 million figure before.

**Ms Lee:** Yes.

**Senator DUNIAM:** You mentioned two contracts were entered into. I may have misunderstood, but that \$6.4 million is for more than just two contracts? It is for those ones you referenced there?

**Ms Lee:** Yes, that's the sum of those.

**Senator DUNIAM:** To save us time, I'm just going to ask, on notice, if you could provide the list of the entities with whom contracts have been formed, the value and the purpose as far as you can?

**Ms Lee:** It's for 43 contracts.

**Senator DUNIAM:** If you could do that and if on notice also you could provide the 2024-25 equivalent for the full financial year?

**Ms Lee:** Yes.

**Senator DUNIAM:** Excellent.

**Mr Kaiser:** Just to be helpful, there is a public register.

**Senator DUNIAM:** Excellent. Can you provide that public register?

**Mr Kaiser:** Yes. We'll send through the link in the answer.

**Senator DUNIAM:** I'm sure you will. You're a very helpful secretary.

**CHAIR:** Senator Henderson.

**Senator HENDERSON:** I refer to the earlier answers to the international travel questions. You indicated some \$1.2 million was spent between July and September involving 91 trips and 81 travellers. When you calculate that, that's just a bit under \$14,000 per trip. How many of those trips were business class?

**Ms Lee:** I don't have that information with me.

**Ms Harris:** International travel is generally a business class travel, because that's the entitlements under the EA or the remuneration tribunal.

**Senator HENDERSON:** We can assume they were all business class travel?

**Ms Harris:** Yes.

**Ms Lee:** We can confirm that.

**Senator HENDERSON:** What about domestic travel? How many business class flights were taken domestically?

**Ms Harris:** I can take that on notice for you. We don't have that detail here.

**Ms Lee:** There are different requirements domestically as opposed to internationally.

**Senator HENDERSON:** Yes, I know that. That's why I was asking.

**Senator Ayres:** Probably similar amounts to the travel that you lot spent for your ding-dong on energy policy the other day. It's probably a similar combination of different classes of travel, I'd imagine. If you continue to not be able to resolve it, it will continue to be very expensive.

**Senator HENDERSON:** Chair, can you bring the minister to order?

**CHAIR:** Senator Smith, I think you have a question?

**Senator DEAN SMITH:** I do. I return to a matter we deliberated over in the last estimates, which was the order for the production of documents No. 100. Ms Lee, I understand that the ministerial branch sits under your responsibilities?

**Ms Lee:** It does, today, yes.

**Senator DEAN SMITH:** But at the time of preparing the response to the OPD 100 you were not in the department?

**Ms Lee:** I wasn't in the role. We're just covering while people are on leave et cetera.

**Senator DEAN SMITH:** What lessons have been learnt from the OPD 100 matter by the department?

**Mr Kaiser:** Can you elaborate on your question? What lessons?

**Senator DEAN SMITH:** Certainly. The Senate Clerk wrote to me confirming that the department's defence in the OPD 100 was to utilise an FOI justification for not meeting that and that was incorrect.

**Mr Kaiser:** We relied on FOI because documents relating to guidance for witnesses described the FOI as—I don't have the precise description in front of me—a rough guide to be applied. The Clerk of the Senate clarified that matter and, in consultation with our minister, we responded somewhat differently.

**Senator DEAN SMITH:** Mr Kaiser, that makes it sound as if it were a minor error or an oversight when, in actual fact, I think the tone of the Clerk's letter makes it very clear that nowhere, not ever, is the FOI justification a suitable justification for not complying with an order of the Senate.

**Senator Ayres:** I'm not sure that the secretary can comment on tonal differences between various letters in Senate procedural matters. I think it is normal for there to be an exchange between the executive and the legislature on these questions and for people's approaches to evolve over time.

**Senator DEAN SMITH:** No, Minister Ayres, you're wrong. This is a substantial matter. This is a substantive matter that goes to whether the government complied with orders of the Senate.

**Senator Ayres:** I know there may be a difference between your view about what's substantial and what's not.

**CHAIR:** Minister and Senator Smith, I notice this has happened already a number of times this morning. If we could just allow each other to speak? Senator Smith, you'd put a question and a proposition. The minister was providing a response to that. It was relevant to that. I appreciate you have a different view on it and you're entitled to put that view when the call comes back to you. Minister.

**Senator Ayres:** Let me just conclude on this point. At this point in time, this opposition has taken an industrial approach to both orders for the production of documents and freedom of information applications. Some of those applications appear to be mechanically generated, that is, not generated by a normal human who is interested in making an application. They appear to be automated, that is, generated by a computer, not by a person.

**Senator DEAN SMITH:** What is the evidence for that?

**Senator Ayres:** There are thousands of them. There are more over the last few months than there have been in the history of Federation.

**Senator DEAN SMITH:** Just because there are thousands of iterations—

**CHAIR:** Senator Smith, please let the minister continue.

**Senator Ayres:** I'll give you a tip. Our approach, which was effective, was that if a department received an order for the production of documents or an FOI from the Labor Party in opposition, people knew that we were on to something. You lot provide this sort of cacophony of procedural noise that amounts to nothing.

**Senator DEAN SMITH:** Keep going.

**Senator Ayres:** I intend to keep going.

**Senator DEAN SMITH:** Keep going.

**Senator Ayres:** I'll continue answering. Just wait.

**Senator DEAN SMITH:** What did the intergovernmental brief say? It said electricity prices were going up. It said you weren't on track to meet your target.

**Senator Ayres:** There is nothing inconsistent—

**CHAIR:** Senators! Sorry, Minister, if you'll just pause for one moment. Senator Smith and Senator Henderson, as I've said, there are undoubtedly different views in this room about different aspects of what will emerge today. I would like to ensure we have a question and an answer. The minister is giving an answer. Senator Smith, you will have a chance to ask him questions after that. This is going to be, I'm sure, a long enough day for those questions and answers to be fulsome. If we could just observe—

**Senator DEAN SMITH:** I think the key point here is, if Senator Ayres would apply some brevity, we will be able to ask our questions and move through our questions.

**CHAIR:** Senator Smith, I'm sure the answers will be completed more quickly if they're not interrupted. It is appropriate that the minister responds in the way that he sees fit to these questions.

**Senator HENDERSON:** Within standing orders.

**CHAIR:** Yes, but everyone has to operate within the standing orders, Senator Henderson. Let's have this done in a slightly more orderly way and we'll get through it a bit quicker. Senator Ayres.

**Senator Ayres:** You can be totally confident that, when a question requires a short answer, I will give a short answer. Where a question requires a medium sized answer, I'll give you a medium sized answer. When it requires a long answer, you will get a long answer. In terms of the minister's and the department's approach—

**Senator DEAN SMITH:** You make a minute feel like a lifetime!

**Senator Ayres:** I suppose there's a bit of joy in this for all of us. In terms of the incoming government brief in which you are so interested, my recollection is it's not been ordinary for these to be provided. Recently, they have been provided in relation to orders for production of documents. Each incoming government brief intersects differently from the requirements that are there for not providing information in relation to certain matters that would be relied upon where you'd have to rely upon the immunity provisions to do that. Each ministerial office, each department, deals with those differently, and that is what has happened here.

**Senator DEAN SMITH:** Why does this department need to exercise so much secrecy when other departments have provided the incoming government brief unredacted? That's your question. What is the secrecy? What in the department is being withheld from public scrutiny? What is it that you don't want seen? Other departments have made their incoming government brief.

**Senator Ayres:** It's not the football. Don't heckle me like it's under-16s Rugby League. As I indicated, each incoming government brief intersects with these questions differently.

**Senator DEAN SMITH:** I refer to my original question, which was about what other links are within the department in regard to the clerk's advice about how it dealt with OPD 100? What are the lessons that have been learned?

**Mr Kaiser:** I now have the information to hand that we relied upon. The department understands that the FOI Act doesn't usually have application in OPDs, but we relied on the official witness guidance that states that 'the FOI Act can be considered as a general guide to the grounds on which a parliamentary inquiry may reasonably be asked not to press for particular information'. We relied upon that in our application broadly of the FOI Act to the OPD. Since that time, the clerk has clarified the situation. The advice that we gave to the minister in relation to that has led him to release the material that he's released. That's the history of the matter.

**Senator DEAN SMITH:** Ms Lee, you're an experienced official and I think I might have sat across from you in other estimates in other departments. If you were in the chair at the time that this OPD was responded to and the FOI justification provided, would you have queried or challenged that or would you have relied on the official witness guide as well?

**Mr Kaiser:** I don't think Ms Lee was in the chair at the time we were dealing with it.

**Senator DEAN SMITH:** No, she wasn't, but she's an experienced official.

**Senator Ayres:** You asked her for an opinion.

**Senator DEAN SMITH:** I'll give you something that's a bit less hypothetical about a previous government's approach to these questions. I have in front of me a letter from then Deputy Leader of the Nationals, Minister for Regional Services, Minister for Sport, Minister for Local Government and Decentralisation, and Senator for Victoria, who says in relation to a very similar application. 'Dear President' is jauntily scratched out. It states, 'Scott, on behalf of the Hon. Dan Tehan MP, Minister for Education and pursuant order, it is the government's contention that the documents which are the subject to the order'—that is, the incoming government brief—'in relation to the Australian Research Council should be withheld in full from the Senate on the grounds of public interest immunity.'

**Senator Ayres:** Does that say anything about FOI justifications as a reason for not providing the documents? That is the substantive matter here in relation to the FOI justification.

**Senator DEAN SMITH:** I'm talking about the overall approach in terms of incoming government briefs, which do brief new ministers on the totality of issues in their agencies and portfolios. For the ministers secretary Kaiser serves—there are a range of them—those do intersect with areas of public interest immunity, including obviously cabinet consideration in different ways. That means you get differential responses because there's different intersections with those kinds of immunity. I wouldn't have thought that was controversial. Your colleagues have had orders for production of documents and freedom of information applications. There is a blizzard of them. It's not a surprise that these things intersect.

**Senator DEAN SMITH:** Whatever you have just said is nonsense. This is a substantive matter that I'm keen to understand.

**CHAIR:** Senator Smith, once again, while you may not like or agree with the answer that's been given by Senator Ayres, if you would allow him to conclude that answer before you begin speaking over the top of him that would be much appreciated and then we can move on.

**Senator DEAN SMITH:** Senator Ayres's contributions are comments. They don't even come close to being answers to the question.

**CHAIR:** I think he is providing a broad response to what you asserted as well. To be fair, there is a fair bit of characterisation and general proposition-putting on both sides of this table, unfortunately. Minister, if you would finish your answer and then we will come back to Senator Smith.

**Senator Ayres:** There has been some backwards and forwards in relation to the FOI aspects of this. It's a very straightforward set of propositions. What has been provided has been provided and is consistent with the previous practice. There is nothing controversial at all.

**Senator DEAN SMITH:** Senator Ayres, you can in all confidence give me the benefit of the doubt on this particular matter. You know this to be true. I am genuinely interested and curious about the OPD matter and the FOI justification. We had this conversation. The Senate Clerk provided a response. I'm really keen to understand what lessons have been learnt and how, if at all, the official witness guide has been improved upon to reflect the Senate Clerk's comments. I am genuinely interested in how this experience has been used to improve the responsiveness of the department to orders of the Senate. Anyone who knows my history in this place knows that it is a genuine interest. Thank you, Senator Pocock, for nodding in affirmation. It is a genuine interest I have. You'd have to concede that as well, Senator Ayres.

**Senator Ayres:** I know that, unlike your colleagues, your interest in these things is genuine and that you are not the author of hundreds and hundreds of orders for production of documents that each of these departments receive—more than in the history of Federation.

**Senator DEAN SMITH:** I have a healthy curiosity on matters and I do use OPDs to satisfy those curiosities.

**Senator Ayres:** I know you write your own.

**Senator DEAN SMITH:** I'm prudent, yes.

**Senator Ayres:** Unlike some others.

**Senator DEAN SMITH:** Secretary or Ms Lee, I am really keen to understand: having gone through this experience with the OPD 100, what are the lessons learned? How have things improved? How have things changed in the department? If they haven't, that's okay; that's your answer. I'll just be ultra vigilant on other OPD matters.

**Mr Kaiser:** I wouldn't characterise it as the department having learnt lessons, I would characterise it as the department responding to and reacting to new information which was provided by the Clerk of the Senate when they clarified the matter in terms of our response to OPDs. I wouldn't characterise that as lessons learned, I would characterise that as the department responding to new information and new guidance.

**Senator DEAN SMITH:** Mr Kaiser, I don't regard the clerk's letter as an evolution of Senate practice, I regard the clerk's letter as a statement that this is what the Senate practice is.

**Mr Kaiser:** As I've said, we relied upon official witness guidance at paragraph 4.9, which stated that the FOI Act can be considered as a general guide to the grounds on which a parliamentary inquiry may reasonably ask not to press for particular information. That's what we relied upon.

**Senator DEAN SMITH:** A parliamentary inquiry? That is not an order of the Senate. That's not a Senate order.

**Mr Kaiser:** I'm just letting you know what we relied upon. Perhaps we erred. Given the clerk's additional information, perhaps we erred. I wouldn't describe that as a lesson, I would describe that as the department responding to information that was clarified for us in response to what we'd originally released. Then our advice to the minister reflected that new guidance from the clerk. That's what happened. You can describe that as a lesson for the department if you like. I would describe it as the department responding to a bloc of information and involving guidance.

**Senator DEAN SMITH:** Has the official witness guidance been improved to—

**Mr Kaiser:** We're not responsible for it.

**Senator DEAN SMITH:** It hasn't? Has it been improved upon or enhanced in light of the clerk's letter?

**Mr Kaiser:** I don't know. The official guidance isn't our document. I'm not certain.

**Senator DEAN SMITH:** You've not sought to take any initiative on the matter?

**Mr Kaiser:** I personally haven't. I'm not sure.

**Senator DEAN SMITH:** Is it still possible that the department could continue to make mistakes with respect to how it complies with OPDs?

**Mr Kaiser:** The department will always use the best information available to it to respond to the Senate's requests. If that information and that guidance evolves, we will take account of the new guidance and material.

**Senator DEAN SMITH:** How have officials been made aware of the clerk's letter of 17 October which improves upon the advice that's included in the official witness guide?

**Mr Kaiser:** We provided new advice to the minister, who responded then to the OPD.

**Ms Sutton:** The department takes its responsibilities to the Senate and this committee incredibly seriously. I haven't actually seen a copy of the letter. My understanding is it was addressed to you but, if you could provide a copy, I'm very happy to review that and ensure it's consistent with our practices. In terms of the question you've asked, what lessons have been learned, the guidelines for official witnesses is looked after by PM&C, but it might be appropriate that's updated. As the secretary has indicated, that's not our responsibility. Our responsibility is to ensure that the answers that we give to the committee and to parliament are frank and honest and to the best of our abilities. I personally have reviewed those.

The lessons for the department are the importance of ensuring the clarity of any public interest immunity claims are supported by the two elements that are referred to in that guidance, which is what's the head of the authority for the public interest immunity claim? The second element is the harm that will arise. Ultimately, as you'd be aware, it's ministers who make any claims for PIIs, but oftentimes you'll take evidence from officials. While we're trying to assist you with your queries, that guidance makes it really clear that, if we're in doubt around what information may be appropriately disclosed, it's entirely appropriate for us to take that on notice and seek advice from the minister around those provisions. I do think the lesson for us is ensuring those two elements are met each time. What is the head of the public interest immunity claim, and what's the harm that may arise?

**Senator Ayres:** The truth about this matter is that of course the approach of departments and ministers must evolve because the situation that departments and ministers' offices find themselves in is very different from the preceding 124 years of Australian Federation. Previously, orders for production of documents were developed in obviously a contested context but were developed in a mature and sensible way. Now we have industrial-scale orders for production of documents, industrial-scale FOIs. That's the truth of the matter. That means that tens of thousands of hours of not junior officials' but senior officials' time is taken up working out working out which truckloads of documents have priority in the queue for orders for production of documents. On one day—one day—the Senate approved 14 OPDs. On average it's four every day. Some of them require production of the documents before the Senate order takes effect, so the moment they are voted on they're automatically overdue. It's barking mad. The approach that the Liberals and Nationals and some other senators have taken to orders for production of documents is barking mad.

**Senator DEAN SMITH:** No, Senator Ayres, for a matter to be agreed in the Senate it requires 39 senators to agree. That is Liberal, National, Independent crossbench and the Greens—

**Senator Ayres:** Don't interrupt me. We have to endure—

**Senator DEAN SMITH:** which means it's only Labor senators who are opposed.

**Senator Ayres:** and these people behind me have to endure your self-indulgent silliness—I take that back—your colleagues' self-indulgent silliness on this question. It's trying to put sand in the gears of decent government, trying to project an image that somehow the corrupt period of the Morrison government on these questions, where there were prime ministers pretending to be ministers, there was absolute public malfeasance and there was rorting of public money for marginal seats work. But, somehow, providing hundreds of these orders for the production of documents is some administrative smokescreen to try to obscure that period of government, which was a rotten period of government—an embarrassment to Australia. Of course our approach is going to evolve.

If you get a sensible number of orders for production of documents, and there's a sensible number of staff engaged, you can engage with these questions in a particular way. If you get 14 in a day, that involves thousands of hours of work by people who you will never meet, ordinary public servants who are trying to do their job, running around trying to comply with what a group of your colleagues and your colleagues' staff dream up. If it was mature and sensible, we'd be going a whole lot better.

**Senator DEAN SMITH:** Ms Sutton was demonstrating in a very exemplary way how officials participating in the Senate estimates process assist the work of senators and the Senate. Unfortunately, every time—

**Senator Ayres:** They're there to do a job.

**Senator DEAN SMITH:** you have a comment you just detract from the professionalism of officials.

**Senator Ayres:** That's the point.

**Senator DEAN SMITH:** Ms Sutton had provided a very fair and reasonable explanation.

**Senator Ayres:** That is the point. Their job is absolutely—

**CHAIR:** Minister—

**Senator Ayres:** I'm giving you the real politics answer—

**Senator DEAN SMITH:** Minister, the Senate agreeing to OPDs is legal and constitutional and you have a responsibility to respond.

**Senator Ayres:** about how it is that our parliamentary processes intersect with the real work of officials.

**CHAIR:** I'm taking the call back to me. We have a number of senators here waiting to ask questions. Senator Smith, if you have further questions, I understand there is a disagreement about the nature of this that exists, but let's move to questions and then answers once more. Senator Smith.

**Senator DEAN SMITH:** Ms Sutton, thank you very much for your professionalism in responding to some of my queries. I am alarmed and disappointed that the Clerk wrote to me on 17 October. It attracted a tremendous amount of media attention, it embarrassed the minister and no-one in the department has taken a pre-emptive step to seek a copy of the Clerk's letter?

**Ms Sutton:** I'm asking if you could provide a copy; I would be happy to review that.

**Senator DEAN SMITH:** Six weeks after the Clerk of the Senate was required to provide some information out of curiosity to a senator? Wow!

**Ms Sutton:** The letter was addressed to you. I'm very happy for you to provide a copy.

**Senator DEAN SMITH:** Six weeks after?

**Senator Ayres:** It's a letter to you.

**Senator DEAN SMITH:** Yes, that's right. Anyone can ask me; anyone can pick up a phone.

**Senator Ayres:** Let me just get this straight. I just want to understand the question that you're asking the officials.

**Senator DEAN SMITH:** I'm about to offer Ms Sutton—

**Senator Ayres:** The Clerk of the Senate wrote a letter to you and you're wondering why it is—

**Senator DEAN SMITH:** I'm about to offer Ms Sutton—

**Senator Ayres:** that the official doesn't have the letter?

**Senator DEAN SMITH:** and I'm going to invite her to take a question on notice.

**Senator Ayres:** It's because it's a letter to you. One of your colleagues had 35,000 Senate questions on notice in the last term of parliament. More than 500 of those concerned paper use. One hundred of them were about working on the King's birthday.

**Senator DEAN SMITH:** This is my substantial matter. It goes to the core issue of—

**Senator Ayres:** One hundred questions were about who might be the longest serving member of a particular agency.

**Senator DEAN SMITH:** the incoming government brief for this department. I'm going to table this letter, Chair—

**Senator Ayres:** That's not adult.

**Senator DEAN SMITH:** for the assistance of Ms Sutton and other officials. On notice, Ms Sutton, I would be very interested to know how the contents of the Clerk's letter to me are going to be used by your department, Mr Kaiser, and across the government to ensure that OPDs are more fully and responsibly complied with. I might just say that in that official witness guide, if I've understood it correctly, Mr Kaiser—I don't have it in front of me—it talks about parliamentary inquiries, which is quite a separate matter from orders of the Senate. Ms Sutton, on notice, can you please provide to the committee details of how that information containing the Clerk's letter is going to be used to further enhance and improve the department's responsiveness to OPDs specifically and, more generally, how it might be incorporated across government to ensure that those official witness guides are as accurate as they need to be? This is not new information from the Clerk. He is just reiterating; do you agree that it's not new information? Ms Sutton, you're just nodding in affirmation.

**Ms Sutton:** I'm nodding that I'm happy to take that notice and come back to you.

**Senator Ayres:** Just to clarify, a letter from the Clerk to you—the official will read it now that it's been tabled—and what you want the official to do and the department to do is advise how it is that a letter that they've just seen might change their approach—

**Senator DEAN SMITH:** On notice.

**Senator Ayres:** I appreciate that, on notice. We will see how we can—

**Senator DEAN SMITH:** Out of respect for other senators, I'll come back to this at the next estimates, but I think Mr Kaiser's use or the department's use of the official witness guide is incorrect.

**Mr Kaiser:** We understand that now.

**Senator DEAN SMITH:** You understand that it is incorrect or you understand my position that I think it's incorrect?

**Senator Ayres:** We understand all of these things.

**Senator DEAN SMITH:** Thank you. I will take that as success and I'm going to stop while I'm ahead.

**Senator Ayres:** The department will respond to that question on notice. I just say to your colleagues on these issues that learning seems to be a one-way street for you lot.

**Senator DEAN SMITH:** I'm exhausted. Surely you're exhausted?

**Senator Ayres:** No.

**Senator DEAN SMITH:** You must be exhausted.

**Senator Ayres:** It's 10 past 10.

**Senator DEAN SMITH:** Thank you, Senator Ayres.

**CHAIR:** Thank you, Senator Smith. The question has been asked and taken on notice. I appreciate that. I note that we are now running significantly behind our program. I understand that Senator Henderson has some remaining corporate questions. What I propose to do for the benefit of the committee is to allow Senator Henderson to ask those questions in relation to corporate. We then have a break scheduled at 10.15 am. We'll take that break and we'll come back to outcome 1 afterwards, unless—

**Senator DAVID POCOCK:** Can I ask a clarifying question about where we're at?

**CHAIR:** Yes.

**Senator DAVID POCOCK:** I have questions about the ICJ's advisory opinion that was canvassed at the last Senate estimates. Is that in corporate or in outcome 1?

**Mr Kaiser:** No, it's not in corporate. It would be in outcome 1.

**Senator DAVID POCOCK:** I'll come back after the break.

**CHAIR:** Senator Henderson.

**Senator HENDERSON:** Secretary, I'm just wondering—

**Mr Kaiser:** Apologies for interrupting you. I just wanted to clarify that I sought advice from my colleagues. It's actually in outcome 2. My apologies.

**Senator HENDERSON:** Mr Kaiser, I refer to the answer to question on notice that I asked SQ25000855, prepared by the National Energy Transformation division. Who's responsible for addressing questions or drafting the answers to questions from that division?

**Mr Kaiser:** From that division specifically? Certainly corporate coordinates a process of getting experts within the department—

**Senator HENDERSON:** Maybe I'll ask my question and then you could just address that. I asked at the last estimates for any briefs provided to the minister in relation to the department's contribution to the Treasurer's Economic Reform Roundtable. There was also a departmental roundtable. I also asked for any briefs or other materials on outcomes or stakeholder feedback that were provided to the Treasury or the Treasurer or his office. I raised very similar concerns to Senator Smith. The answer was that the briefing cannot be provided due to its security classification, for both of those questions. Can I ask about the nature of the security classification?

**Mr Kaiser:** That's not something I can immediately answer. I'll check whether it is—

**Ms Lello:** I'm not sure I can answer your question specifically on the classification of the brief, but stepping through the question on notice, there was a question about the briefings provided to ministers on the Treasurer's Economic Roundtable. That was the first part of your question; is that right?

**Senator HENDERSON:** There's a departmental roundtable and there's also briefs or other materials on outcomes—it's in the QON. It says briefs or other materials on outcomes or stakeholder feedback that were provided to the Treasury or the Treasurer or his office.

**Ms Lello:** This was on the departmental roundtable?

**Senator HENDERSON:** That's right.

**Ms Lello:** The question with regards to information provided up for the Treasurer's roundtable sits with the corporate area. But if you're asking about the specific departmental roundtable, that was an energy and climate roundtable and that will sit in outcome 2.

**Senator HENDERSON:** What I'm trying to understand is there's been a refusal to provide those materials based on the security classification of those briefs. What was the nature of the security classification, because that is not a reason not to answer a question in Senate estimates. That's an unacceptable ground. I'm just trying to understand what is the security classification?

**Mr Kaiser:** The officer at the table is responsible for coordinating the responses to questions on notice but won't necessarily have the detail of the substance of the answers or the reason for the security classification. I suspect the people who will be able to help you and answer that question—I know I've been persistent in this and you've reacted to that—and provide a reason for that response will be here in outcome 2.

**Senator HENDERSON:** Again, we've had a very big blow-up in relation to the department's decision not to provide the incoming brief, and that's been partially resolved after a lot of drama. We now have a refusal to answer questions because of a security classification of documents, but that's not a reason. That's not an unacceptable ground. I'm looking at the rules for estimates, and secrecy provisions in statutes is not a reason not to answer a question. Could you explain why these questions have not been answered?

**Mr Kaiser:** I can't. The person considering the substance of the question would have made that judgement and provided it to our corporate colleagues as a reason for not answering the question. To get their substantive response, we'll need to wait for the people who made that judgement.

**Senator HENDERSON:** Do you know what outcome that would be?

**Ms Lello:** Just to clarify, I think I said outcome 2. I actually meant outcome 1. The people will be available in outcome 1. What I can say is that in relation to the Treasurer's roundtable, obviously the nature of the consideration of the Treasurer's roundtable was there would have been cabinet discussions about that. The department might have provided a general briefing which would have been cabinet-in-confidence.

**Senator HENDERSON:** That's not what is said in this answer. Yes, the disclosure of executive council of cabinet deliberations is a grounds for refusing to answer a question. That's not what is said in this answer.

**Ms Lello:** As I say, in relation to the aspects of answering the question that I am responsible for and the general matters relating to the Treasurer's roundtable, I can give you that answer.

**Senator HENDERSON:** It's a very unusual classification that's been used, security classification. I was seeking documents in relation to the departmental roundtable associated with the Treasurer's Productivity Roundtable. If they were cabinet documents, I would expect that would be the response to the question.

**Ms Lello:** I can't answer with respect to the department's roundtable. That will be in outcome 1.

**Senator HENDERSON:** Mr Kaiser, could you arrange to bring that information back to the table?

**Mr Kaiser:** Yes.

**Senator HENDERSON:** I'm concerned because these are really important documents I was seeking. There's been a refusal to provide those documents. You've cited security classification without any other details. What I'm seeking is the nature of the security classification, why they were so classified and what was the nature of the harm that would occur if these documents were released? Do you know that answer?

**Mr Kaiser:** I don't, but the people who would have made that judgement are the people who would have sought to have dealt with the substance of the question. That's not our colleagues in corporate, but they will be here at the appropriate time. I understand that you're seeking an explanation for why we relied upon that and we'll provide it.

**Senator HENDERSON:** If there's not a proper basis to refuse to provide these documents, I'm also seeking the documents. If they are executive council or cabinet deliberations, yes, that's an acceptable ground, but that's not what is said here. This is a very unusual response. If it does not fall within that category, I'm asking what is the nature of these documents and the security classification, which seems very odd? If you are not satisfied that you have complied, could I please ask for those documents to be returned to the committee as soon as possible today?

**Mr Kaiser:** Yes. I've not been handed an answer, so I assume people are scrambling to either get the individual who made the judgement or a response to me, but they will be available later, I understand.

**Senator HENDERSON:** We are taking this very seriously, when the department doesn't answer questions. There may well be a legitimate reason, but I would like you to investigate this. The buck does stop with you as the secretary. It just looks very suspicious to me.

**CHAIR:** Thank you, Senator Henderson.

**Senator HENDERSON:** Just one more question, Mr Kaiser.

**CHAIR:** No, we'll go to the break and then we'll come back to you.

**Senator HENDERSON:** This is just a clarifying question. In relation to the responses to questions on notice—and I'm happy for you to come back—we were receiving batches of responses up until late last night, many of which have not been uploaded, so we've not been able to actually look at the answers. They were due on 28 November. Is there any reason that answers to questions on notice are overdue such that we have not been able to scrutinise those answers?

**Mr Kaiser:** I can only imagine that relates to the workload of the department and the volume of questions that we were responding to since the last Senate estimates.

**Senator Ayres:** I gave you an answer—I think I was responding to Senator Smith—about what is the natural result of there being more of these, whether it's questions on notice, OPDs or whatever. If they are performed at industrial scale, it requires an industrial-scale response. These are hardworking public servants who have responsibilities to discharge on behalf of the Commonwealth, including to the legislature. If there was a more grown-up approach to orders for production of documents and questions on notice, then there would be fewer things falling behind. That's the truth of it.

**Senator HENDERSON:** Minister, thank you—

**Senator Ayres:** If you and your colleagues have embarked upon this approach, a vainglorious approach, then public servants are doing their best to comply—

**Senator DEAN SMITH:** You are conflating the issue.

**Senator Ayres:** It's conflated for them because they have to do all of the work that you and your colleagues generate for them. That's the truth.

**CHAIR:** Senators, thank you.

**Senator DEAN SMITH:** For OPDs generally and OPDs and other questions being asked—

**CHAIR:** As I've said once before or maybe even multiple times before, I appreciate that there is a difference of view on this subject. At this point in time we are going to our break. We will be back at 10.35 am. As I understand it, we can then move to outcome 1.

**Senator Ayres:** And we might deal with the 581 Senate questions on notice that have been provided since the October hearing. Honestly. What a joke.

**Proceedings suspended from 10:20 to 10:38**

**CHAIR:** That concludes the examination of the corporate matters of the Department of Climate Change, Energy, the Environment and Water. We indicated we'll call officers from the department relating to outcome 1, Support the transition of Australia's economy to net zero emissions by 2050; transition energy to support net zero while maintaining security, reliability and affordability; support actions to promote adaptation; strengthen resilience of Australia's economy, society and environment; and take a leadership role internationally in responding to climate change. We will begin with outcome 1.1, Reduce Australia's greenhouse gas emissions. I will go to Senator Whitten in a moment, but I understand that Senator Henderson has a point that relates directly to what was asked before the break and seeks a moment to clarify.

**Senator HENDERSON:** Secretary, we had a brief chat during the break, and you wanted to clarify an answer you gave in relation to documents not being disclosed by the department. I ask you to update the committee, please.

**Mr Kaiser:** It would seem that we erred in terms of relying upon security classification as a reason to not respond to answers 1d and e of your question on notice. Again, the person who can describe the rationale for that and the circumstances around it will be coming up in outcome 1.2. We are, in fact, relying on a cabinet confidentiality requirement, and you, in our conversation, made the point that can't be relied upon completely.

**Senator HENDERSON:** Let's just put it on the record. My question to you is: if you're relying on disclosure of executive council or cabinet deliberations as a grounds to refuse to provide the documents, Mr Kaiser, are these executive council or cabinet deliberations?

**Mr Kaiser:** I'm not certain of that. That is what we're relying on, but we will respond to this question now in a different context, in the context of that cabinet classification. I have the documents in front of me. I can't judge them. It will take us some time to make a decision about that.

**Senator HENDERSON:** I've asked for briefs provided to the minister and briefs or other materials or the outcomes or stakeholder feedback that were provided to the Treasury or the Treasurer or his office. Ministerial briefs are ordinarily not cabinet documents. I am also concerned that may not be a correct characterisation of these documents.

**Mr Kaiser:** We won't know until we get an opportunity to look at them. I've acknowledged to you that we've erred in terms of the reliance on a security classification as a rationale for not providing them; we've erred in doing that. We'll now consider the documents in the light of—

**Senator HENDERSON:** Thanks, Mr Kaiser.

**Senator Ayres:** As I indicated before, you're right that something being a ministerial brief in itself doesn't give rise to a cabinet-in-confidence immunity claim; that is the case. Of course, different incoming government briefs provided to different ministers at different points in time give rise to an intersection with cabinet confidentiality in different ways, so you would expect to see different outcomes across the government. As it happens, in this portfolio area we have had to make decisions in cabinet to clean up a giant, 10-year-old mess in energy policy that has required making some decisions. For example, every single day for the last three weeks, one of the 28 power stations, 24 of which announced or brought forward their closure over the decade that—

**Senator HENDERSON:** Minister, I'm going to stop you there.

**Senator Ayres:** No, you don't get to stop me anywhere.

**Senator HENDERSON:** Point of order, Chair.

**Senator Ayres:** What I get to do is conclude my answer. We are cleaning up a giant mess. That does mean that it's more likely that there will be—

**CHAIR:** Senator Ayres, there is a point of order being raised.

**Senator HENDERSON:** Chair, I would ask if you could remind the minister he needs to be directly relevant to the question I was asking, which was about disclosure of documents concerning the departmental roundtable. I appreciate the to and fro of estimates, but I think the minister was wandering well off the nature of my question.

**CHAIR:** For a whole range of reasons, including for the benefit of non-government senators, I am reluctant to narrow the scope of relevance of questions that are able to be asked in relation to these matters. I understand the minister was concluding his answer. Minister, if you'll conclude that answer briefly, then we'll move on.

**Senator Ayres:** Thank you. We have a giant mess to clean up. That does mean that in this portfolio items in the incoming government brief will, of course, intersect with cabinet decision-making, because the scale of the problem that was created with a decade of climate science denialism and an incapacity to reach a sensible policy framework—which has extended, of course, beyond the life of government into this period of opposition—has consequences. When your side of politics wrecks the energy system, ordinary Australians pay. That means that this cabinet and this government have a lot of work to do.

**Senator HENDERSON:** Minister, what I'm—

**CHAIR:** Thank you, Minister. Thank you, Senator Henderson.

**Senator Ayres:** If you've got another question, I'll have another answer.

**CHAIR:** No, I appreciate that—

**Senator HENDERSON:** Chair, I want to conclude this by saying to Mr Kaiser that we take the issues in relation to disclosure of documents under Senate estimates rules very seriously. We look forward to you coming back to this committee as soon as possible to rectify this matter. Thank you.

**Senator Ayres:** I will respond. We take these things seriously too.

**Senator HENDERSON:** We look forward to seeing the documents.

**Senator Ayres:** Don't interrupt me. Honestly, it's compulsive. Just let me answer the question.

**Senator HENDERSON:** I don't need to hear from you on this, Minister.

**Senator Ayres:** It's not up to you. If you ask a question, I respond to questions.

**Senator HENDERSON:** I didn't ask a question.

**Senator Ayres:** I'm entitled and required to—

**Senator HENDERSON:** I didn't ask a question.

**Senator Ayres:** respond on behalf of the government.

**CHAIR:** Senators, let's—

**Senator Ayres:** It's a misunderstanding of the way that this process works.

**Senator HENDERSON:** Maybe you should learn the rules of Senate estimates.

**CHAIR:** I'm not sure this is getting us anywhere.

**Senator HENDERSON:** I've got no more questions.

**CHAIR:** I understand that.

**Senator HENDERSON:** Let's move on.

**CHAIR:** Senator Ayres, do you want to briefly finish what you wanted to say, and then I'm going to move on.

**Senator Ayres:** When there's a question, I will respond to it when I see fit and when I think I'm required to. In terms of the incoming government brief, I could not be clearer. There is a giant mess. You're not asking questions, I note, about what the department would have said in the incoming government brief about the cost of nuclear, your \$600 million plan.

**CHAIR:** Minister, now, I think—

**Senator Ayres:** We are—

**CHAIR:** Hold on.

**Senator HENDERSON:** Don't point at me, Minister.

**Senator Ayres:** \$600 billion.

**Senator DEAN SMITH:** Does the incoming government brief talk about nuclear? What else does it talk about?

**CHAIR:** Senators, I appreciate that there are strongly held views in this room, but this is not fruitful. I'm going to move the call to Senator Whitten.

**Senator WHITTEN:** We'll see if we can have a reset. My question has a heavy agricultural bent, if you need a certain person to come to the chair. Would I be correct in assuming you consult with other government agencies on mitigation strategies to lower greenhouse gas emissions from, for example, cows?

**Ms Munro:** Yes.

**Senator WHITTEN:** Whose idea—

**Senator Ayres:** And bulls and steers, I suppose.

**Senator WHITTEN:** You can add all the bovine forms, if you like.

**Senator Ayres:** Buffalo, Brahmins, Herefords. Anyway, continue.

**Senator WHITTEN:** It's going to be a long day, Minister.

**Senator Ayres:** It will be much longer for me than for you, Senator Whitten.

**Senator WHITTEN:** Whose idea was it to use Bovaer 10?

**Ms Munro:** Sorry? Could you repeat the question?

**Senator WHITTEN:** Whose idea was it to use Bovaer 10?

**Ms Rowley:** Could you clarify the use—in what context, by whom and where? It's a very broad question.

**Senator WHITTEN:** My understanding of Bovaer 10 is that it's used in cows, bulls, steers and all the other things to lower greenhouse gas emissions. My question is: which direction did it come from? Whose idea was it to look at Bovaer 10 or any other products that might have—

**Ms Rowley:** I can't speak to the genesis of the technology. We could certainly speak to some of the programs that the department is responsible for administering that have been involved in trials and testing of the emissions impacts of Bovaer 10, which is, as you said, a feed additive that helps reduce the emissions from livestock. That's a very particular piece of the puzzle rather than the very general question that you've asked. The technology both reduces emissions and also enhances productivity of livestock production because it reduces essentially the amount of feed that is lost through livestock burping. I would imagine it's an agrochemical industry origin, but we can speak to the programs if that's of interest.

**Senator WHITTEN:** My question is: would it have originated in your department, or would it have originated somewhere else?

**Ms Rowley:** It would have originated in industry, I would imagine. The only thing that we can really speak to is our department's involvement with certain trials.

**Senator WHITTEN:** If it was found that Bovaer 10 was detrimental to human or animal health and it had to be removed from usage, would that have an impact on the department's targets?

**Ms Rowley:** My understanding is that the use of Bovaer is not enormously widespread at this point, although I don't have specific statistics on that. Certainly our emissions inventory isn't yet factoring in the impact that technology could have on our emissions. At this point, no, it would not affect our estimates of Australia's emissions. Over time, as we have better science and better capability to map from the application of those technologies through to their adoption in Australia and then what that means for Australia's emissions, we will do that. That's not just for Bovaer 10; that's for feed additives, which have been a big focus for the livestock industry, but not at this time.

**Senator Ayres:** I wasn't aware of this, but I have just googled 'Bovaer 10 conspiracy theories' and I'm now up to date with your line of questioning, Senator. Keep going. Is there any other nutty recess of the internet that you want to—

**CHAIR:** Minister—

**Senator WHITTEN:** I will rise to the challenge if you want me to, but I'm trying to keep it civil in here.

**CHAIR:** Thank you, Senator Whitten. Minister—

**Senator Ayres:** Prosecuting misinformation and disinformation is not civil.

**CHAIR:** Minister. Senator Whitten.

**Senator WHITTEN:** I'm moving on from Bovaer 10. Would you agree with the statement that, when managed properly, grazing cattle contribute positively to carbon sequestration in soils?

**Ms Rowley:** I think it's a very general question. The contribution of any farming practice to Australia's emissions and sequestration depends on the particulars. Certainly there is carbon sequestered in Australia's grazing landscapes, and we reflect that in the inventory, but when things are managed properly depends on perspective—whose management and for what purpose? There is certainly scope for sequestration, both vegetation and soil, in Australia's grazing landscapes.

**Senator WHITTEN:** Would you also agree with the statement that ungrazed pasture releases carbon?

**Ms Pentony:** Grasslands can have emissions depending on climatic conditions and things like that. That would be for grazed and ungrazed grasslands.

**Senator WHITTEN:** When it's not grazed, grass will die; it oxidises and releases carbon?

**Ms Pentony:** I probably can't get into a huge amount of detail about exactly the source of the emissions, but certainly grasslands have emissions and sequestration depending on a range of factors.

**Ms Rowley:** That's true for grazed pastures and that's true for ungrazed pastures. There are many factors that bear upon whether carbon is sequestered or emitted or both.

**Senator WHITTEN:** My point was that, if it's managed correctly, it can sequester carbon—the grazing of animals—and when it's left idle it can release carbon. That's my general premise.

**Senator Ayres:** I think the evidence that the officials just gave was that there are emissions and sequestration in ungrazed and grazed pastures. Different types of pasture, different seasonal variations, different grazing cycles and different land management practices all intersect with farm productivity, which is very important, and soil health, which is not unimportant when considering the intersection of the economic, agricultural and emissions characteristics of both pasture that's there for grazing and pasture that's naturally there. That's just nature for you.

**Senator WHITTEN:** Agreed.

**CHAIR:** Senator Hodgins-May.

**Senator HODGINS-MAY:** The emissions projections report released last week shows that, because we don't have meaningful policies to get us there, Australia is going to miss its 2035 emissions target by a country mile. The Greens are ready to get to work, but there doesn't seem to be any sense of urgency here. I'm really curious to know what timeline you're working to.

**Ms Rowley:** The government has set and legislated a 2030 target, as you know, and has recently set and submitted as our next NDC, or nationally determined contribution, under Paris, the 2035 target. They're the key timeframes as stepping stones to the ultimate goal of net zero by 2050. Are there specific timeframes or actions that you were—

**Senator HODGINS-MAY:** Yes, like an action to actually get us to achieving that 2035 target?

**Ms Rowley:** Yes. As you'll be aware, the government set the 2035 target in September. Its decision was informed by the advice of the Climate Change Authority, and the target that was set—62 per cent to 70 per cent below 2005 levels—was identified by the authority as both Australia's highest possible ambition, as required under the Paris Agreement for countries' targets, and achievable given all of the analysis they had done of technology readiness and community and corporate activities.

The Net Zero Plan, which the government released in September, set out the suite of policies and measures that are currently in place and driving emissions reductions. It indicated reviews that are relevant to some of our key policy measures, including things like the safeguard mechanism and the new vehicle efficiency standard. They're scheduled reviews that will be taking account of the 2035 target in determining policy settings for post 2030, because those policies have been essentially calibrated at this time to the 2030 target, and those reviews provide an opportunity to take account of the 2035 target in their future settings. It also set out a whole range of new policies and measures and a cycle of review and revision of Australia's policy mix over time to essentially bridge the gap from what current policies under current settings are projected to deliver, which is what's reflected in the annual emissions projections, and those targets that Australia has set.

**Senator HODGINS-MAY:** What about in terms of the timeline for the new policies? I didn't hear an answer in relation to those new policies that are going to get us to that 2035 target and the timeline over which they'll be announced. Is it the next few months, the next year, 2027 or the next parliament?

**Ms Rowley:** In relation to a couple of specific examples, the new vehicle efficiency standard, which entered into force for compliance purposes on 1 July this year—so it is a relatively new policy—has headline limits which ratchet down over time, set currently in legislation to 2029. That's going to be subject to an annual review which will consider future settings. In 2026 they'll be taking a forward look and then every year thereafter, and that provides an opportunity to set those headline limits for the outyears. They're currently not set, so they're not reflected in the projections. We just assumed a return to business-as-usual trends, but, with those new headline limits being set each year, that will then be reflected in the projections. That starts in 2026 in terms of the first review.

Just to note, the new vehicle efficiency standards apply to light vehicles. That's about 12 per cent of Australia's emissions. The safeguard mechanism, which covers about 30 per cent of Australia's emissions from big industrial sources, has a review scheduled starting in 2026 and is scheduled to run to 2026-27. That's going to look at a

range of factors, including the ratchet rate for the emission limits on our big industrial emitters for the post-2030 period. That will be looked at in 2026 moving forward.

**Senator HODGINS-MAY:** In relation to new policies, should I assume then that there are no new policies in terms of—

**Ms Rowley:** Alongside the announcement of the Net Zero Plan, as we discussed in the previous hearing, a number of new measures were announced by the government. For example, the government announced \$1.1 billion for the production of low carbon liquid fuels in Australia and an intention to look at demand-side measures to support the uptake of low-carbon liquid fuels. That's important because, whilst we are currently very busily working—and in the next outcome, they can talk to the details—to decarbonise the power system, and electrification through clean energy provides one important pathway. There are other applications where electrification is less prospective, and so low-carbon liquid fuels will be an important part of that. In the next outcome, under Energy, 1.2, they could speak to the work that we have underway on low-carbon liquid fuels. That's one example.

**Senator HODGINS-MAY:** Could you elaborate on new policies outside the electricity sector?

**Ms Rowley:** We spoke about the safeguard mechanism—

**Senator HODGINS-MAY:** New policies?

**Ms Rowley:** It's also about future settings for existing policies, because policies such as the safeguard mechanism and the new vehicle efficiency standard provide a stable architecture that you can ratchet over time. As I said, about 30 per cent of Australia's emissions are covered by the safeguard mechanism. Under the architecture of that scheme, you can ratchet those emissions down to net zero by 2050. Similarly, with the new vehicle efficiency standard, you can ratchet those down over time to net zero. Electricity accounts for more than 30 per cent of Australia's emissions. The government has an 82 per cent renewable electricity target by 2030 and currently has a review of wholesale market settings which will inform the parameters for policy, particularly market operation, post 2030. There's a lot of work on foot covering well over half of Australia's emissions under current policies. In terms of new measures, as I said, measures such as low-carbon liquid fuels will tap into emission sources that aren't covered by those other measures to which I referred.

**Senator HODGINS-MAY:** Are there any examples other than that new liquid fuel?

**Senator Ayres:** Not all of these questions are within the scope of the portfolio. The official has pointed to the low-carbon liquid fuels question, which is of course being dealt with by the Minister for Infrastructure, Transport, Regional Development and Local Government. It's an important measure in emissions terms, but it's also important in investment and manufacturing terms. It's also, in my view, an important fuel security measure in a world where our energy security is becoming increasingly important. Of course, in my day job in industry, there are measures that were announced—namely, \$5 billion in the net zero fund, in the National Reconstruction Fund, to support concessional finance for Australian manufacturers using a high emissions and inefficient source of energy to make their processes more efficient. There is capital support for firms to do that. The officials talked about the safeguard mechanism which, of course, covers our largest industrial facilities and provides a framework for them. Of course, there's small and medium manufacturing as well in all of our suburbs.

**Senator HODGINS-MAY:** Just to follow up on low-carbon liquid fuel, I understand that no abatement is ascribed to it. Do you have expectations on how much abatement will come from that policy?

**Ms Rowley:** That would be explored in the process of developing the policy. I expect that over time we will be doing estimates, but we don't do them in the absence of policy because the impact of the policy is part of the assessment and development. One thing I would add by way of other new measures are the energy efficiency measures.

**Ms de Hosson:** Alongside the Net Zero Plan, there was also \$85 million to accelerate energy performance, which my colleagues in outcome 1.2 will be able to speak to in more detail. They were investments in: the national Australian Built Environment Rating System; expanding the Commercial Building Disclosure Program to more commercial building types; expanding the Nationwide House Energy Rating Scheme to cover existing homes; and establishing a demand-side statement of opportunities. Much of that goes to the built environment sector.

**Senator Ayres:** Like carbon liquid fuels, your question was: does the government ascribe an abatement value to that effort? The short answer is not yet. There's very significant demand from the airline industry around these questions. There is deep concern from the Australian tourism industry that, if we don't move at the same speed as in particular our European partners and competitors, there will be an effect on very significant industries such as the convention industry and conferences being able to come to Australia. What firms are taking into account is

whether or not we end up being able to compete with other jurisdictions for what are big value, big tourist dollar, big economic value propositions. There's an interplay of reasons we are engaged with this. The emissions value of it is important, but we're also engaged in this because of the economic value for industry and reaching right into the tourism sector.

**Senator HODGINS-MAY:** Should we be expecting any new policies on land use or waste sectors?

**Mr Kaiser:** The department officials are trying to be really helpful in terms of existing policy or policy which may have an impact and an effect that have been announced but which may have an effect down the track. By definition, 2035 is 10 years away. You would expect a government to come up with more policy initiatives, but it's not reasonable to ask public servants to speculate about what that might be. We can talk about existing policy.

**Senator HODGINS-MAY:** Maybe I'll ask the minister. Is there a time line on any new announcements we should expect around land use or waste?

**Senator Ayres:** As you know, the government timetables announcements and decision-making in our normal cabinet processes. I'm not in a position to help you beyond saying that we will continue to unfold policy consistent not just with the targets but the enormous economic opportunity. It doesn't just sit within this portfolio managing these questions; it's department of industry, department of transport and the broader economic portfolios.

**Ms Rowley:** Just to the point about energy use and waste, obviously the reforms to the Environment Protection and Biodiversity Conservation Act have implications for land use which could be discussed in outcome 2 this afternoon. The Department of Agriculture, Fisheries and Forestry leads on a range of programs relevant to agriculture and land use. One of the things that was announced in the lead-up to the Net Zero Plan was a billion dollars additional funding to the Regional Investment Corporation to support climate action. There's new activity that will flow from that. For both the land sector and waste, there are activities that reduce emissions in those sectors which are eligible for crediting under the Australian Carbon Credit Unit Scheme. We are developing new methods. We just had the new method for landfill emission reductions approved. That sets a more stringent standard for crediting of emissions reductions from landfills in the waste sector. Similarly, we're developing new methods for land sector opportunities. The final point I would note is that, again in outcome 2, there's a range of work that the Commonwealth is doing with states and territories on circular economy, on food organics and on garden organic recovery which will also contribute to emissions reductions that they could speak to.

**Senator HODGINS-MAY:** I don't think it's unreasonable to ask for a timeframe given that the 2035 target is aligned to 48 per cent—not 62 per cent. I say that as a Greens politician and as a parent. I will anxiously await our next estimates session to see what progress has been made. I thank you for your responses. The report to which I just referred also states that the 42 per cent in 2030 and 48 per cent in 2035 are based on Queensland's energy policies as of July this year. Of course, in October of this year, the LNP government announced it would spend whatever money necessary to keep its coal plants going beyond their technical life. Outrageous! Why didn't you include this in the report?

**Ms Pentony:** We needed to set the assumptions for electricity before that report by Queensland was released. We'll just note that in the projections we removed the Queensland renewable energy targets, so they're not included in those assumptions. We also allowed those coalmines to run to the end of their technical life, which was what we understood at the time, rather than having early closures as articulated by the previous government.

**Ms Rowley:** I'd just note that it is coal generators rather than coalmines. To clarify, as you might appreciate, there's a lot of analysis and modelling that goes into our annual emissions projections, which is why we need to have an earlier cutoff date for policy settings, so we can then conduct the analysis and modelling and do all of the necessary quality assurance ahead of their publication in November.

**Senator HODGINS-MAY:** That seven-week period wasn't enough?

**Ms Rowley:** No, not for the work that's involved. I would note that, as Ms Pentony said, the core elements that really do bear upon emissions, which is the renewable energy target and the timing of the closure of coal-fired power stations are reflected in the projections. We did understand that from Queensland officials back in July.

**Senator HODGINS-MAY:** The emissions project report also didn't quantify the emissions saved from the various policies announced at the 2035 target announcement. Has the department calculated the expected savings yet or is that not possible?

**Ms Pentony:** No. We'll do that as these policies develop to the point where we have enough information to do them in projections reports over time.

**Ms Rowley:** The rule with emissions projections is that they reflect the policies and measures where we have sufficient detail to model them and where it's more of an intention to develop. Then we await the details, and we bring them in. Projections are updated every year, so we bring them in over time.

**Senator HODGINS-MAY:** In relation to offsets, we've seen the preliminary data for the second safeguard year. What seems to be a trend is that three safeguard mechanism credits are being created for every one tonne of actual emissions reduced in the scheme. In other words, the number of credits being issued is about three times larger than the real-world abatement achieved. Most of these offsets don't actually represent any real-world abatement. Does that concern you?

**Ms Rowley:** It's actually a safeguard mechanism rather than offsets. I might just make an opening point and then my colleague might want to speak in more detail about the safeguard mechanism. The safeguard mechanism, by design, has binding emission limits which ratchet down over time and which start based largely on the existing emissions from facilities, but transition over time to the average emissions intensity of that commodity or product that the facility makes. That creates incentives over time, through the operation of markets, to push production more towards the most efficient producers. Producers that are already very efficient benefit from that arrangement. Producers that are less efficient have a stronger obligation. They have to reduce their emissions more either directly where they can or through the purchase of credits. That is by design. We calculate the ratchet rate and the scheme settings to ensure in aggregate emissions come down over time. Based on current policy settings and the current outlook for the economy, the projections indicate that the aggregate emissions from safeguard facilities will reduce over time both in gross and net terms. The gross reduction is baked into the legislation and the net is a function of those gradual declines in baselines.

**Senator HODGINS-MAY:** The Climate Change Authority has said that the number of offsets are a concern. Does the department disagree with that assertion?

**Ms Flanigan:** As I was saying, the safeguard mechanism credits are a key aspect of the design of the reformed safeguard mechanism and were actually consulted on as part of that process in 2003. As my colleague was saying, they provide an incentive to facilities to reduce their on-site emissions. Facilities can receive safeguard mechanism credits for a range of different reasons, including improvements to the facility's emissions intensity, and where a facility's emissions intensity is significantly lower than the industry average. The reasons to allow facilities to use carbon credits, whether or not they be safeguard mechanism credits or Australian Carbon Credit Units, or ACCUs, are that it reduces their compliance costs, creates a demand for cost-effective emissions reductions across the scheme and broader economy and provides an effective way for facilities to contribute to the national abatement task while on-site abatement options are being developed.

**Senator HODGINS-MAY:** Is the department working on any strategies to rein in offsets?

**Ms Flanigan:** We have a review of the safeguard mechanism scheduled to commence next financial year. That will look at a range of issues, including the use of offsets going forward past 2030.

**Senator HODGINS-MAY:** In relation to renewables, last week's report makes it clear that almost 90 per cent of expected emissions reductions in 2030 are from the electricity sector. All the government's eggs seem to be in one basket here, but I understand that you have to publicly say that we're on track to meet 82 per cent even though market analysts disagree publicly. Are you working on backup plans? Is there a plan B to reach 43 per cent if the renewables rollout stumbles further?

**Ms Munro:** I think it's fair to say these are probably answers that can best be given by our colleagues in 1.2 on renewables.

**Senator Ayres:** Senator, I don't think telling officials that they're saying something because they have to say it is necessarily okay.

**Senator HODGINS-MAY:** I'll give benefit of the doubt. I will withdraw that.

**Senator Ayres:** A little bit of kindness would probably be helpful in these questions.

**Senator HODGINS-MAY:** Sorry. I'll attempt to be kinder and ask the question without putting the assumption to you.

**Ms Munro:** The government's plans to reduce Australia's emissions are set out in the Net Zero Plan. There are a wide range of policies and programs well beyond the electricity sector. It is absolutely true to say that in this decade the electricity sector, which is the largest source of emissions in Australia and so it's the biggest chunk, has the most cost-effective opportunities for reductions. It's not entirely surprising that the lion's share of reductions come there. Certainly, in outcome 1.2 they can speak to all of the policies and measures to drive that transition. However, the measures to which I referred earlier—the new vehicle efficiency standard, the safeguard

mechanism, the new policies that will come with respect to low-carbon liquid fuels, the work that we're doing in land and agriculture and circular economy to reduce the waste sector emissions—all bear upon Australia's emissions outlook. We are regularly—and this is reflected in the annual emissions projections—looking at the combined effect of national policies, key state and territory policies and global and market trends to see what that means for Australia's emissions.

Even over the course of five years, those things can change quite a lot. The outlook to 2030 will inevitably change quite a lot over the next five years. We will continue to do our analysis and publish those results. The minister, through the Climate Change Act, will continue to be accountable to parliament through the annual climate change statement on how we're going, where the headwinds are, where the tailwinds are and therefore how the policies and measures need to be adjusted over time to ensure we meet that legislated target for 2030.

**Senator HODGINS-MAY:** We desperately want to see those targets you mentioned. It depends so heavily on the renewables rollout. I am really keen to know whether there's a backup plan, but I'll reserve that question for 1.2 if you're suggesting that's a more appropriate spot for it. Ending native forest logging and deforestation would deliver around 25 million tonnes with instant effect. Will the department pick up this load?

**Ms Pentony:** I think I've seen that estimate for the benefits of native logging. If I'm thinking of the correct estimate, I'm not sure that it references the right assumptions about emissions from the national inventory system. My understanding is that it makes assumptions about emissions that are in the forestry part of the national inventory, but also about land-clearing emissions. I think that's a misunderstanding of how the inventory reflects emissions from those two sectors.

**Senator HODGINS-MAY:** Can you provide a number on notice?

**Ms Pentony:** We don't have an estimate of the emissions from native harvest the way that we estimate emissions from native logging. As native logging occurs in one place, you have vegetation regrowing and you're also cutting trees down, and our model just provides a net number of the net carbon result of that. It doesn't disaggregate the growth from the emissions.

**Ms Rowley:** It is true to say that, when we've seen through policy reforms at the state and territory level—noting that forestry policy is largely a matter for the states and territories—policies to cease native public native forest logging have been implemented, we see an improvement in the emissions outlook. It's very true to say that there is abatement potential there. In terms of the precise amount, no doubt there are many different estimates. Similarly, in terms of reducing land clearing, again, states and territories are largely responsible for regulation and control of land-clearing activities. However, again, the reforms to the Environment Protection and Biodiversity Conservation Act to which I referred earlier have some implications for that. Again, that might be a question that you could raise in outcome 2 in terms of the details of that and what contribution that might make. From an emissions perspective, it is very true to say there's abatement potential that's also identified in the Net Zero Plan and the Land and Agriculture Plan. Most of the levers are held at the state and territory level. That said, our colleagues in Department of Agriculture, Fisheries and Forestry do run a number of policies and programs related to reafforestation, including plantations. There are also opportunities there.

**Senator DEAN SMITH:** As to COP30—what was the total size and composition of the formal Australian delegation to COP30?

**Dr Box:** Australia's official delegation to COP30 was comprised of 42 staff—32 from this department, nine from the Department of Foreign Affairs and Trade, and one from the department of agriculture. That delegation is comprised of staff supporting the minister's programs, representing Australia in the negotiations and the action agenda, and running Australia's pavilion. That's the official delegation. There were other Australian government officials who attended COP for other reasons.

**Senator DEAN SMITH:** What was the total cost of that formal Australian delegation comprising 42 people?

**Dr Box:** Staff only returned from Brazil recently. In fact, I only returned on Thursday. The total travel costs for the official delegation haven't been reconciled or acquitted yet. That information is not yet available.

**Senator DEAN SMITH:** When will it be available?

**Dr Box:** As soon as the acquittals are done. Usually, that happens within 30 days of return.

**Senator DEAN SMITH:** That is for travel costs and also for accommodation costs and other costs?

**Dr Box:** That's right.

**Senator DEAN SMITH:** What was the cost of the Australian exhibition at COP30?

**Dr Box:** Are you referring to the Australian pavilion?

**Senator DEAN SMITH:** That's right.

**Dr Box:** The current estimated cost of the COP30 Australian pavilion, which includes the build and design, furnishings et cetera, is \$1.364 million, which is similar to costs for pavilions over the last several years.

**Senator DEAN SMITH:** Are the officials who attended COP30 to support the Australian pavilion included in the 42 who formed the Australian formal delegation?

**Dr Box:** Yes.

**Senator DEAN SMITH:** Did you keep a register of how many people attended the pavilion?

**Dr Box:** We do have estimates of that. I don't have them on me I'm afraid, so I'd have to take that on notice. I think we had more than 80 events at the Australian pavilion, which were extremely well attended over the two weeks.

**Ms Munro:** I think the numbers were in the order of 4,500 people.

**Senator DEAN SMITH:** On notice, could you provide the details of those 80 events?

**Mr Kaiser:** I may be able to provide further information about volumes.

**Senator DEAN SMITH:** In a moment, yes, I'll come back to you. Can you provide details of the 80 events? Mr Kaiser, you can provide some information about attendance or participants?

**Mr Kaiser:** Yes, at a point in time during the last week of COP—I think it was the Wednesday of the last week—with still two or three days to go, we'd conducted 90 events, hosting over 4,500 participants. We covered topics focused on Pacific and First Nations climate leadership, the role of youth, green trade, catalysing finance and clean energy technologies. People from the following departments participated in events at the pavilion: DFAT, Austrade, ARENA, CSIRO, DAFF, DHDA, CCA and CEFC. We served over 6,000 coffees.

**Senator DEAN SMITH:** Could you provide details of each of the 80 events? I'm assuming that you also observed or recorded the number of participants who attended each of those 90 events.

**Mr Kaiser:** There were 90 events and 4,500 participants.

**Senator DEAN SMITH:** Was it 90 events—

**Mr Kaiser:** It was at a point in time during the course of the last week.

**Dr Box:** We can certainly provide you with the final number of events that happened at the Australian pavilion. It's also the case that there are some details about the Australian pavilion programming on our website which are available. Of course, we can provide the details of the events. I'm not confident that we necessarily have a detailed breakdown of the number of participants at each event, but we'll provide the best available information we have.

**Senator Ayres:** We'll work through these issues, of course, over the course of the morning. The pavilion at COP26, for example—Mr Morrison's pavilion—cost \$1,075,000. It was sponsored, of course, in addition to that by Santos after the Commonwealth begged for some corporate support to try to tide it over. There are different categories of people who attend. The official has given evidence about the delegation from the department. The delegation includes ministers, advisors, officials, people in post—people who are DFAT staff and consular staff in country. The total number of Australians on the official delegation was 75, precisely the same number—it must be an accident—as Mr Morrison took to COP26 in Glasgow. It is exactly the same number. He did take a bunch of his friends, though, as part of that group—13 political staffers on top of the two ministers. Our delegation for COP30 included three advisers for the two ministers. That trip was sort of like a rugby trip for Mr Taylor and Mr Morrison. It involved excursions to indulge Mr Morrison's passion for family history. Essentially, it was a holiday. This delegation was constructed carefully and was done in a disciplined way. There weren't people wandering off on family holidays. There wasn't the 'incident' involving Mr Brandis in a car crash, chasing Mr Morrison's motorcade, that engaged a bill ultimately of about a quarter of a million dollars. We take our responsibilities in this area seriously.

**Senator DEAN SMITH:** Could you help me understand the difference between the 42 officials that formed the formal delegation and the 75 that you have mentioned? Perhaps we could get there a bit more quickly, because I'd like to talk about data centres in the emissions projections report. What is the difference between the 42 that Dr Box mentioned and the 75 that you have mentioned?

**Senator Ayres:** We'll get the officials to step you through that. There are different categories of people.

**Senator DEAN SMITH:** Let's ask the officials to do that now. It's getting very tedious.

**Senator Ayres:** You're asking the tedious questions. I'm trying to lift the tempo of the answers.

**Senator DEAN SMITH:** Whatever goodwill exists, you are destroying that.

**Senator Ayres:** I am trying to get you to the answer that you're seeking.

**Senator DEAN SMITH:** It's getting tedious, not just for me but for everyone.

**Senator Ayres:** The higher number—

**CHAIR:** Minister, I'm just going to interrupt you for a moment. Let's resolve that answer swiftly. Senator Smith then will move on to his question that he has in relation to categories. I just want to keep this moving. I want to avoid the back and forth.

**Senator Ayres:** I didn't want Senator Smith to be under a misapprehension. There are different groups of people who are engaged. I wanted to go to the larger number quickly. Officials will be able to step you through what categories they're in. I've given you some information, for example, about the number of friends and staffers who went to COP26 versus the more business-like proposition that we advanced in government. But we'll let officials step you through the categories.

**Dr Box:** As I mentioned, 42 officials were on the official delegation. They're officials who are supporting the minister's program, supporting the pavilion, supporting the negotiations and the action agenda. On top of that, there are the ministers and their staff. That's five. Then there are other Australian government officials who attend for shorter periods to undertake activities relevant to their portfolio. For example, there is the Department of Health, Disability and Ageing or the Department of Agriculture, Fisheries and Forestry. Then, of course, there's post and consular staff from Brasilia Post who support the delegation on the ground. If you add up all of those categories of staff, ministers and their advisers, you reach 75 in total.

**Senator DEAN SMITH:** On notice, can you identify—not their names necessarily—which departments they represented and whether they might have been doing their specific departmental representations or whether they were part of the 42 supporting the minister in his program? That would be much appreciated. Is the department able to do what the South Australian Labor premier has done, that is, to calculate the cost of the failed bid? I understand that the South Australian premier calculated that the cost of the failed bid for South Australia was approximately \$1.3 million. Has the department been able to cost the bid cost? That bid cost would have been the same if we were successful or unsuccessful.

**Mr Hutchinson:** We can give you a figure for the amount of funds that have been committed to contracts for COP31 preparation.

**Senator DEAN SMITH:** Yes, for COP31 preparations.

**Mr Hutchinson:** We can also talk briefly, if you'd like, to the effort that went into securing the bid. We did not have any specific funding or staff specifically committed to pursuing the bid. The bid was pursued by staff who undertook that amongst a range of other responsibilities to do with international climate negotiations and that type of work. With regard to the contracts that were entered into for COP31 preparation to ensure we were in a position to be able to deliver should the bid have been successful, as reported on AusTender, we have a figure of \$7.5 million that had been committed to a range of procurements, including consultancy engagements, labour hire contracts, professional services and legal services.

**Senator DEAN SMITH:** Minister Bowen, the Foreign minister and the Prime Minister made a media statement on 23 November talking about Australia's future participation. That was to reflect the agreement that had been reached with Turkey. Is it correct to say that \$7.5 million was monies expended up until that 23 November announcement, or will some of that \$7.5 million continue to flow through into the reorganised COP31 arrangement? Does that make sense?

**Mr Hutchinson:** It does. I'll step through the answer carefully in case I inadvertently give any wrong impressions. The \$7.5 million is funding that was committed as opposed to spent to date under a range of contracts. Those contracts had clearly been entered into prior to 23 November. Largely, that work, but not entirely, was focused on preparing to host COP31 in Australia should we have been successful. Obviously, we are no longer hosting the COP31 major conference in Australia. To the extent that work is no longer relevant to Australia's responsibilities, we'll be concluding those contracts as soon as we are able to. This is work that's still underway, as I'm sure you can appreciate, and that announcement is very fresh. We're working through the implications. We'll of course be trying to leverage value out of those contracts. If there's any work that was done that helps position us to deliver our responsibilities under the new COP31 modalities, we'll absolutely do that. By and large, you would expect most of those contracts to close as soon as we're able to under the terms of that contract.

**Senator DEAN SMITH:** I don't remember seeing a COP31 operations delegation group on the organisational chart. I can't see the organisational chart for this estimates, but I didn't recall seeing it at the previous one. Is this a new division?

**Ms Munro:** I can confirm it was in fact on the organisational chart at the last estimates.

**Senator DEAN SMITH:** Under the international division?

**Ms Munro:** That's right.

**Senator DEAN SMITH:** Thank you very much. Do I still have some time?

**CHAIR:** I was going to move the call.

**Senator DEAN SMITH:** I'm happy to come back.

**CHAIR:** Senator Ananda-Rajah.

**Senator ANANDA-RAJAH:** I have a question about COP30 versus COP26. Can you again outline the number of political staffers who went to each of those? That seems to be the differentiating point, in that the total headcount was the same but the number of political staffers at COP26 versus COP30 was quite different.

**Dr Box:** At COP30 in Belem, there were five ministers and staffers. At COP26 in Glasgow, there were 15 ministers and staffers. Of course, that includes the Prime Minister.

**Senator ANANDA-RAJAH:** How many staffers were there from that five and 15?

**Dr Box:** On the five, there were three ministerial advisors—one supporting Assistant Minister Wilson and two supporting Minister Bowen. For COP26 in Glasgow, I don't have the breakdown of the 15 between ministers and advisers.

**Ms Munro:** I'm fairly certain that included the Prime Minister and the minister at the time, Angus Taylor. Therefore, there were two ministers, prime ministers and the remainder were advisors, so it was 13.

**Senator Ayres:** Sorry, Senator. It may be confusing; Mr Morrison was also the Minister for Industry, Science, Energy and Resources.

**Dr Box:** Good point, Minister.

**Senator ANANDA-RAJAH:** We think a couple of ministers in COP26 and the rest would have been political staffers. That would mean there would have been around 13 political staffers versus three at COP30; is that right? Would that be approximately right? You could take it on notice and then clarify. How does the number of political staffers who attended that COP26 compare with previous ones? Is that highest, lowest or about average?

**Dr Box:** I don't have the data in front of me for attendance prior to COP26.

**Senator ANANDA-RAJAH:** Could you take it on notice and perhaps provide the number of political staff as compared to previous?

**Dr Box:** We can.

**Senator ANANDA-RAJAH:** Let's move on to emissions. Are emissions down or up since 2021-22?

**Senator Ayres:** I should correct a previous answer that I gave in relation to Mr Morrison and the COP26. It was in fact the G7 that was treated more like a family history junket than COP26. I am anxious to correct that small factoid for you all.

**Senator ANANDA-RAJAH:** Thanks, Minister.

**Senator Ayres:** I always correct as soon as I know. I'm always trying to be helpful.

**Senator ANANDA-RAJAH:** Are emissions down or up since 2021-22?

**Dr Box:** Emissions are down since the 2021-22 financial year.

**Senator ANANDA-RAJAH:** Would you care to elaborate? They are down by how much? How does that compare in terms of performance?

**Ms Rowley:** Emissions in the year to June 2025 were estimated to be 0.7 per cent, or 3.1 million tonnes, lower than the year to June 2022. That's a relatively small reduction over that period at the headline level, but I could provide details at the sector level if that's helpful.

**Senator ANANDA-RAJAH:** I thought the year-on-year reduction in emissions according to the annual climate change statement—perhaps we're talking about two different things here—was nearly 10 million tonnes?

**Ms Rowley:** Your initial question was with respect to the change from 2022, and that's what my answer related to. If you're interested in the year-on-year change from 2024 to 2025, that is a reduction of 2.2 per cent, and I think it's in the order of 10 million tonnes.

**Senator ANANDA-RAJAH:** Is that the largest year-on-year drop in non-land emissions outside of COVID?

**Ms Pentony:** That's right. It is the largest drop in emissions outside of the land sector for any financial year other than using a year in COVID.

**Senator ANANDA-RAJAH:** Can you itemise the sectors that made that contribution? Which ones went down? Which ones went up?

**Ms Pentony:** Are you interested in year-on-year here or the change from 2024 to 2025?

**Senator ANANDA-RAJAH:** Yes. If you have any preliminary data for September 2025, that would be also helpful.

**Ms Pentony:** Emissions from 2024 to 2025 fell in electricity, chemicals and metals, fugitives, agriculture and stationary energy. They rose slightly in transport.

**Senator ANANDA-RAJAH:** Transport was the key driver that went up? In every other sector it went down; is that what you're saying?

**Ms Pentony:** Transport emissions went up a little bit. Transport emissions have been rising pretty consistently for quite a while now. There was a short period during COVID where they dropped quite substantially and then have been rising again since then. They went up a little bit in the past financial year.

**Senator ANANDA-RAJAH:** We've had basically reductions across the board with the exception of transport, where it's gone up a smidge?

**Ms Pentony:** That's right. The land sector is stable because we hold the land sector in the quarterly updates.

**Senator ANANDA-RAJAH:** I want to move on to energy infrastructure. Can you talk us through how the Net Zero Plan outlines investments in energy infrastructure and energy generation? Why is that so important given the fact we have coal-fired power stations that are either clapped out or due to retire?

**Ms Rowley:** I can speak to the headline levels, but you might want to reprise that question in outcome 1.2, where my colleagues can speak to more detail of the energy transition. In relation to the energy transition, including in particular electricity, as I was saying earlier, it's the largest source of emissions in Australia. It's where the largest quantity of cost-effective emissions reduction opportunities are available given the relative cost-effectiveness of renewable electricity compared to fossil fuels. As you know, the government has set a target of 82 per cent renewables by 2030 and implemented a range of policies and measures to support the investment to deliver that, the details of which can be explored in the next session. It's important because the majority of Australia's coal-fired generators, which have historically provided the largest share of electricity generation, are reaching the end of their life. As a result, their reliability is declining and costs are increasing. It's very important to get very substantial investment in clean energy in place to support both the continued reliability of energy generation as well as the reduction in cost pressures for energy users.

**Senator ANANDA-RAJAH:** What would happen if we didn't make those investments in clean energy? What if we just said, 'Let's sweat the assets'? What would that mean for Australians, businesses and industry?

**Ms Rowley:** Again, you might want to reprise this in the next session, which is focused on energy. However, some of the issues set out in the Net Zero Plan and the Energy and Electricity Sector Plan which was also released were the increased unreliability of electricity supply that comes when you rely on ageing and end-of-life assets; increased costs associated with that when you fall back on the more expensive generation options; and the implications both for households and for industry flowing from those higher energy costs. From a Net Zero Plan perspective, the key issue is that there are cost-effective emission reduction opportunities available in the energy sector, in particular in electricity, and that as we move the electricity sector to more clean generation, electrification itself provides a cost-effective opportunity to decarbonise other activities which currently use fossil fuels directly—vehicles and cars; for heating and cooking in our homes; and low-temperature industrial uses of gas as well. Electrification brings very substantial efficiency gains and therefore cost reductions at that household level and in improving business competitiveness.

**Senator ANANDA-RAJAH:** What are the benefits of actually following the Net Zero Plan? We have a plan. It's a roadmap. In terms of an orderly transition versus a disorderly one, what are the implications for our economy?

**Ms Rowley:** The Net Zero Plan is supported by Treasury modelling which explored different pathways to net zero. To your point, it includes scenarios with an orderly transition through a signposted 2035 target on the way to net zero versus what they called a disorderly transition scenario that did not include a 2035 target but did still ultimately take action to achieve net zero. That modelling highlighted that the benefits of policy certainty in guiding investment particularly in clean energy but also other assets across the economy to contribute to

emissions reductions led to an economy that was in aggregate over the period to 2050 \$1.2 trillion to \$2 trillion bigger than in the disorderly transition scenario. So, aggregate economic benefit coming from orderly transition through a 2035 target to net zero, and good for the economy by stimulating investment, by minimising risks of stranded assets, by reducing energy costs and by enhancing the competitiveness of our industries. Treasury could speak in more detail to that work if you were interested.

**Senator HENDERSON:** I wanted to come back to my earlier questions about the approved travel costs for COP31. Are you able to update the committee on what those approved travel costs are?

**Mr Kaiser:** Travel costs are not yet reconciled.

**Senator HENDERSON:** No, not reconciled; the approved travel costs that are within the department. Could I have that information?

**Ms Munro:** For COP30, we took it on notice, but that information is not yet available.

**Senator HENDERSON:** What I'm seeking, Ms Munro, is not the reconciliation. I'm seeking the costs which were approved in the department. Mr Kaiser has already confirmed that information sits within the department.

**Mr Kaiser:** Yes, and we took it on notice.

**Senator HENDERSON:** You said you would come back if you could provide any further information. That information is with your department. Can you not provide us with the approved travel costs?

**Mr Kaiser:** No-one has provided it to me yet.

**Senator HENDERSON:** Is there anyone who could come to the table?

**Mr Kaiser:** The travel costs that were approved were for the departmental officers who attended COP. That's what was approved.

**Senator HENDERSON:** Yes. What is the amount that was approved?

**Mr Kaiser:** I'm not certain, but that might not be available until it's reconciled. We approved the travel. The costs still need to be reconciled.

**Senator HENDERSON:** I'm asking for the amount that was approved for the department to travel?

**Mr Kaiser:** What was approved were for a certain number of officers to travel.

**Senator HENDERSON:** Yes, I understand that. How much was that?

**Senator Ayres:** This might assist. The travel is approved. There's a set of policies that apply to travel. I am not sure that the cost of the travel in advance is necessarily calculated. It has to be consistent with the policy. Bookings are made consistent with the policy. Is there an amount for a conference that is approved ahead of the conference?

**Senator HENDERSON:** Mr Kaiser has already confirmed that these are—

**Senator Ayres:** This is why I'm contributing the way that I am, because I'm not sure. I think you might be talking past each other.

**Senator HENDERSON:** Mr Kaiser, again, it appears that your department is very unwilling to discuss the travel costs for COP30. You are required under the rules of Senate estimates to answer the question.

**Senator Ayres:** They got back last week.

**Senator HENDERSON:** Could you please address the question: what is the quantum of the travel costs which were approved by your department for COP30?

**Mr Kaiser:** I've just been handed a note: it will be available after lunch. Frankly, that surprises me, but I'm told it will be available after lunch. It is largely as the minister described. We have an overall travel budget for an amount of travel that we intend to do. We knew that we'd be sending a certain number of people to COP in Belem. Policies were applied to that. To work out exactly what was approved—I'm surprised that my officers are telling me this is available.

**Senator DEAN SMITH:** What was that global figure?

**Mr Kaiser:** We provided it earlier.

**Senator HENDERSON:** The good news is that you're going to provide us with this figure after lunch.

**Mr Kaiser:** That's what I'm told.

**Senator HENDERSON:** Fantastic. Mr Kaiser, we are making progress, but given I asked about this at 9.05 am—

**Senator Ayres:** I think that's a pretty good effort.

**Senator HENDERSON:** I'm pleased. I'll hand over to Senator Canavan to ask some questions.

**Senator CANAVAN:** Mr Kaiser, congratulations on your appointment. Always good to see Queenslanders succeed. I want to ask about a court case in the Federal Court. The judgement was on 25 July this year in the case of Pabai versus Commonwealth of Australia. Was your department consulted on the Commonwealth's submission to the court in that case?

**Mr Kaiser:** That's not something I can immediately answer. Perhaps someone can.

**Ms Munro:** In short, yes, we provided advice to the Attorney-General's Department, which has the overarching lead on this.

**Senator CANAVAN:** They made a submission to the court. I quote to you from paragraph 920 of that judgement from Justice Wigney. For context, this case was brought by a group of Torres Strait Islanders who were claiming that the Commonwealth had failed in its duty of care to protect them from the impacts of climate change. Justice Wigney summarised the Commonwealth's position as follows:

The Commonwealth, on the other hand, submitted that it had no control over the risk of harm to Torres Strait Islanders from the impacts of climate change. That was essentially because, in the Commonwealth's submission, climate change is a global problem that requires a global solution. It is not a problem over which Australia alone has any, or any significant control. While Australia may have control over its own emissions reduction targets, it has no control over the emissions reduction targets set by other countries and Australia's targets alone are unlikely to have any impact on climate change or the risks posed by its impacts.

I hear a lot from the government that we need to act on climate change to solve this issue, but to the Federal Court the position of the Commonwealth is it has no control or any significant control on the climate.

**Senator Ayres:** It's a political question. I'll give you a political answer. There's nothing wrong, in my view, with what the judgement says there.

**Senator CANAVAN:** I'm just—

**Senator Ayres:** Don't interrupt me, Senator Canavan. I've been interrupted all morning by Senator Henderson and colleagues. We'll just step you through it carefully. Of course, it is absolutely the case that it is global action, cooperative action between nation states with industry that will determine the outcome, whether it's in the Torres Strait, the Sunshine Coast, Tuvalu or Vietnam. That is why Australia is engaged internationally. There has been so much criticism from your side of Australia's engagement in the most recent Conference of the Parties. That is why Australia is engaged. We are engaged because we see very clearly, as had previous governments, that it is in Australia's interests for a number of things to happen.

Firstly, credible action on climate. Secondly, that the approach in terms of emissions and industry suits Australia's unique position, that is, we have more to lose and more to gain. For example, we need to make sure Australia's competitive advantages in the future are catered for in the approach that we take on climate action. Features of the approach that's taken to emissions targets, for example, separating out scope 1 and 2 and 3 emissions in the way that they have, are very much in Australia's interests to maintain. That's why we take that approach. It is of course going to depend very much on international action. That is why Australia's approach under this government has been to support action on climate domestically and internationally. We're not, as we used to be under the previous government, hanging out with Iran and Russia in the isolated position that your approach would make even worse.

**Senator CANAVAN:** Can I just get a very simple answer? It was a very lengthy response obviously—very defensive. Does Australia have any significant control over the world's climate?

**Senator Ayres:** Of course. As I just outlined, small countries make up about 40 per cent of global emissions. I'll be corrected by officials, but Australia is somewhere between one and two per cent, so we're high emitters on a per capita basis and small in global terms. This requires cooperation—

**Senator CANAVAN:** I just asked the question—

**Senator Ayres:** By itself, Australia does not determine the global climate. What we can do is take action ourselves, make sure that Australian industry is at the front of the queue for investment and seek to influence the course of events by taking an outsized approach with our friends and partners in the region.

**Senator CANAVAN:** So, we've established that we can't change the climate by ourselves.

**Senator Ayres:** No, we haven't established that at all.

**Senator CANAVAN:** You just said—

**Senator Ayres:** Understand—

**Senator CANAVAN:** I didn't interrupt you before, Minister. You can give your response after my question.

**Senator Ayres:** Don't mischaracterise the response. I know your social media grabs are all about mischaracterising people's responses. But what I said was that action only in Australia doesn't work. What works is Australian action together with global action, and it's Australia's job to have a government that's actually in the international community rather than a pariah, which is your position, hanging out with Iran, Yemen, Russia and Azerbaijan. It's the pro-Iranian position—

**Senator CANAVAN:** It's all rubbish.

**Senator Ayres:** of the federal coalition.

**Senator CANAVAN:** People just want to know—

**Senator Ayres:** It is your policy—

**Senator CANAVAN:** People would just like a lower electricity bill instead of this rhetoric.

**Senator Ayres:** I think people want to see all these things. They want to see lower costs, lower emissions, progress—

**Senator CANAVAN:** We're waiting for you to deliver.

**Senator Ayres:** and they want to see political parties actually acting in the national interest.

**Senator CANAVAN:** The statement has been made that we need to work with other countries. I think we can establish that, right?

**Senator Ayres:** Do you agree with that?

**Senator CANAVAN:** Yes, I do. If you'd like me to expand, I'm happy to come to that side of the table and expand on how we would do that, under our policy, with a much more sensible approach to this.

**Senator Ayres:** Sort of Taliban style, I reckon—

**Senator CANAVAN:** But given that we just have to work with other countries, I'm trying to understand how what other countries are doing has informed our 2035 targets. Has modelling or assessment been done on what other countries are doing to then feed into what we should do over the next 10 years to 2035?

**Ms Munro:** In terms of international action, that was a consideration that the Climate Change Authority took into account in providing its advice to government in setting that 62—

**Senator CANAVAN:** What about the modelling; did the modelling look at scenarios of different climate action?

**Ms Munro:** In terms of modelling, Treasury modelling did look at global trends and what that would actually look like for Australia and our economic prospects.

**Ms Rowley:** Two specific modelling exercises were conducted to inform the government's decisions on 2035 target and the Net Zero Plan. One was led by the Australian Treasury, and the other was conducted by CSIRO, as input to the Climate Change Authority's independent advice to the government. The Treasury modelling looked at global action consistent with the Paris goal of keeping warming well below two degrees, as well as market and other settings that would be consistent with that outcome.

**Senator CANAVAN:** Just to be clear, did the Treasury modelling only have one scenario for global action?

**Ms Rowley:** One global scenario and three domestic scenarios. That was because the focus of that work was to inform Australia's pathway to net zero under its existing commitments; they include, as a party to the Paris Agreement, its commitment to keep warming well below two degrees, and its commitment to net zero. CSIRO for CCA looked at a range of international scenarios; within that are domestic scenarios, including keeping warming well below two degrees and also being consistent with a 1.5-degree outcome. CCA, which is appearing later before this committee, would be able to speak more to that work.

**Senator CANAVAN:** Did any modelling look at whether other countries weren't compliant with a two-degree goal?

**Ms Rowley:** An extensive range of modelling is conducted privately as well as publicly. With respect to the modelling conducted for the 2035 target and the Net Zero Plan, those modelling exercises were consistent with Australian and global commitments.

**Senator CANAVAN:** Can I just get a clear answer? Was there any—

**Ms Rowley:** I've said that Treasury models below two, and CSIRO for CCA modelled below two and 1.5.

**Senator CANAVAN:** So, was any modelling done for the 2035 targets to assess whether other countries acted in a way not consistent with the two-degree goal?

**Ms Rowley:** Not by Treasury or CSIRO, no. I would note, however, that one of the reasons for the CCA seeking additional time to provide its advice to the government was to be able to take account of global developments, including the US decision to withdraw from the Paris Agreement. Their advice to the government, which has been published, includes extensive discussion of those factors. Ultimately, their conclusion was that global action and Australia's interests are squarely in maintaining action consistent with the Paris goals.

**Senator CANAVAN:** I would almost suggest there's a consensus right now that action to date has not been consistent with a two-degree target; Bill Gates has said that, and the IEA released a report recently suggesting that. Does the government maintain that it wasn't worth assessing the risks to our country of other countries not acting consistent with the two-degree target, given that quite a lot of eminent people right now are saying, 'That's not happening'?

**Ms Rowley:** There's more detail on this set out in the Net Zero Plan. But over the course of the last 10 years, so prior to the Paris Agreement, we've seen that global action and commitments were on track to warming of roughly four degrees or more by the end of this century. Over the course of the last 10 years, we've seen countries take action and make commitments that have bent that curve down. On current trends, my understanding is that global action is more consistent with something towards 2.6 to 2.8 degrees by the end of this century. So, over the course of the last decade, the global outlook has improved by more than one degree. I think it is very clear, both from the international literature and from domestic analysis, that more work needs to be done if the world is to keep warming well below two degrees and to keep 1.5 on track. But the architecture of the Paris Agreement, about which my colleagues could speak more, is about fostering and tracking that progress.

**Senator CANAVAN:** I'm not a voting member of this committee and I need to move quickly, so I'll just try to move on.

**Senator Ayres:** The answer is that we've made progress. 10 years ago it was four degrees, and that would be catastrophic for Australian agriculture, coastal communities and suburban communities.

**Senator CANAVAN:** Chair, I didn't ask about this.

**Senator Ayres:** You did. You asked about what is happening in terms of compliance and how that factors into the Australian government's thinking.

**Senator CANAVAN:** Yes, compliance. I didn't ask about the effects of it. I didn't ask about this, Chair.

**Senator Ayres:** Now we're well below three degrees and there is more work to do.

**Senator CANAVAN:** I want to turn to a specific part of the Treasury modelling. On page 32, there's a graph or what they call a chart, which is labelled 3.14. That suggests that, by 2050, we need to get 107 million tonnes of carbon abatement from reforestation. How much land would be taken up to deliver that 107-million-tonne abatement?

**Ms Rowley:** Treasury modelling focused on the economic implications of the transition to net zero and, as I've said, they looked at a range of scenarios. They didn't conduct spatial modelling, so there is no estimate of the land associated with that abatement; however, they did work closely with our colleagues in the Department of Agriculture and the Australian Bureau of Agricultural and Resource Economics, but we don't have an estimate of that.

**Senator CANAVAN:** I want to understand this. How can you make the decision that this plan is good if we don't know how much farmland we have to give up to get there? You don't know that answer?

**Ms Rowley:** The scenarios run out to 2050, which is a long way away, and the estimates are based on what we currently know with respect to technology and market outlooks. There is extensive analysis by many different sources that indicates there is cost-effective abatement potential in Australia's landscape. That includes farmers engaging in carbon plantings as part of their activities—

**Senator CANAVAN:** Yes, I get that, but—

**Ms Rowley:** if I could just finish—and also other changes across the landscape, which means that it's not just on farmland, to enhance sequestration. We were asked questions about that earlier in terms of the management of grazing and other lands to enhance sequestration, and there are very substantial opportunities across the Australian landscape to take that up at cost-effective levels.

**Senator CANAVAN:** I was in Dubbo on the weekend, and there's enormous concern from people about the loss of productive areas in their community. Yes, you're right; farmers will get money and do it voluntarily, and that's great for them. But as for the people who work in the town and the businesses that rely on the farm

economy, there's not a lot of money in trees; there's not a lot of jobs in unmanaged scrub, which most of this becomes. They don't even control the pests and weeds, normally. How have you modelled and/or assessed the impact on those small farming towns if you don't even know how much productive land you're going to take away from those communities?

**Senator Ayres:** Senator, despite what you and your colleagues assert, wandering around farming communities trying to freak people out—

**Senator CANAVAN:** How dare we!

**Senator Ayres:** I don't mind the misinformation sometimes if it's developed here but, when it's imported from overseas, it's pretty difficult. There is no plan. There is—

**Senator CANAVAN:** There's no plan. You're absolutely right about that; there's no plan. They have no idea how much land they're taking up.

**CHAIR:** I stepped away from the chair—that was my fault—and I was not following the exchange, so I don't know where we've landed on this. I would just indicate, once again, that this process works better in a question-and-answer format. If questions can be asked and then answers given, that would be my preference.

**Senator Ayres:** I'm answering regarding a deliberate effort to produce misinformation in farming communities. I've watched this unfold for a little while now.

**Senator CANAVAN:** How can I produce misinformation? There's no information; this is an example of no information.

**Senator Ayres:** The chair has just invited you to let the answer flow before you ask a question. Absolutely there are enormous opportunities here for Australian agriculture and, absolutely, improvements can be made, as they have been made, in Australian agriculture over other issues, like protecting topsoil and adopting better agricultural practices to improve agricultural productivity. All of these work hand in hand. Nobody has been asked to do something that they don't want to do. Under our framework, farmers are able to make improvements over time to their agricultural productivity, and that's what I expect to see happen. The alternative is that we do nothing and agricultural productivity in Australia hits the fence. Under your preferred scenario, which is that we just sit on our hands and do nothing, four degrees for Australian agriculture and farming communities is a cataclysm. If you want to take the Iranian or Russian approach, the sort of Taliban approach—

**Senator CANAVAN:** No. Taliban support net zero; they're big fans of it.

**Senator Ayres:** of just doing nothing, it means disaster for Australian agriculture. That's why sensible people—

**Senator CANAVAN:** We'll get back to the facts.

**Senator Ayres:** in Australian agriculture are on board with the government's approach.

**Senator CANAVAN:** When I did question ABARES and the Department of Agriculture about this last time, like you, they couldn't come up with a figure, but they did say that their carbon abatement curves show that you'd expect a range of between 5 and 21 tonnes per hectare of carbon abatement. So, that means that, to get to the 107 million tonnes, we need at least something like five million hectares. That's if we hit the maximum range, which is unlikely. But even if we were to have to take five million hectares out of production, that's not shy of the size of Tasmania. Does that sound about right? I can't believe that we haven't calculated—

**Senator Ayres:** No, it does not—

**Senator CANAVAN:** I haven't finished my question. I can't believe you haven't calculated this figure. It's a logical step that I'm taking. I don't know whether you have access to their information, but they've got those carbon abatement curves, and you want 107 million tonnes of abatement. That's five million hectares. Where is it going to come from, and what does it mean for a small town that relies on farming?

**Senator Ayres:** It's just dead wrong.

**Senator CANAVAN:** Tell me how much land—

**Senator Ayres:** It's deliberate misinformation, and it's dead wrong. The truth is that there are opportunities on productive farmland every day of the week to make improvements, many of which that are made in emissions terms actually also mean improvements in output. Improvements occur from improving pasture and pasture productivity. Just think about grazing.

**Senator CANAVAN:** This is about reafforestation. It's not that; that's a different—

**Senator Ayres:** It is—

**Senator CANAVAN:** I can give you some—

**Senator Ayres:** No. It is—

**Senator CANAVAN:** This is explicitly reafforestation.

**Senator Ayres:** There are always opportunities in agricultural management—

**Senator CANAVAN:** You don't know your own plan, and you don't—

**Senator Ayres:** to improve productivity.

**Senator CANAVAN:** Okay.

**Senator Ayres:** If you don't want to hang around for the answer, you should go back and keep improving your social media game.

**CHAIR:** Senator Whitten.

**Senator WHITTEN:** Does the department calculate how much CO2 is accounted for in the building of a dwelling?

**Ms Rowley:** There are a range of emission sources relevant to the built environment and the construction sector that are reflected in Australia's inventory; for example, there is energy use and the production of materials, such as where they are produced in Australia, and the transport of materials. All of those things are captured in Australia's emissions inventory. Where activity occurs overseas and releases emissions—for example, with the production of materials that are then used in Australian construction—that's not part of Australia's inventory. Similarly, the emissions associated with materials that are produced in Australia and then exported are in our inventory.

**Senator WHITTEN:** So, there's no general calculation for all the components—such as the concrete, metal, bricks and roof tiles—that are used in building an average-sized house in Australia?

**Senator Ayres:** Do you mean in building a house?

**Senator WHITTEN:** Yes; or is it calculated, with the brick factory producing 'this much' and it's a separate thing?

**Ms Rowley:** In terms of the emissions accounting that my division is responsible for in compiling the inventory, it's much more the latter. Certainly, some parts of government but also of the private sector do draw on emissions information from the inventory and other sources to estimate the emissions intensity of different materials; they use that to inform their selection of materials when they're focused on decarbonisation. Also, there's a range of tools and calculators available in the market to support that, but that's not our role in compiling the national inventory.

**Senator WHITTEN:** So, the extra 1.2 million homes that we're going to be building in the next number of years will have a significant impact; is that accounted for?

**Senator Ayres:** I don't think that question flows from the answer that you just got. We have a vision for growth in the Australian economy and in housing, and we're doing something about it. We're working closely with elements of the housing supply chain to improve efficiency and lift investment. Of course, those businesses, particularly emissions intensive businesses, are engaged. I think cement and brickmaking are engaged with the safeguards framework and will invest more because of the safeguards framework than they would have without it. If we build 1.2 million homes, that's a good thing, I would have thought.

**Senator WHITTEN:** I'm not passing judgement. It's not a bad thing; I think it's a good thing, as we need more houses. But the point I'm making is—

**Senator Ayres:** The country is going to grow and, as the economy grows, if we didn't have an emissions framework and an industrial framework around that to create investment, emissions would grow at the same time and we would lose the opportunities for investment in industries that export to the world. But we've got a vision for growing the joint—more factories, more construction and more blue-collar jobs, rather than the 'taking the hands off the wheel approach', which the previous questions were all about and which would lead to fewer jobs, less blue-collar work, less energy security and, at the end of it, fewer homes.

**Senator WHITTEN:** Every person is another house or at least a bed, a car and all of those things, so each person who comes into the country is going to impact all of these things.

**Ms Munro:** Perhaps we could just note that the emissions projections take account of forecasts of activity levels, so that would include building houses and things like that. It also takes account of population forecasts going into the future. So, it has factored in expectations around population but also expectations about activities, such as building new houses and those sorts of things.

**Senator WHITTEN:** I'm sorry, but did you say that it 'doesn't take into account'?

**Ms Munro:** It currently does take those things into account; that's right.

**CHAIR:** Senator Pocock.

**Senator DAVID POCOCK:** At estimates in October, officials said that the government had received legal advice on the ICJ advisory opinion and was still considering its response. I just have some questions around that.

**Ms Munro:** Please ask your questions; whether we can answer them in this outcome will depend on what they are.

**Senator DAVID POCOCK:** In terms of considering its response, is that still ongoing? Where are things up to?

**Ms Munro:** This is the Attorney-General's Department 'at lead', so we don't have a direct lead or responsibility on that issue.

**Senator DAVID POCOCK:** So, there's a cross-department advisory body or how is this being worked through?

**Ms Munro:** It's led by the Attorney-General's Department and the Office of International Law.

**Senator DAVID POCOCK:** Will there be a formal response?

**Dr Box:** I think that's a question for the Attorney-General's Department.

**Senator DAVID POCOCK:** So, it's DCCEEW, AGD and DFAT; those are the three?

**Ms Munro:** But, again, it is actually the Attorney-General's Department.

**Senator DAVID POCOCK:** Yes, but you must know who's involved.

**Ms Munro:** Yes, they're the three involved.

**Mr Kaiser:** They'll seek advice as they see fit from a range of departments. While we may be involved in providing some of that advice, certainly whole-of-government responsibility for a matter like this rests with the Attorney-General's Department.

**Senator DAVID POCOCK:** If you're part of the response, are you aware of when that body of work will be done?

**Dr Box:** The response to what in particular, the ICJ decision? No, we don't have a time frame, I'm afraid.

**Senator DAVID POCOCK:** So, it's just ongoing?

**Mr Kaiser:** AGD will be able to assist you with that.

**Senator DAVID POCOCK:** Yes, I'll ask them as well. In terms of the ICJ decision, the ICJ found that mitigation must aim at the 1.5 temperature goal and needs to be based on best available science. That's at paragraphs 224, 245 and 254. The ICJ accepts the IPCC as an authoritative statement of best available science. Would the department also accept the IPCC as an authoritative statement of best available science?

**Ms Munro:** I'm sorry? Can you just restate the last part of your question?

**Senator DAVID POCOCK:** The ICJ is saying that the IPCC is providing pretty solid science, and I'm interested in whether the department would agree with that.

**Ms Munro:** We participate as part of the IPCC, and we certainly accept the science.

**Senator DAVID POCOCK:** The latest IPCC report states, with high confidence, that future CO2 emissions from existing fossil fuel extractions 'without additional abatement already exceed the remaining carbon budget for limiting warming to 1.5 degrees Celsius'. It then follows that we have a legal duty to prevent new fossil fuel infrastructure, surely?

**Senator Ayres:** It's pretty hard for the officials to comment on what they think the approach of the government should be in relation to a decision of that tribunal. If you're asking whether the government accepts the climate science, the answer is, yes.

**Senator DAVID POCOCK:** Do you accept that we have an obligation to be aiming for 1.5 degrees?

**Senator Ayres:** We're in it belts and braces. I don't think anyone in the international community is—

**Senator DAVID POCOCK:** I could name a few—

**Senator Ayres:** We are engaged with partners in trying to push forward global action. We are engaged here at home, both in emissions terms and because we see the enormous growth opportunities.

**Ms Munro:** Coming back to your question, perhaps I can just add that, in the 2023 UN Global Stocktake of progress under the Paris Agreement, the IPCC called for global emissions to reduce by 60 per cent from 2019 levels to keep 1.5 degrees within reach. That's based on the IPCC's sixth assessment report. If you look at that on the basis of 2005 levels, which is how Australia does that, that's a 60 per cent reduction, and the 60 per cent reduction on 2019 levels is equivalent to a 68 per cent reduction on 2005 levels. As you're aware, that was within the target range of the 2035 target, so it is actually accounted for. Again, the Climate Change Authority, which has our chief scientists and also leading scientists, such as Leslie Hughes, provided their advice to the government on the target.

**Senator Ayres:** Mr Kean will be able to answer these questions when he comes. But the formal source of advice to government on these questions is the Climate Change Authority. In their advice to government, they did say, 'In summary, a target of 62 to 70 per cent is ambitious, achievable and in Australia's national interest, and is based on robust analysis of the best available evidence.' It continues, 'It anchors Australia's commitment to the global goal of pursuing efforts to limit warming to 1.5 degrees.'

**Senator DAVID POCOCK:** Thank you, Minister. The IPCC's report states that just existing fossil fuel projects have the ability to take us beyond 1.5 degrees. So, we need serious abatement, and we've talked through the pathway there. Basically, they are saying that we can't have any new fossil fuel projects; we've got more than enough to blow our collective carbon budget. So, with this ICJ case, I think there's a very strong argument to say that, yes, Australia has commitments, but they also should not be approving new fossil fuel projects. I'm just curious. You can say that you accept the science—the IPCC is the authority on this—but then approve fossil fuel projects at the same time as saying we're still heading to 1.5 degrees?

**Senator Ayres:** The way the framework works is that there's scope 1, 2 and 3 emissions. Largely, while I accept that projects themselves—depending upon the project and the technology that's been engaged—have their own scope 1 and 2 emissions here in Australia, the emissions profile of export gas or export coal is largely the responsibility of the economy that uses the emissions in their industrial or energy processes. It is true that is a framework that suits Australia's interests, but it is also a framework that is in the interests of international action and is the framework that we're going to follow and promote. The idea that we should reduce the energy security of our partners and that will somehow contribute to greater action is just not right. It would undermine the action that's being taken now and throw the global emissions efforts into complete disarray. I understand that it's a dinner-party discussion and gets people going a bit around the place. But the framework is there; it's there because it's in our interest and is better for global emissions efforts.

**Senator DAVID POCOCK:** Minister, this is more than a dinner-party conversation. This is the best available climate science with the imperative to act to actually protect the people and places we love. This is a government saying that we're going to have it both ways. We're going to say that we're acting. Essentially, we're going to continue to swallow the line from Japanese gas companies, hook, line and sinker, when we know that they are actually exporting our gas into South-East Asia. They are helping invest in new gas infrastructure.

**Senator Ayres:** That's just not correct.

**Senator DAVID POCOCK:** Could you provide evidence to the contrary? There's some very good work that's been done that now shows that Japan is on-selling more gas than we export to them. To bring you back to the ICJ case, your government may just fob off scope 3, but the ICJ actually refers to the stringent obligations of due diligence including conducting environmental impact assessments of climate related effects and assessing their possible downstream effects. They're essentially saying you can't just under Paris punt your scope 3 emissions. You actually have to look at how this will affect our global emissions? Are we opening ourselves up to potential cases against Australia?

**Senator Ayres:** While we're swapping various tribunals' approaches—

**Senator DAVID POCOCK:** I'm interested in the ICJ.

**Senator Ayres:** The global framework that in the real world is going to drive emissions reductions is a framework that we work within. It is, in my view, more likely to achieve real global emissions reductions if everybody agrees to the framework and doesn't take unilateral action. That is the approach that the Australian government is taking. We support the international framework. We support it because it's the most realistic path forward in terms of emissions reduction. We support it because knocking over the card table at this point of the game will do nothing but increase global emissions. That's why I say it's a dinner-party discussion, because it only makes sense until you confront the actual realities of the way that economies are in the framework. Third, it is in Australia's interests. All of those three things taken together mean this is the right approach.

I indicated to you before what the Climate Change Authority's view was. There was discussion a bit earlier about the Pabai decision in the Federal Court, which was very selectively quoted. That decision stated that the updated 2030 target that was communicated in 2022 could fairly be said to be a target that was capable of realistically contributing towards limiting the increase in global average temperature to 1.5 degrees above pre-industrial levels. I don't know what the point of duelling tribunal decisions is. The pragmatic course here is: what is going to reduce emissions? What's in the best interests of Australia? This framework is the approach that we've adopted.

**Senator DAVID POCOCK:** For me, the pragmatic approach would actually be doing what we can here to reduce emissions.

**Senator Ayres:** That's what I just said.

**Senator DAVID POCOCK:** In terms of the second of your three points, are you saying that opening new gas export projects will actually reduce emissions?

**Senator Ayres:** We export into economies that have their own responsibilities in terms of emissions reduction.

**Senator DAVID POCOCK:** I know that.

**Senator Ayres:** That's the answer.

**Senator DAVID POCOCK:** It's not as if atmospheric physics cares where it goes.

**Senator Ayres:** Yes, that's right. It's their responsibility to comply. They're undergoing their own industrial transformations. They're using less coal and more gas; less gas and more electricity. They are going through their own processes. In terms of demanding that some of our partners use Russian gas instead of Australian gas and disabling their economies, as I say, it's a nice dinner-party discussion but it's not a real one.

**Senator DAVID POCOCK:** Have you been briefed by the department on the ICJ case?

**Senator Ayres:** I'm briefed by my department.

**Senator DAVID POCOCK:** Have you been briefed on the ICJ case?

**Senator Ayres:** I'm aware of it.

**Senator DAVID POCOCK:** My question was simple: has the minister been briefed on the ICJ case?

**Senator Ayres:** I'm certain that the minister has been briefed on these matters. I'm here representing the minister. My job is securing investment in Australian industry. Much of that is about reducing industrial emissions.

**Senator DAVID POCOCK:** On notice, I will ask whether the minister has been briefed specifically on the ICJ case.

**Ms Munro:** We can certainly take it on notice.

**Senator DAVID POCOCK:** Minister, in your role have you been briefed on the ICJ case?

**Senator Ayres:** I'm aware of it, but it's not something that would—

**Senator DAVID POCOCK:** It's a pretty big deal.

**Senator Ayres:** I understand. Different parts of government do different things.

**Senator DAVID POCOCK:** Yes, but sprouting forth on climate, exports and all of the rest goes against what this landmark case said and clearly has huge ramifications. We have AGD, DCCEEW and DFAT looking at the ICJ decision and providing advice on what this actually means for Australia.

**Senator Ayres:** We are just going to get on with the job of delivering our 2030 and 2035 targets. We are going to continue to contribute, whether it's this COP or future COPs, to strengthening global action.

**Senator DAVID POCOCK:** As an Australian, I'm concerned the government is not—

**Senator Ayres:** We're all Australians here.

**Senator DAVID POCOCK:** That's what I'm saying. I'm concerned that the government of the day is opening us up to potential litigation, not to mention the impacts of climate change. We're essentially trying to have it both ways, where we say we're doing everything we can. At the same time, we've somehow convinced ourselves that opening up huge new gas projects for export will actually reduce emissions when all of the expert evidence says that we simply cannot continue down this pathway if we want to keep it below—

**Senator Ayres:** It is very clear to me that the framework that we're approaching, reducing domestic emissions, improving the position of our industry and our electricity system, modernising our electricity system and being

very clear about whose responsibility is what—and that is that scope 3 emissions are the responsibility of the economy that is engaging those products in their processes—is the best way of delivering a coherent global response. In my view, if we muddy it all up and start again on this framework the whole show is cooked. We have a framework. We are going to pursue it. It's in Australia's interests. It's in the interests of climate action and reduced global emissions. We're going to keep on with it.

**Senator DAVID POCOCK:** I understand those are the lines from government. I'm just concerned that the ICJ opinion actually reinforces our obligation as an incredibly wealthy developed country to do more than just the aggregate reduction. The judges made it very clear that considering scope 3 is part of that obligation.

**Senator Ayres:** I'm not sure it's useful to repeat what I just said.

**Senator DAVID POCOCK:** Do you disagree with the ICJ judges?

**Senator Ayres:** I said what I said. I'm not going to be argumentative about it. Australia's approach is going to be the one that I outlined.

**Senator DAVID POCOCK:** You're allowed to disagree with that. I'm just asking.

**Senator Ayres:** We pay attention to decisions that are made by international tribunals, but there's an international framework there that is in Australia's interests. It is in our interests but it's also, in our judgement, in the interests of a coherent global approach on emissions. Taking an alternative approach in the real world would be disruptive to efforts, to say the least. I'm not even a bush lawyer; asking for my opinion in terms of tribunal decisions, it is probably not wise for me to answer. I even get my conveyancing done by somebody else. Senator Ghosh is a very good lawyer, though.

**CHAIR:** Senator Pocock, I'll move the call on. At this point, I just note that we are, to my despair, significantly behind where we need to be on our program. I'm just letting senators know that I will probably move to shorter and more defined blocks of questions to try to keep things moving. Obviously, the usual rules apply, but that's the approach I'm going to take to try to keep things moving along. I appreciate that lots of senators have questions today. I now go to Senator Smith to take us to the lunchbreak.

**Senator DEAN SMITH:** My questions are actually very brief. I don't think it's the containing of the asking of the questions that is the challenge. I turn to the matter of how the department is supporting Minister Bowen in his President of Negotiations role. I'm interested to understand structurally how that is happening. In the organisational chart that was available at the last estimates, there was the COP31 presidency division and then there's the COP31 operations division. I'm interested to understand how the department works with Foreign Affairs and Trade, assuming that there is an IDC mechanism. If there is, could you elaborate on that for me?

**Ms Munro:** This arrangement was entered into a week ago. In terms of the President of Negotiations, you're right. There are a number of supporting functions, including Dr Sally Box as head of the International Climate Negotiations Division and David Higgins, head of the International Climate and Energy Division. Fundamentally, the agreement talks about Australia taking on the role of the President of Negotiations. It also is very significant in terms of the partnership with the Pacific. Australia would set the agenda and preside over a special pre-COP in the Pacific. That's a very important shared responsibility with the Pacific. You're right. We have relationships with the Department of Foreign Affairs and Trade and also directly with Pacific island officials on those matters.

**Senator DEAN SMITH:** Let's go to the organisational chart. Dr Box, if I've read that chart correctly, the two groups, the International Climate Negotiations Division and the COP31 Operations Division, continue to support you in your role?

**Dr Box:** I head up the International Climate Negotiations Division. The functions of my division include engagement in international climate negotiations. Mr Feng heads that branch. As you can imagine, with Minister Bowen being the President of Negotiations, we will continue to support Minister Bowen in that role through our team of negotiators. We also have another branch in my division which has been supporting the Pacific Partnership for COP31 and also other elements of our COP31 presidency endeavours. As the arrangement with Turkey was just agreed very recently, we need to look at what this agreement means for us and the resourcing that we will require to support those functions. I anticipate that it will include functions that are currently sitting within my division, both in terms of our relationship with the Pacific, our negotiating functions and also functions currently supported in Mr Higgins' division, which includes our engagement in the action agenda of COPs. Of course, as we're delivering the pre-COP in the Pacific, there will be an operational function associated with that as well. We'll be going through a process of looking at these responsibilities and what functions are required to support them.

**Senator DEAN SMITH:** Will the organisational chart as it currently exists change?

**Dr Box:** Yes, I anticipate it will change.

**Senator DEAN SMITH:** What additional divisions do you expect will be added or will it sit under the existing alignment?

**Ms Munro:** I think that is speculative at this stage. We can report back at the next estimates in terms of what our structure is and how we're supporting these functions.

**Mr Kaiser:** As you've heard, there are people already in roles within the department who broadly do the kind of work to support Minister Bowen in the past that he will need in the future. We are still making an assessment as to what resource implications his role may have, but we've certainly got the divisions and the skillsets within the department currently to support him in the future and to continue to work with our Pacific partners that we've had in the past.

**Senator DEAN SMITH:** My understanding is that Minister Bowen is now President of Negotiations?

**Mr Kaiser:** Yes, that decision was taken very recently.

**Senator DEAN SMITH:** The statement of 23 November said from the end of COP30 this week until the end of COP31.

**Mr Kaiser:** Yes. As has been said, we're still making an assessment as to the implications of that. The point I'm making is that we have been supporting Minister Bowen in the past in terms of his negotiations on behalf of this nation internationally when it comes to climate matters. We already have skillsets, divisions and groups within the department that are doing that. While we're making an assessment, we're not anticipating there being a whole bunch of new skillsets required for supporting Minister Bowen into the future.

**Senator DEAN SMITH:** You're not expecting there to be any significant additional resourcing to support Mr Bowen in his President of Negotiations role?

**Mr Kaiser:** We are making that assessment. I'm simply making the case that there are already skillsets and personnel in the department who have those skillsets to fulfil those requirements. It may require some additional resourcing. I haven't said that it won't. We're making that assessment. It's not as though we will expect a significant reorganisation of the department in order to support the minister.

**Senator Ayres:** This is the kind of discipline that you see in our assessment to resources. 'It's not automatic' is what he's saying.

**Senator DEAN SMITH:** How is that assessment being undertaken?

**Senator Ayres:** He'll make that assessment over time. It's very early but, as you heard the secretary say—

**Senator DEAN SMITH:** It's actually very late, because he's in the role; he's started. Have you heard Senator Wong's media statement? From the end of COP30 this week until the end of COP31; he has started the job.

**Senator Ayres:** As you've heard the secretary say, we're a few days into this now and there is a very capable set of officials within the department who are doing the same kind of work to support Minister Bowen's role on behalf of Australia prior to assuming the COP presidency. It is in Australia's interests for us to have that capability. Whether there's any requirement to lift that has not been determined. It's not automatic.

**Senator DEAN SMITH:** What's the time frame for that determination?

**Senator Ayres:** Over the fullness of time. When the secretary reaches a conclusion about that with his senior officials, he'll act on it.

**CHAIR:** I'm going to stop you there, Senator Smith. We'll come back at the end of our luncheon adjournment.

**Proceedings suspended from 12:49 to 13:38**

**CHAIR:** We will recommence now with our post-lunch session. We are still on outcome 1.1. Before I hand the call to Senator Smith, I am in a position to release the Threatened Species Scientific Committee, the Australian Institute of Marine Science, the Great Barrier Reef Marine Park Authority and those officials exclusively related to outcome 3 of the program. You go with the committee's thanks, and I thank my colleagues for their assistance with that. Senator Smith.

**Mr Kaiser:** All officials related to outcome 3?

**CHAIR:** That's right. We're not going to get to outcome 3 today.

**Senator DEAN SMITH:** We were discussing the expected departmental uplift to support Minister Bowen in his new role as President of Negotiations. Secretary, you mentioned that you are undertaking an assessment at the moment with respect to what uplift would be necessary?

**Mr Kaiser:** I don't think we agreed to the proposition of an uplift necessarily. What we said was that the situation is currently under assessment. It's complicated by the fact that we already have a number of people in the department who fulfil the responsibilities of supporting the minister in terms of international negotiations, in terms of the potential of hosting an event somewhere in the Pacific, so we have people in place. I can't at this point in time say that it will result in an uplift. It will result likely in something that's different, but I just can't say what at the moment because that's under assessment. The decision was only made a very short time ago, a matter of days, and the role is new; it has not previously existed. You'll understand if we say that it takes some time to assess the requirements of our support for the minister.

**Senator DEAN SMITH:** That all may be true with regard to personnel, but has any assessment been undertaken in terms of additional financial resources that may need to be accessed to support Minister Bowen's role in terms of increased international travel?

**Mr Kaiser:** No.

**Senator DEAN SMITH:** There has been no assessment yet?

**Mr Kaiser:** Not yet, no.

**Senator DEAN SMITH:** When will that assessment be completed?

**Mr Kaiser:** I think it will certainly be completed by the time of the next estimates hearing.

**Senator DEAN SMITH:** I was thinking more about MYEFO.

**Senator Ayres:** No.

**Senator DEAN SMITH:** It won't be ready for MYEFO?

**Mr Kaiser:** It's not at that scale.

**Senator Ayres:** I'm not sure that MYEFO is going to go into that sort of granular detail such as how many socks are going to be required for a particular part of the defence forces or whatever. No.

**Senator DEAN SMITH:** Will the government make a public statement with respect to what, if any, additional resources are required to support Mr Bowen in his new role?

**Senator Ayres:** We'll deal with that—

**Senator DEAN SMITH:** There's a high level of interest.

**Senator Ayres:** What?

**Senator DEAN SMITH:** There's a high level of interest. I'm interested.

**Senator Ayres:** The way I would describe the level of interest is there's a high level of interest in certain circles. They are very small circles. As I look across the Senate there's a sort of febrile anticipation on these issues. The truth is that Australia has extended its influence in a very significant way around future negotiations that will have much to do with our economic as well as our environmental interests. I can think of a few areas that go to our economic security, our national security, the security of our Pacific partners and the region and our economic interests. Then negotiations around future emissions reduction and industrial frameworks are associated with that. That's a good thing. Minister Bowen will be engaged in that in the Australian interest. You would have to be pretty small-minded and unpatriotic to be arguing anything else.

**Senator DEAN SMITH:** To be more concise, what people like myself are interested in understanding is how Minister Bowen might split his time between doing the President of Negotiations role, which will require international travel and no doubt participating in international meetings perhaps by Zoom or some other digital means at unusual hours here in Australia at a time when Australians are experiencing increasing electricity costs. What we're interested in is understanding how the government is going to ensure that it maintains high-level focus on domestic energy and electricity cost issues while at the same time fulfilling the negotiated outcome that it's been able to secure as a result of COP31. That is precisely our level of interest.

**Senator Ayres:** There are three responses to that question.

**Senator DEAN SMITH:** Can I just ask the question.

**Senator Ayres:** No. You've asked a question.

**Senator DEAN SMITH:** Can I just ask a question about the interface between the United Nations Framework Convention on Climate Change and the COP? I'm keen to understand how these things—

**Senator Ayres:** I'm going to answer your first question and then we'll see how—

**Senator DEAN SMITH:** I'm keen to understand how these things are interrelated or if they're not interrelated. I'm keen to understand that.

**Senator Ayres:** I'm going to insist on answering your first question and then asking you to try to explain whatever your second one was. In terms of Minister Bowen's approach to this, his time and the level of interest in this, I would say three things. Firstly, you're doing a very good job of pretending to be interested in it. That is good; at least you're doing a good job of pretending to be interested in it. Secondly, it is absolutely material—

**Senator DEAN SMITH:** I am genuinely interested in it.

**Senator Ayres:** It is absolutely material to Australia's economic performance and our performance in energy terms for Australia to have influence on these questions. That is precisely what this role has achieved. Thirdly, he'll do it confidently. He'll do it on his ear. Don't you worry about that. He's a hardworking minister. He's been a very hardworking minister. He will be engaged every hour, every day in the Australian national interest on these questions.

**Senator DEAN SMITH:** My question was to properly understand what, if any, is the interrelationship between COP and the UN Framework Convention on Climate Change.

**Dr Box:** The UN Framework Convention on Climate Change is a treaty from circa 1992. The COP stands for the Conference of the Parties. That is the annual meeting of the parties to the UN Framework Convention on Climate Change, to that treaty. It also serves as an annual meeting for parties to the Paris Agreement, the separate treaty that entered into force in 2015, as well as parties to the Kyoto Protocol.

**Senator DEAN SMITH:** What are Minister Bowen's obligations, if any—there may not be any obligations—to participate in the UNFCCC?

**Dr Box:** As per the agreement with Turkey, as President of the Negotiations, Australia through Minister Bowen will have exclusive authority in relation to the negotiations. They'll have a role in convening consultations and meetings to inform negotiations, selecting ministerial and other co-facilitators and leading the negotiations agenda. Those negotiations will be mandated negotiated items that are under the UN Framework Convention on Climate Change or under the Paris Agreement or under the Kyoto Protocol.

**Senator DEAN SMITH:** Minister Bowen will be expected to chair?

**Dr Box:** Minister Bowen will convene the consultations, absolutely. Also, it's the fact that he'll be supported by departmental officials who will do that on his behalf on many occasions as well.

**Senator DEAN SMITH:** Physically on his behalf?

**Dr Box:** There will be a range of different meetings through the year and a range of different consultations. Some of them will be in person, some of them will be conducted online. Some of them Minister Bowen would preside over and many of them departmental officials would preside over. That is normal practice for any President of Negotiations in the COP process.

**Senator DEAN SMITH:** Is the sixth meeting of the Accreditation Expert Panel, which is scheduled to meet on 4 February next year, a meeting that Mr Bowen would attend himself?

**Dr Box:** I'm not familiar with that meeting.

**Senator DEAN SMITH:** It's in the UNFCCC program of events.

**Dr Box:** I'm not—

**Senator DEAN SMITH:** What about the 39th Standing Committee on Finance meeting scheduled on 10 February?

**Dr Box:** No.

**Ms Munro:** It's a great example of the fact that there are a range of meetings, but that is not the role that Minister Bowen would have.

**Senator DEAN SMITH:** Is there a program of scheduled meetings at the moment that Mr Bowen would be expected to participate in, whether it's physically by attending or whether it's a digital participation by Zoom?

**Dr Box:** There is a range of meetings that are standard on the calendar that Minister Bowen as President of the Negotiations will be invited to. There are also meetings that Minister Bowen would be invited to as a party. There is a standard schedule of meetings. There's also a range of meetings—

**Senator DEAN SMITH:** There is or is not a standard schedule?

**Dr Box:** Let me finish. There are meetings that happen on a regular basis each year that have become the norm. There are also meetings that arise from mandates. Decisions taken at COP30 will create new mandates. Associated with those there will be meetings. They're not necessarily meetings that are held at the ministerial level. Many of them are held at head of delegation level and even more of them are held at expert level. It's the

case that I don't have a full stocktake of the range of meetings on the UNFCCC calendar for the next year, but it's fair to say that there is a regular rhythm of meetings, some of which are at ministerial level attendance, but many of which are not.

**Ms Munro:** If I can also add in terms of the Minister for Climate Change and Energy's role here, the mandated events are, of course, the actual COP and what is described as the pre-COP. They are the two mandated events for Minister Bowen.

**CHAIR:** Senator Smith, I'm just going to move the call on.

**Senator DEAN SMITH:** I have one last question.

**CHAIR:** If this is the last one, that's fine.

**Senator DEAN SMITH:** Would the department take on notice and provide to the committee the known and expected list of events that Minister Bowen, as President of Negotiations, would be expected to participate in—those that are known at the moment, but also those that may be anticipated or expected based on previous programs?

**Senator Ayres:** The officials will take it on notice. To the extent that they can do that, there are a number of—

**Senator DEAN SMITH:** No, the secretary cannot do an assessment without knowing exactly what is Minister Bowen's workload in this new role.

**Senator Ayres:** What I was about to say—

**Senator DEAN SMITH:** The two actually work together.

**Senator Ayres:** What I was about to say—and I think this is why the officials have been answering in the way they have—is there will be meetings that we know are happening. Judgements will be made about whether ministerial attendance and attendance in Minister Bowen's role as president will be made at the time. There will be judgements about what is the most impactful way.

**Senator DEAN SMITH:** That's nice to know, but it is not my line of inquiry at this point. I am just interested in getting the list of known or expected meetings.

**Senator Ayres:** That goes for any minister who's engaged in international work. It goes for me as well. You make an assessment about knowing what you know as you approach those meetings based on the advice of officials in particular about—

**Senator DEAN SMITH:** It's nice to know, but it is not central to my line of inquiry.

**Senator Ayres:** I'm saying it may not be able to be sensibly answered.

**Senator DEAN SMITH:** I'm just interested in what is the range of meetings that Minister Bowen would be expected to participate in or exercise judgement about how or why he will or will not; I'm just keen to understand, Dr Box, exactly what that list of meetings contains.

**Senator Ayres:** As I said—

**Senator DEAN SMITH:** Some of them are publicly available and publicly known already. However, I'm interested in understanding from the department's perspective when they're having to think about Mr Bowen's forward program in the context of his role as the President of Negotiations where he will expect it to be, what range of meetings he'll be expected to make a decision about, whether he participates himself or delegates it to others. I'm just keen to understand what that is because that will also have to inform Mr Kaiser's assessment.

**Senator Ayres:** As I've said, it may not be able to be sensibly answered. They will have a look at it and see what they can provide to you. I just wanted to qualify—

**Senator DEAN SMITH:** You're happy to confirm known; many of them might be standard features?

**Senator Ayres:** Yes, and he may or may not attend. That's right.

**Senator DEAN SMITH:** You can add that qualification—

**Senator Ayres:** I just did.

**Senator DEAN SMITH:** when you respond to the question on notice. You're welcome to add that qualification—not likely to attend' or 'might attend'.

**Senator Ayres:** 'Don't know'.

**Senator DEAN SMITH:** 'Parliamentary sitting day; can't attend'.

**Senator Ayres:** Those judgements will be made over time, but this is a very good development for Australia's influence on the course of events in climate change and emissions strategy around the world, overwhelmingly a good thing.

**CHAIR:** On that note, I'm moving the call to Senator Hodgins-May.

**Senator HODGINS-MAY:** Last month, the Australian government signed the Belem Declaration to Transition from Fossil Fuels. Can you explain what this will entail and the timelines that you're working towards on that?

**Mr Higgins:** Yes, you're quite correct. The government did join that declaration. It doesn't require the Australian government to undertake anything in particular. It was joining with a number of other countries to signal Australia's interest in some of the elements that were contained within the declaration.

**Senator HODGINS-MAY:** At the risk of sounding unkind, is it like the methane pledge where we've seen something signed up to but no policies implemented?

**Mr Higgins:** The nature of this declaration was not to implement particular policies. It was an undertaking by those who signed it to indicate that there ought to be greater focus in the collective process that is represented at the COP in the transition away from fossil fuels, consistent with the consensus decision that was taken in Dubai in relation to the global stocktake outcome at COP28.

**Senator HODGINS-MAY:** Do you think, for example, our Pacific island colleagues think that a signal is enough without a plan to actually act on limiting emissions and transitioning?

**Mr Higgins:** I couldn't comment on what Pacific colleagues may think, but I would say that there was a significant set of discussions in the margins of COP30 in relation to issues around the transition away from fossil fuels. That took a range of forms. One of those was this declaration. The Brazilian presidency at the conclusion of the COP indicated that a roadmap in relation to exploring issues around transition away from fossil fuels was something that they saw merit in. That was not something that enjoyed support of all members of the process and consequently wasn't part of the consensus outcome, but it was indeed something that was the subject of conversations. The declaration that Australia joined was part of that same set of processes.

**Senator Ayres:** It's a very good example. This language essentially originated in a meeting of the Pacific Island Forum leaders in, I think, November 2023. With Australia's support, almost precisely the same language was adopted in Dubai at COP28. The position from the Pacific with Australian leadership and support was adopted in December of 2023. The language adopted at this conference is essentially the same. It's useful at these conferences to have countries that are on the same page making plurilateral declarations to keep momentum going. In the event that you can't secure a consensus outcome, it's helpful to keep the momentum going by trying to get the biggest team possible and giving our Pacific partners some voice in the process as well.

**Senator HODGINS-MAY:** When signing the Belem declaration, the government recognised that fossil fuel projects are incompatible with limiting warming to 1.5 degrees. The government has also welcomed the advisory opinion from the International Court of Justice which found expanding fossil fuel production may be a wrongful act under international law. Reflecting that call, thousands of people took peaceful direct action in Newcastle over the weekend calling on Australia to phase out coal and gas. Does the expansion of fossil fuel anticipated by this report risk putting Australia in breach of its international legal obligations and the commitment made last month through the Belem Declaration to Transition from Fossil Fuels?

**Senator Ayres:** No.

**Senator HODGINS-MAY:** You don't believe?

**Senator Ayres:** No. That's why we've got—

**Senator HODGINS-MAY:** Have you got legal advice?

**Senator Ayres:** achievable, consistent targets for 2030 and 2035. That's why we're making such an effort on the global stage to shape future decisions that the world makes on emissions targets. There was a very long exchange with Senator Pocock, who went to precisely the same issues. The Minister has received advice, of course, as you would expect, in relation to that international tribunal decision and the long list of decisions made by courts here and around the world. This is a declaration of 80 countries, and Australia's decision-making in this area is informed by the best scientific evidence that we can get and, of course, by the team in the Climate Change Authority, whose evidence on these questions, I'm sure, is just around the corner.

**Senator HODGINS-MAY:** Has the minister considered using the gas market reform mechanism to ensure that the small—relative to export demand—domestic demand for gas is met from existing sources as part of the planned phase-out of fossil fuels?

**Senator Ayres:** Minister Bowen and Minister King are leading, as has been publicly traversed, a review of our gas market settings. That will be considered by the government over coming weeks and months. It is directed towards evaluating the gas market arrangements and making sure that they are delivering in Australia's interests. There's a range of areas to consider. There's household gas use, there's gas's role in the electricity system, and there's gas's role in small and medium industrial enterprises where gas is essentially a heat source. There may be significant emissions reduction opportunities, which is why we've got the \$5 billion Net Zero Fund to support industry where it's viable to move from gas processes to electricity driven processes. Then, of course, there's that section of our large-scale industry, which is largely in the safeguard mechanism. There's a range of things that those ministers will be considering. Some of that does touch on the kinds of issues that you're talking about—in particular, that section of industry where there are significant abatement opportunities.

**Senator HODGINS-MAY:** Thank you. That's all from me.

**CHAIR:** Senator Roberts.

**Senator ROBERTS:** Nice to see you, Mr Kaiser. Minister, my questions are only to you. I raise Minister Watt's—

**Senator Ayres:** No wonder you were being so nice to Mike. I just thought it was you Queenslanders sticking together again.

**Senator ROBERTS:** It's good to see you, too, Minister Ayres, as always.

**Senator Ayres:** Thank you. What can I do for you?

**Senator ROBERTS:** I raise Minister Watt's spending of taxpayer money on overseas trips.

**Senator Ayres:** Minister Watt?

**Senator ROBERTS:** Yes, in his new role. He was appointed as Minister for the Environment and Water in May this year, correct?

**Senator Ayres:** Yes.

**Senator ROBERTS:** Within his first two months of being appointed he took two trips, to the United Arab Emirates and France; is that correct?

**Senator Ayres:** I don't want to get our Bowens and our Watts confused.

**Senator ROBERTS:** No, this is Minister Watt.

**Senator Ayres:** He'll be here later, no doubt. I'm answering for Minister Bowen.

**Senator ROBERTS:** With regard to the Department of Climate Change, Energy, the Environment and Water, within his first two months Minister Watt undertook two trips—to the United Arab Emirates and France. Is that correct?

**Mr Kaiser:** You're in the wrong part of the agenda for these questions. Chair, can I ask for your guidance?

**Senator ROBERTS:** I want to go to his expenditure.

**Senator Ayres:** I think I can see where you want to go, but it seems to me it's either a question for corporate or a question for environment. These officials will not be in a position to answer these questions.

**Senator ROBERTS:** Where should I go?

**Senator Ayres:** When environment comes on.

**CHAIR:** It seems those may be questions for—

**Senator ROBERTS:** I thank Senator Ayres for his advice again.

**CHAIR:** Senator Henderson.

**Senator HENDERSON:** I want to go to a commitment you made that you would bring forward the approved travel costs for COP30 last month. What information can you provide us?

**Mr Kaiser:** Yes, indeed, the department did undertake a budgeting exercise to arrive at an indicative cost for travel and accommodation and other expenses to Belem. We did that in circumstances where Belem is not a destination that officials of this department frequently fly to; also, in circumstances where some officials needed to plan up to five flights to get from Australian locations to Belem; also, in circumstances where accommodation was particularly challenging in Belem, including predictions of cost, and on-ground costs in the City of Belem were also difficult to predict. I say all of that because the figure I'm about to use is an internal budgeted figure for the department based on those conditions and those constraints, and the reconciled actual figures are not yet available. Our indicative budgeted costs with all of those caveats were \$1.6 million.

**Senator HENDERSON:** Can you break that figure down into airfares, accommodation and other costs?

**Mr Kaiser:** I don't have those in front of me. I may need to come back to you with that.

**Senator HENDERSON:** Are they the costs for the 75 officials?

**Mr Kaiser:** No, they would be the departmental costs for the—

**Ms Munro:** For the DCCEEW delegation?

**Mr Kaiser:** The DCCEEW delegation of 42, I think. The figure was mentioned earlier today.

**Senator HENDERSON:** What about the total costs?

**Mr Kaiser:** We're not responsible for the total costs.

**Senator HENDERSON:** I realise that, but what information can you provide us?

**Mr Kaiser:** I have no information on that. Other agencies would pick up the costs for anyone they would have sent. We're not responsible for the overall costs.

**Senator HENDERSON:** There were 75 officials in total? They include officials from other agencies; is that right?

**Mr Kaiser:** Yes.

**Senator HENDERSON:** Do you know those costs?

**Mr Kaiser:** No.

**Senator HENDERSON:** How many people travelled to COP30 courtesy of the taxpayer?

**Mr Kaiser:** I think we said previously 75.

**Ms Munro:** Yes, but that does include DFAT and consular staff who are based in Brazil as well.

**Senator HENDERSON:** What about ministerial, the ministers' costs and ministerial staff?

**Ms Munro:** Those costs are with the Department of Finance.

**Mr Kaiser:** As we described earlier, the ministerial costs for them and their staff are accounted for within the Department of Finance.

**Senator HENDERSON:** Do you have any information about those costs?

**Mr Kaiser:** No, I'm not accountable for costs of other departments.

**Senator HENDERSON:** Do you know what those costs are? They sit with the Department of Finance; is that right, Mr Kaiser?

**Senator Ayres:** Yes. There was evidence before that two ministers and three advisers travelled, which is a small number. I think Mr Morrison's trip was two ministers and 13 advisors. Lord knows what they were doing. The size of the delegation, 75, is exactly the same as the Morrison delegation. You are absolutely entitled to ask whether it's Department of Finance in respect of those ministers and the MoP(S) officials, the advisors. DFAT would have some information, of course, as well because consular staff are engaged in this work. There may be others but, no, I'm not in a position to account for the travel costs of two ministers and a couple of advisors heading across the water.

**Senator HENDERSON:** Mr Kaiser, on notice, could you provide all relevant documents in relation to the travel costs to COP30 to this committee?

**Senator Ayres:** To provide what? Sorry?

**Senator HENDERSON:** I was just asking Mr Kaiser, on notice, could you provide all documents held by the department to the committee relating to travel—

**Mr Kaiser:** Relating to the budgeted figure of \$1.6 million?

**Senator HENDERSON:** Yes, and all other relevant documents that you hold in relation to facilitating the attendance at COP30, too, please. Can I ask—

**Senator Ayres:** We'll take it on notice. It's typically an expensive request, but anyway.

**Senator HENDERSON:** Yes, Mr Kaiser. What was the total carbon emissions generated by sending this delegation to Brazil?

**Mr Kaiser:** I certainly don't know. I would be surprised if my colleagues do, but I'll—

**Senator Ayres:** I think our official answer is: no idea.

**Senator HENDERSON:** Has that been calculated at all by the department?

**Senator Ayres:** I doubt it.

**Senator HENDERSON:** Mr Kaiser?

**Mr Kaiser:** It's not part of our function to—

**Senator HENDERSON:** On notice could you please provide us with that information?

**Senator Ayres:** The answer is that they don't calculate it. It's not something that a sensible show does.

**Senator HENDERSON:** Thanks, Minister, but to the extent that you hold that information, or could you check?

**Mr Kaiser:** I'm confident that we do not hold that information.

**Senator HENDERSON:** Mr Kaiser, are you aware there were nearly 500 people who travelled as part of an Australian delegation to COP30, one of the largest delegations of any country in the world? I'm not suggesting they were all taxpayer funded, but of those nearly 500 people do you know how many were funded by the taxpayer?

**Mr Kaiser:** I have no idea.

**Senator HENDERSON:** You don't know?

**Ms Munro:** I think Dr Box can answer.

**Senator HENDERSON:** Dr Box?

**Dr Box:** The 75 Australian government officials would have been funded through their various departments. There are a range of Australians who go to COP and they are issued with party overflow badges if they have an interest in matters relating to COP, but they do not represent the Australian government at the COP and they're not funded by the Australian taxpayer. The only other delegates who would have been funded by the Australian taxpayer were stakeholders who were supported under the COP30 travel grants program. The total funding of that program was \$395,612 provided as grants to support the participation of underrepresented Australian stakeholders at COP30. I think there were 20 organisations that received and used the grants, including eight First Nations organisations, six youth organisations and six sectoral organisations—agriculture, finance, nature. Those organisations were supported with Australian government funding. I can't tell you the exact number of individuals because organisations may have chosen to support one individual with their funding or more than one individual with their funding.

**Senator HENDERSON:** The total grant funding for those organisations?

**Dr Box:** The total value of the grants program was \$450,000 GST exclusive, but the total funding provided as at November was \$395,612.

**Senator HENDERSON:** What other support was provided to attendees at COP30? Was there any other taxpayer funded support?

**Dr Box:** No, there's support of Australian government officials through their relevant departments and then there is this travel grants program, which has been a standard feature of our participation at the last few COPs.

**Senator Ayres:** We might have paid for the lanyards that we gave people maybe or a bit of photocopying.

**Senator HENDERSON:** Dr Box, if I can continue asking you questions about the 75 in total, have you got a breakdown or do you have a list of from which department they emanate?

**Dr Box:** Yes, I took that question on notice earlier. I'm very happy to provide that information.

**Senator HENDERSON:** You don't have it with you?

**Dr Box:** I can tell you which organisations. I don't have the exact—

**Senator HENDERSON:** Yes, please, if you could just read out the organisations that you've supported.

**Dr Box:** Department of Foreign Affairs and Trade, the Australian Renewable Energy Agency, the Clean Energy Finance Corporation, CSIRO, the Climate Change Authority, the department of health and aged care and the Department of Agriculture, Fisheries and Forestry.

**Senator HENDERSON:** They were all funded through that \$395,000 grant program?

**Dr Box:** No. The \$395,000 applies to non-government stakeholders.

**Senator HENDERSON:** Organisations?

**Dr Box:** Organisations—First Nations organisations, youth organisations, other organisations. Those agencies would have been supported through their own budgets.

**Senator HENDERSON:** Could you provide us with a list of those external organisations which were supported?

**Dr Box:** I will have to provide that on notice. I don't have that list with me.

**Senator HENDERSON:** If it's possible to bring that back to the table to the committee, I would be grateful.

**Dr Box:** Yes.

**Senator HENDERSON:** Chair, I do have a few more questions—

**CHAIR:** We are coming up to the end of it.

**Senator HENDERSON:** I know we are very keen to move on.

**CHAIR:** Yes.

**Senator HENDERSON:** Mr Kaiser—I will have this tabled—there's a big front-page article today headed 'Trapped in transition turmoil'. There is story after story of businesses struggling to keep the doors open because of electricity prices. Mr Kaiser, when will electricity prices start to come down? We've now heard from the Climate Change Authority that, based on the current trajectory, the government will not reach its 2030 and 2035 targets.

**Mr Kaiser:** This is the wrong part of the agenda. We're doing electricity prices—

**Senator HENDERSON:** I'm talking about emissions reduction.

**Mr Kaiser:** No, you asked about electricity prices.

**Senator Ayres:** No, you asked about electricity prices.

**Senator HENDERSON:** What about the emissions, Mr Kaiser?

**Mr Kaiser:** I think we heard earlier today in evidence that they're coming down.

**Senator HENDERSON:** So, they're flatlining, because they went up by—

**Mr Kaiser:** They've come down.

**Ms Munro:** They've come down.

**Senator HENDERSON:** They have been coming down by a very small amount overall since the government was elected.

**Ms Munro:** A 2.2 per cent decrease on last year is what was in the latest quarterly results.

**Senator Ayres:** There was quite some evidence given about this earlier on.

**Senator HENDERSON:** Thank you very much, Minister. Chair, I will ask that question again, probably very shortly, when we move to outcome 1.2.

**CHAIR:** Wonderful. On that note, I was closing—

**Senator DEAN SMITH:** I did previously allude to the fact that I wanted to ask some questions about commentary about data centres and energy demand in the *Australia's emissions projections 2025* report from November 2025. Is this the place?

**Mr Kaiser:** Would that be in the context of electricity?

**Senator DEAN SMITH:** In terms of electricity emissions, yes.

**Mr Kaiser:** Emissions, yes.

**Senator DEAN SMITH:** Thank you. Ms Rowley, I wonder if you could expand upon the comment on page 44 of the *Australia's emissions projections 2025* November report. It talks about the electricity emissions trajectory and it points to rising electricity emissions. Then it talks about the 'assumed higher demand forecast in the NEM', mainly from data centres. I was wondering if you could share with the committee what is the impact that data centres are having on the electricity emissions profile and how might that be mitigated?

**Ms Rowley:** I might start and then Ms Pentony might want to add. Every year in the emissions projections we take the best available information on the outlook for economic activity, including electricity demand, and that forms part of the modelling of emissions associated with electricity generation. All things being equal, higher demand would mean more generation and, depending upon the mix of that generation, it may or may not mean more emissions. In terms of the analysis that we do—and it's in partnership with our colleagues from the Energy Group, and perhaps there's an opportunity to drill in during the next session—the emissions projections take current policy, including the policy of 82 per cent renewables by 2030. It looks at market trends and operations in terms of which generators are most likely to meet the projected demand, and that varies according to season and time of day, the patterns of demand as well as the total amount. If that additional demand was met by renewable

generation, it would put no upward pressure on our electricity emissions. If that additional demand was met by fossil fuels, then there would be additional emissions.

**Senator DEAN SMITH:** Have we actually projected the expected increase in energy demand attributed to data centres in Australia?

**Ms Rowley:** We take energy demand from other experts. For the purposes of the emissions projections, we take that largely from AEMO. Ms Pentony can answer.

**Ms Pentony:** That's right. What's included in the projections is consistent with AEMO's Electricity Statement of Opportunities from 2025 and their assumptions about data centres. On page 40 of the emissions projections report, it notes that data centres are projected to represent about six per cent of total demand in the NEM in 2030, which will increase to 11 per cent in 2040, but that's drawing on AEMO's advice.

**Ms Rowley:** That is the Australian Energy Market Operator.

**Senator DEAN SMITH:** Each emissions projections report will provide an annual update to that expected growth in energy demand attributed to data centres?

**Ms Rowley:** That's right.

**Ms Pentony:** To all electricity demand. Obviously demand changes for a whole range of reasons and we'll update that as we have information each year.

**Senator Ayres:** So—

**Senator DEAN SMITH:** We were doing very well there, Senator Ayres. I thought I was going to have an uninterrupted line of inquiry.

**Senator Ayres:** You would expect that the number of data centres that would be predicted in 2024 and 2030 would increase over time as we're getting to understand what the scale of electricity demand is. This is an unambiguously good story for Australia, I have to say.

**Senator DEAN SMITH:** What, data centres?

**Senator Ayres:** The demand from large-scale industry and from digital infrastructure investments will underwrite investment in generation and transmission capability. That will be good for the grid and good for Australia. These facilities are coming to Australia because we have a plan for the electricity system. They are avoiding jurisdictions that are characterised by disorder and policy incoherence. You have to plan for increased demand in the electricity system because we want to grow the economy and we want to grow industry. It's an alternative approach, the one that your party took as they approached the last election, which was an explicit plan to close heavy industry and electrical users in order to decrease demand in the electricity system. That was the whole basis of the Dutton plan. We've got a plan to build the electricity system—addition as well as transition.

**Senator DEAN SMITH:** Does the increasing energy demand arising out of data centres change the energy source? When we think about renewable energy and some of the risks that might be attached to that intermittent nature and then the attraction of more reliable baseload fuels, does the increasing proportion of data centres and the energy demand that they create change how the—

**Senator Ayres:** This is the modern Liberal Party: afraid of the modern world, afraid of the future world, afraid of the future.

**Senator DEAN SMITH:** Senator Ayres, you are the smartest Labor person in the room, but I'm really interested in the expert officials' perspective.

**Senator Ayres:** It's like the old fogies: afraid of the future, afraid of technology, afraid of losing jobs.

**Senator DEAN SMITH:** We were going so well. I was hoping that the afternoon might have dampened your spirits, but I was wrong. I read the reports. I'm just curious to know how the increased number of data centres in the energy demand mix changes how the source of energy might need to be considered. Do see what I'm saying?

**Ms Rowley:** I do understand. It's possibly a perfect pivot into the next session because that's really a question for my Energy colleagues in terms of how it plays out in the energy system.

**Senator DEAN SMITH:** Correct. Thank you for your cooperation. Apologies for Senator Ayres's interruption.

**CHAIR:** Senator McKenzie, I understand you have questions in outcome 1.1.

**Senator McKENZIE:** In an opinion piece written by CCA boss Matt Kean, he said that Norway had achieved 98 per cent electric vehicle take-up and had shown the world how to do it. Can you outline the regulatory approaches taken by Norway to achieve the level of take-up, the 98 per cent electric vehicle take-up?

**Senator Ayres:** He's on the screen there.

**Senator McKENZIE:** I understand it's not up—

**Senator Ayres:** He's ready to answer your questions.

**Senator McKENZIE:** No, I'm asking the department.

**Senator Ayres:** Do we know anything about electric vehicles in Norway? I'm not sure whether we do.

**Senator McKENZIE:** It's not question time. Save theatrics.

**Ms Munro:** I think we'd have to take that on notice in terms of the detail of the Norwegian regulatory component.

**Senator McKENZIE:** I think someone has come and is very keen to answer the question.

**Mr Kaiser:** The capabilities of this department continue to amaze me. I can't wait to hear what he says.

**Senator McKENZIE:** They are racing to the table, Secretary. That's what you want.

**Mr Ryan:** That's probably a question for the CCA.

**Senator McKENZIE:** Consider yourself on notice, Mr Kean!

**Mr Ryan:** I am familiar with Norway. They've had a number of subsidies for a number of years on electric vehicle uptake and have been rolling out EV charging for quite some time—so government funding.

**Senator McKENZIE:** It's only a subsidy arrangement in Norway?

**Mr Ryan:** Predominantly, as I understand it.

**Senator McKENZIE:** What's the other incentive or disincentive for purchase of electric vehicles within the Norwegian system?

**Mr Ryan:** I know they've been—

**Senator Ayres:** They have to get around the fjords. They have to navigate the fjords.

**Senator McKENZIE:** Mr Ryan is trying to be helpful.

**Senator Ayres:** He's just about exhausted the outer bounds of his knowledge here, I sense. But I will let him answer.

**Mr Ryan:** There has been extensive government support for charging that's related to the EV vehicles as well.

**Senator McKENZIE:** That would explain the 98 per cent EV take-up—charging infrastructure?

**Mr Ryan:** I don't want to hold myself out as an expert on Norway, but I am familiar with that they have put a lot of—

**Senator Ayres:** It's Fords and fjords!

**Senator McKENZIE:** So, no-one is here from the department—

**Senator Ayres:** That's what this is about, Fords and fjords!

**Senator McKENZIE:** who can speak on the Norwegian regulatory environment when it comes to electric vehicles? We know there are some subsidies. We know there's some support for EV charging.

**Senator Ayres:** It's an opinion piece. I'm sure Mr Kean is bursting at the seams to answer about his opinion piece. We have a limited amount of knowledge.

**Senator McKENZIE:** Do we let other independent agencies just drop in to Senate estimates?

**Senator Ayres:** He's waiting to give evidence in his section.

**Senator McKENZIE:** Usually he would be waiting—

**Senator Ayres:** He's been waiting for a long time.

**Mr Kaiser:** He's actually not. He's gone to pick up his son from school but he'll be back.

**Senator McKENZIE:** Thank you.

**Senator Ayres:** He's not far away.

**Senator McKENZIE:** It wouldn't be usual for independent agencies to be hanging around at parliamentary—

**Senator Ayres:** He's scheduled to give evidence.

**Senator McKENZIE:** I can read the timetable.

**Senator Ayres:** He was ready to go at 11.15 am. I suppose this line of questioning—

**Senator McKENZIE:** What I would like to know, Minister—

**Senator Ayres:** Yes. I've been itching to answer.

**Senator McKENZIE:** I want to understand what modelling the department has done around the take-up of electric vehicles. Having sat for the second time in the transport infrastructure and regional development estimates, they've sent me over here. Can anyone help me? Has any modelling been done within the department around the take-up of electric vehicles across the economy?

**Senator Ayres:** In Norway?

**Senator McKENZIE:** I accept your point. I'll ask him about his opinion piece. Generally in our economy, Minister?

**Senator Ayres:** Unlike some of the conspiracy theories that your crowd look at, at least you've conceded that Norway exists, which is more than could be said for some of your colleagues.

**Senator McKENZIE:** Chair, I seek your protection from this harassment.

**CHAIR:** I don't think I would agree that it's appropriate to characterise it as harassment, but I do think there is a need to answer the question.

**Senator McKENZIE:** I feel harassed and harangued.

**CHAIR:** My respect for your toughness, Senator McKenzie, is enormous. I don't think you'll struggle with it, but I do think the officials need to answer the question.

**Ms Rowley:** With respect to the outlook for the transport sector, the key modelling that the department has undertaken—the most recent analysis is for the 2025 projections. The projections take as their starting point the government's policies and measures, which in the light vehicle segment is predominantly the new vehicle efficiency standard. That, as I'm sure you're familiar with, sets the headline limit for emissions intensity of new vehicles. It doesn't prescribe technology categories. The emissions intensity limit can be met by a mix of electric vehicles, hybrid vehicles and fuel-efficient vehicles. We model the aggregate emissions from the light vehicle segment—and the results for that are presented in the projections report—based on that declining emissions intensity headline rather than the share of specific vehicle category. We don't model electric vehicle uptake because we don't have an electric vehicle target; we have an emissions intensity target.

**Senator McKENZIE:** Got it. So it was that modelling that was done to inform Treasury's work on the broader setting of the target—

**Ms Rowley:** The 2035 target?

**Senator McKENZIE:** for 2035?

**Ms Rowley:** No. The emissions projections is a separate exercise from Treasury's modelling. Treasury did its own modelling of the whole economy under a global action scenario to inform the government's Net Zero Plan and the 2035 target. We certainly contributed to that in terms of our expertise in emissions, technologies and other matters. They drew on whole-of-government expertise for that work, but that's separate from the emissions projections.

**Senator McKENZIE:** In terms of doing some analysis or assessment on whether the Climate Change Authority's targets are feasible, have you assessed whether their CCA target is feasible?

**Ms Rowley:** Australia's target, which was adopted by the government following the CCA's advice, is in the government's view certainly achievable. That understanding is informed by both the CCA advice through its sector pathways work, the further advice provided in its targets report, analysis by the Treasury as published alongside the Net Zero Plan, and all of the consultation that was done to inform the six sector plans that sit alongside the Net Zero Plan. Some of the key things that guide us in understanding its achievability are that, as the CCA advised, technologies now exist to meet an economy-wide target of 62 to 70 per cent by 2035. It's not reliant on new or unproven technologies. That overall assessment has been reflected also in some industry groups' responses to the target announcement. For example, the Australian Industry Group said 'recognising it's not straightforward to achieve but it is also in the realm of the feasible, with hard work and a tight focus on making Australia a place where it is easy to invest and build'. Similarly there were comments by the Business Council of Australia with respect to the pathways that their analysis suggested made that target achievable. The CCA also noted that the government has already put foundational climate change policies in place that can be strengthened and supported to remove barriers, lower costs and ease implementation over time. So they are some of the factors that guide our understanding of its achievability.

**Senator McKENZIE:** I've got some other quotes about its achievability. I'll take that as you haven't done further analysis on the CCA target around electric vehicles, because their target was that half of all cars sold between now and 2035 must be electric vehicles to achieve the 2035 emissions target.

**Ms Rowley:** Yes, Senator, I'm familiar with that, and that's not the government's policy. The government's policy is set out in the new vehicle efficiency—

**Senator McKENZIE:** It's the CCA's target.

**Ms Rowley:** Yes—for observation.

**Senator McKENZIE:** The Chamber of Automotive Industries CEO, Tony Weber, said it's almost impossible—that the demand was not there for Australians to buy the amount of cars claimed by the CCA. Does the department have any evidence to suggest that Tony Weber was wrong on this point?

**Senator Ayres:** There'll be different views across industry.

**Senator McKENZIE:** That's true.

**Senator Ayres:** It's not a surprise that, coming from that particular part of industry, there are divergent views. But what you're seeing, of course, is prices falling sharply in electric vehicles, about 30 per cent year on year, in particular categories of electric vehicles. There's an increased level of purchasing. I think, from memory, the proportion of new sales last year—

**Senator McKENZIE:** Chair, I've got some bigger questions for the department.

**Senator Ayres:** You're asking a question about what's happening in electric vehicles. I'm telling you that—

**Senator McKENZIE:** No, this isn't question time with Sue Lines here to take the one word from what I say and you being able to spruik whatever you like.

**CHAIR:** Senators! Hold on, Minister, before you respond.

**Senator McKENZIE:** I want to know: does the department have any evidence—

**CHAIR:** Senator McKenzie as well, when I call order and take the call back, please respect that. Before I go back to the minister, I will say that, yes, we do need to try to move this program along because we are a long way behind. However, I don't consider that the minister is being irrelevant to your questioning. I would ask him to complete his answer, and then we'll come back to you.

**Senator McKENZIE:** They should make you President.

**Senator Ayres:** The proportion of electric vehicles appears to be increasing, driven by the price—

**Senator McKENZIE:** That's not my question.

**Senator Ayres:** The government's policy mechanisms are quite different to the modelling and projections that come from the agencies.

**Senator McKENZIE:** I appreciate that. I heard what the official said. My question is: does the department have any evidence to suggest that the industry that I just quoted is wrong?

**Mr Ryan:** I could probably have a go at that, if it's helpful. I can't go to what the person who said that was thinking, but perhaps it's helpful to say that the technology is moving on very quickly. So even if you go back two years ago, there are a number of vehicles that weren't in the market two years ago that are now. There are more electric vehicles—not just your base passenger cars but there are more SUVs. We're even seeing utility vehicles now, commercial vehicles coming on, both hybrid plug-in and full-battery electric. So when the person claimed that we wouldn't be able to get there, maybe they were thinking of the current or historical models that were available. What we do know—

**Senator McKENZIE:** This gentleman represents all the electric vehicle manufacturers from overseas, plus Toyota et cetera. He's literally representing car manufacturers in all their diversity, so I'm pretty sure they're—but thank you for being helpful, Mr Ryan. James Voortman, who represents the dealers, said it's naive to conclude that the adoption of electric vehicles will escalate significantly. Has the department done modelling as to the cost to industry and Australian car buyers of trying to force Australians to buy one out of two new cars as an electric vehicle between September this year and 2035?

**Senator Ayres:** Nobody is being forced to buy an electric car—nobody. Not in Australia.

**Senator McKENZIE:** I'm just asking: has the department done a model?

**Senator Ayres:** I don't know what's happening in Norway, but in Australia nobody is being forced to buy a petrol car, a diesel car or an electric car. What is happening is they are buying them. No one is being forced. They are buying them.

**Senator McKENZIE:** No-one's suggesting it's forced. I want to know if the department has done any work in modelling projections of vehicle sales, based on even these very ambitious assumptions as outlined by Mr Ryan.

**Senator Ayres:** You asserted that people were being made to do something. Nobody is being made to do anything.

**Senator McKENZIE:** I would like to know if the department has done the modelling.

**Senator Ayres:** When prices fall by 30 per cent, the market responds. That's what happens.

**Senator McKENZIE:** Has the department done any modelling on said market response?

**Senator Ayres:** You withdraw the assertion that people have been made to do it, do you? Why do you spread misinformation in that way?

**Senator McKENZIE:** I would argue that if you take something out of existence, you are leaving people with limited choice.

**Senator Ayres:** Nothing's been taken out of existence. Cheaper cars have been provided.

**Senator McKENZIE:** Minister, has the department done any modelling?

**Ms Rowley:** Senator, if the question is if we have modelled the CCA's observation that one of the things that might help get to the target is the shares that you were talking about—no. What we've modelled is the government's policy.

**Senator McKENZIE:** Thank you; that's very helpful. Looking at the figures in August, there are 100,539 new cars sold across the market in August. If that happened every month this year, we'd record 1.2 million new car sales this year. With electric vehicle take-up now sitting at less than eight per cent, that means Australians will need to buy 600,000 new electric vehicles each year for the next decade off a current figure of less than 100,000 a year. What information—

**Senator Ayres:** That is in fact not true. From 2022 to date, the electric vehicle share of annual light vehicles in Australia has grown from 3.8 per cent to 12.7 per cent. That's an October 2025 figure.

**Senator McKENZIE:** I was using, as I said, August.

**Senator Ayres:** The overall number of EV models available in Australia has tripled. And the prices have fallen. It turns out that when people are presented with a choice where one thing is more expensive than another, they go for the cheap thing. If the Liberals want to stop Australians from being able to purchase cheap cars, go ahead and tell us.

**Senator McKENZIE:** Has he been like this all day?

**Senator HENDERSON:** Yes, he has.

**Senator Ayres:** I'm just not—

**Senator McKENZIE:** Give the man sugar.

**Senator Ayres:** I'm just not happy with people spreading misinformation about the Australian government's position.

**Senator McKENZIE:** No, I'm not. In August—he's quoting different facts. It's not apples with apples.

**Senator Ayres:** 12.8 per cent.

**Senator McKENZIE:** On the same day that the Climate Change Authority report was released, the government also released the Transport and Infrastructure Net Zero Roadmap and Action Plan. This action plan sets out a range of activities the government has committed to in the transport sector in order to achieve 2035 targets. Did this department have input into the transport sector roadmap?

**Mr Ryan:** Yes.

**Senator McKENZIE:** Excellent. Could you outline what the input was?

**Mr Ryan:** We certainly worked with our colleagues in Infrastructure to look at—they were the lead authors of it, so we did provide support. What they did share with us, and we provided feedback on, was the drafting of the document, looking at the different technologies that were the pathways for the different types of vehicles and forms of transport, and we provided expertise within the department where that would have been helpful in preparing that plan.

**Senator McKENZIE:** Did your department request any changes to the transport and infrastructure roadmap as was proposed by the infrastructure department? If so, what were those changes?

**Mr Ryan:** That document was being worked on for quite a while back and forth. To tell you all the changes—it would have been quite a number in terms of iterations of the policy. So to answer your question, yes, we did provide changes, and they were taken on board.

**Senator McKENZIE:** Over what sort of time period?

**Mr Ryan:** I'd have to take that on notice. But over a longer period—maybe 12 months, I would have said off the top of my head, but I'd have to take that on notice too, exactly. They were being developed for quite a while.

**Senator McKENZIE:** Minister, you only get to your figure if you include plug-in hybrids, the 12 per cent—just letting you know.

**Senator Ayres:** That may be. As Australians make choices for cheaper and cheaper—

**Senator McKENZIE:** But you don't actually allow plug-in hybrids as part of your subsidy program. But anyway, we'll leave that for another day.

**Senator Ayres:** Senator, you want to create the impression that people are being made to do things.

**Senator McKENZIE:** Has the department modelled the transport and infrastructure roadmap action plan to determine how much abatement it will deliver and the marginal cost of abatement for each of the actions?

**Ms Rowley:** We have not specifically modelled each of the sector plans. There are a couple of different modelling exercises that are relevant here. All of the sector plans and the Net Zero Plan were informed by the Treasury modelling, which is the whole-of-economy modelling of pathways to net zero for Australia. In terms of current policy settings, as we were discussing earlier in this session, Australia's emissions projections, the latest version of which was released late last week, provides estimates of Australia's emissions, including for the transport sector under current policy settings. Now, that does not include the new measures that were announced alongside the release of the Net Zero Plan, things like the \$1.1 billion to support development of low-carbon liquid fuels. And it does not pre-empt the outcome of scheduled policy reviews, such as for the new vehicle efficiency standards. It just takes the existing measures with their existing settings and pushes them forwards. That was released last week.

**Senator McKENZIE:** Thank you.

**CHAIR:** Thank you, Senator Mackenzie. Senator Henderson, I am very eager now to move on to outcome 1.2, given that we are at nearly 5½ hours on this first couple of outcomes.

**Senator McKENZIE:** It's pretty important.

**Senator HENDERSON:** Ms Rowley, you might be the right person to answer this; I'm not sure. In 2021, annual emissions, based on the latest data, were at 28 per cent below 2005 levels. The latest report shows they are now at 28.5 per cent. Is it the case that in three years, emissions are half a percentage better than they were three years ago?

**Ms Rowley:** Thank you, Senator. I might just relocate, if I can, because it's more helpful to be able to confer with my colleague. Just one moment.

**Senator HENDERSON:** You're the correct person to answer that question, Ms Rowley?

**Ms Rowley:** I and Ms Pentony, yes.

**Senator HENDERSON:** Ms Pentony, do you know the answer to that? Is it correct we're now at 28.5 per cent?

**Ms Pentony:** It is correct that we are now at 28.5 per cent.

**Senator HENDERSON:** Are you now suggesting that in the next five years, the government will deliver 29 times as much as the government has to date to get to 43 per cent below 2005 levels?

**Ms Rowley:** As we've discussed in this committee before, Australia's headline emissions over the recent period at the headline level have been relatively flat, but that's underpinned by some very significant changes at the sector level. In the period since 2021, for example, emissions in 2021 were to some extent artificially reduced by COVID-related restrictions on the transport sector, and transport emissions were in the order of 10 per cent down from their pre-COVID levels because of those restrictions. In addition, emissions in 2021 were significantly lower than trend because of a La Nina event leading to significant sequestration—

**Senator HENDERSON:** Ms Rowley, I'm—

**Ms Rowley:** If I could just explain—significant sequestration in the land sector. Since then—

**Senator HENDERSON:** I just want you to address my question. I'm sorry to cut in. That wasn't my question, though Ms Rowley.

**CHAIR:** Hold on.

**Senator HENDERSON:** If I could just address the trajectory needed between now and 2030 to get to 43 per cent—only because I've got very limited time, so I've really got to move through these questions quickly.

**Senator Ayres:** The official is going to answer the question in the way that she can. You can't push her along. She will answer the question and she'll do it diligently.

**Senator HENDERSON:** Minister, the rules of Senate estimates require the questions to be directly relevant. I'm just asking Ms Rowley if she—

**Senator Ayres:** That's up to the chair, not to you. You ask the questions, she answers them, and the chair manages it.

**Senator HENDERSON:** Could you just confirm that we'll need to deliver emissions reduction 29 times more quickly, Ms Rowley, than we currently are?

**Ms Rowley:** Senator, as I was saying, emissions in 2021 were lower due to, particularly, reductions in transport and a La Nina event leading to substantial sequestration in the land sector relative to normal conditions. Since then, the transport sector has returned to trend and is now projected to decline in emissions. The bump back has now peaked and we anticipate it will decline. We anticipate the land sector will continue to ease off those La Nina highs and so we will still see, at the headline level, relatively more net emissions in the land sector. However, as we discussed earlier in this session, we expect the trend, which is a reduction in most other sectors of the economy, to become dominant over the coming years. It's because of the interplay between those different sectoral trends that over recent years we have seen emissions relatively flat. But as the transport trend turns around and the La Nina effects return to normal, the land sector returns to normal, what we'll see at the headline level is significant reductions in Australia's emissions, and that's as set out in the 2025 emissions projections. To your question—you asked if it would get to 43. Our latest estimate is that emissions would be at 42 per cent below 2005 levels in 2030.

**Senator HENDERSON:** The Climate Change Authority doesn't have the same conviction. In its last annual progress report, it says, 'Current emissions reductions are too slow to meet Australia's 2030 or 2035 targets.' What do you say to the contradiction from your own agency in relation to emissions reduction?

**Senator Ayres:** It's not a contradiction at all. How is that a contradiction?

**Senator HENDERSON:** Because the evidence that I've just heard from Ms Rowley is that emissions reduction is going to be 42 per cent below, but the Climate Change—

**Senator Ayres:** The effectiveness of measures accrues over time.

**Senator HENDERSON:** Minister, you asked me a question and I'm now—please don't interrupt me, Minister. I'm now addressing the question you've raised. The Climate Change Authority in its latest annual progress report says, 'Current emissions reductions are too slow to meet Australia's 2030 or 2035 targets.' Minister, they're calling you out. They're saying that these policies are not working and you will not get to your targets.

**Senator Ayres:** Well, the efficacy of measures has to increase over time. That is true. Technology changes over time. I've just spent a whole lot of time on Fords and fjords with Senator McKenzie. The uptake of electric vehicles, for example, in the transport sector will increase over time. And 2022 is not a sensible year to point to in terms of emissions reduction efforts, because of course—

**Senator HENDERSON:** I'm just addressing the CCA. The CCA says this is not going to get there, Minister.

**Senator Ayres:** Don't interrupt me, Senator. Honestly, we've gone on all day largely because of interruptions from over there.

**Senator HENDERSON:** Minister, all you've done is duck and weave and not address the question. I'm asking—

**Senator Ayres:** And 2022 was a COVID year. I don't know whether you want to take credit for the Morrison government's efforts during COVID but there was a substantial fall in economic activity, including in the transport sector. The official has drawn your attention to that. It's just not right to make that the baseline. If you look at 2019, you'll see substantially higher emissions. It turns out if you stop an economy, emissions do sharply reduce. The projections through vary. Whether it's 42 per cent or 43 per cent, we are on track to achieve—get very close to, potentially exceed—our targets here.

**Senator HENDERSON:** The Climate Change Authority says you're not, Minister.

**Senator Ayres:** It is a basket of activities.

**Senator HENDERSON:** It's a basket case.

**Senator Ayres:** Some of them—

**Senator HENDERSON:** The Climate Change Authority says you will not reach your targets. You're ignoring addressing my question.

**Senator Ayres:** If you want to ask the Climate Change Authority questions, Mr Kean's very enthusiastic.

**Senator HENDERSON:** I've got one last question, Chair, because I know we have to move on. Last year, the Climate Change Authority said that 15 million tonnes of emissions reduction each year would be needed to deliver on the 43 per cent 2030 target. In its 2025 progress report, it says 18 million tonnes is needed each year. What is the reason for this increase? And is it because this government—your government, Minister—continues to so underperform?

**Senator Ayres:** Is that a question for me?

**Senator HENDERSON:** Yes, it is.

**Senator Ayres:** You'll get an opportunity to ask the Climate Change Authority questions about what they are doing. This government, after the wreckage of the last decade, has a sensible, measurable, achievable plan to reduce emissions. It is supported right across, not just within this portfolio area but in areas like industry and transport. It will deliver lower emissions, a bigger economy, more blue-collar jobs, more factories and more economic activity. The alternative is a return to the shemozzle. That is absolutely evident in a more extreme way, if you really do aspire to be the alternative party of government—it's not clear that you lot all do—in the shemozzle that is evident on the other side of politics.

**Senator HENDERSON:** Minister, one of the reasons I think you're not addressing the question is your own expert agency is saying you will not reach your targets. You will not get there. You need to increase the emissions reduction to 18 million tonnes a year. You're barely doing a million tonnes on average. It is just not credible. And now your own agency is calling you out, Minister.

**Senator Ayres:** We welcome the work of the Climate Change Authority and we're open to views. We have an evidence-based process to dealing with policy, which is a sharp change from the sort of imported ideology-driven approach to policy that your side of politics characterises.

**Senator HENDERSON:** The Climate Change Authority has looked at the evidence and they're saying, based on the evidence, you will not get there. You will not reach your targets. I put to you that you are not telling the Australian people the truth.

**Senator Ayres:** Why don't you ask them a few questions?

**Senator HENDERSON:** I would put to you that your government is not telling the Australian people the truth, and even your own agency has called it out.

**Ms Rowley:** If I could just bring it back to the 2025 emissions projections—

**Senator HENDERSON:** No answer, Minister?

**Senator Ayres:** I'll let the official answer.

**Ms Rowley:** The projections indicate that—

**Senator HENDERSON:** That says it all. I don't have any further questions. I'm sorry, Ms Rowley. That's the question I was asking.

**Ms Rowley:** With respect to the outlook for emissions and why we think that 42 per cent is a credible estimate—

**Senator HENDERSON:** I've already asked you that question.

**Ms Rowley:** And the interaction with the average reductions per year? I'm very happy to address that.

**Senator HENDERSON:** Sure, you go for it.

**Ms Rowley:** Looking forward, the projections that indicate that land sequestration is likely to continue to ease off the La Nina highs. Transport, electricity, stationary energy, and fugitive emissions are all projected to decline. That reflects the impact of the government's policies, particularly the 82 per cent renewable target, the safeguard mechanism and the new vehicle efficiency standards. In aggregate, the projections indicate that national emissions might continue to remain relatively flat for the next couple of years, particularly because of that land sector swing back off the La Nina highs. But after that period eases, then we expect reductions to dominate. These figures are all presented in the 2025 projections published last year. The reductions dominate to 2030 and then continue to 2040. The final point I'd make is that those reductions are not going to occur in a linear fashion. It's not a straight-line pathway to 2030. What we see is very big shifts, particularly when large emitters like coal-fired power stations close. The Eraring power station plans to close in 2027, the Yallourn brown coal power station plans to close in 2028, and the Muja station by 2029. It's the exit of those large, lumpy emission sources that lead to non-linear shifts in our emissions out to 2030.

**Senator HENDERSON:** Thanks, Ms Rowley. Chair, I'll leave it at that.

**CHAIR:** Thank you, Senator Henderson. On that note, we will now move off outcome 1.1. I do note, for the benefit of the senators in the room and more generally, that we are running considerably behind. I think we're up near 4½ hours behind schedule at this point in time. So any efforts that senators can make to assist us to recover some of that program would be very gratefully welcomed by me.

[14:55]

**CHAIR:** We now move to outcome 1.2 in the program, which is 'support reliable, secure and affordable energy'.

**Senator HODGINS-MAY:** In relation to the gas market reforms currently under consideration, are you able to give us a sense of the range of petajoules of gas that you are trying to free up for the domestic market in order to prevent anticipated shortfalls?

**Ms Svarcas:** The gas market review that you've referred to is underway at the moment, and we are due to report to government by the end of the year on the findings of that outcome.

**Senator HODGINS-MAY:** So you can't provide any more details on that question around the range of petajoules that you're trying to free up for the domestic market?

**Mr Duggan:** The aim of the review is to ensure a number of things. The first is that we get gas into the domestic market that is at a price that is affordable. The second thing is to make sure we address short-term, medium-term and long-term gas supply shortfall risks. In that context, the number of petajoules we're aiming at for the domestic market is enough that meets our demand going forward. That demand will move over time. Typically what we observe through the projections is it remains fairly constant, certainly out for about a decade. So we would seek to make sure that our advice to the government is on options that allow us to have supply that matches that demand.

**Senator HODGINS-MAY:** At the last estimates session, DISR made it clear that all options were on the table, including an export levy, but it has been reported that is no longer under consideration. Are you able to advise if those reports are true or whether, in fact, all options are still on the table, including an export levy?

**Mr Duggan:** Ms Svarcas advised that we're in the final stages at the moment of the review. We'll give our advice to the government. I think the public terms of reference talking about the review being completed before the end of the year. We'll provide our advice to the government in that context.

**Senator HODGINS-MAY:** So it's still on the table then?

**Mr Duggan:** Our advice to the government is still being put together, and it will go through a cabinet process. So we are not in a position at the moment to talk about what options we would put to the government.

**Senator HODGINS-MAY:** Minister, gas prices on the east coast have tripled since LNG exports commenced, and Australians haven't been compensated for this. Do you think that a levy on gas company exports—who we know are notorious non-payers of tax—should also be implemented to help Australians with cost-of-living pressures that gas companies have in large part caused?

**Senator Ayres:** I think Mr Duggan gave you a very accurate assessment of the proper way of answering these questions in the context of cabinet deliberations.

**Senator HODGINS-MAY:** You're the minister.

**Senator Ayres:** I'm bound by the same requirements that bind Mr Duggan and his colleagues on these questions.

**Senator HODGINS-MAY:** It was reported that there are two options being considered. You'll probably bat me off. The first just involves the three LNG exporters. The other involves a broader option with all gas producers. Given how adept gas companies are at manipulating systems, whether it is the tax code or even WA's reservation scheme, how important is simplicity and preventing gaming of the rules in the design of your policy?

**Mr Duggan:** Senator, when we look internationally, we see different ways of approaching the challenge of ensuring we've got enough domestic gas into the domestic market. We're aware of different options for doing that. In providing our advice to the government, we are trying to assess which options, as I said before, get to ensuring that we keep downward pressure on gas prices and ensure, very importantly, that we meet our future domestic gas needs. In that context, of course, there is a high premium on ensuring that whatever model we recommend to the government achieves the objectives, so we want to ensure that there's no leakage from whatever regulatory system the government were to put in place to support the domestic gas market. You're right. If you had a choice between a complex regulatory system and a simple regulatory system, I think business would always prefer the simple regulatory system because that gives them the most clarity around which they can take investment decisions. So yes, to the extent that we can recommend simplicity, we would certainly aim to do that.

**Senator HODGINS-MAY:** Is there any further time line that can give us on—we're at the first of December today—when we might expect to see that review?

**Mr Duggan:** The commitment in the terms of reference was that the review would be completed before the end of the year. That remains the commitment.

**Senator HODGINS-MAY:** My next question is a bit of a jump. We had data centres in the previous line of questioning, but I have one other question to follow up on there. In the US, we're seeing regular citizens facing sharp increases in their energy bills because of the massive construction of hungry data centres. Can you provide an indication of what we're doing here to safeguard against that happening in Australia?

**Mr Duggan:** I'll start, and then my colleagues who are working specifically on these issues will add to my answer. There's a lot of work that is taking place certainly between ourselves and the jurisdictions. This was a piece of work commissioned by the Energy and Climate Ministerial Council: that we look specifically at the implications of data centres for the Australian electricity grid. Also a lot of work is taking place with the market bodies. When AEMO comes to do its integrated system plan and it projects forward demand for electricity, data centres has become an increasing component of that work. Mr McKissack has been leading our work on that, so I'll hand over to him.

**Mr McKissack:** We are, through our work with the states and territories, trying to better understand demand from data centres. It has grown quite significantly in the last few years, post-COVID, as that demand for digital services in the economy has grown. It's a matter of trying to balance supply and demand in the system. We and AEMO have put a lot of time into better understanding what might be coming. AEMO has upgraded its demand forecasts for data centres. Currently, it's about 2 per cent of grid demand, if you look at the NEM. That's forecast to grow to 6 per cent by 2029-30 and 12 per cent by 2049-50. Does it increase prices? Well, if you don't plan for it, it could. But I guess we are in a process of trying to understand how that demand will evolve over time and ensuring that the supply does match that growth in demand.

**Senator HODGINS-MAY:** Is the Capacity Investment Scheme calibrated for those sorts of increases—additional demand sources?

**Mr Duggan:** The Capacity Investment Scheme is calibrated to the government's target of getting to 82 per cent renewable energy by 2030. The question when you come to think about 82 per cent is: 82 per cent of what? So 82 per cent of what we project the level of demand for electricity to be in 2030—yes, it is calibrated to meet that level of demand. It's worth noting that the Capacity Investment Scheme supports grid-scale, solar, wind and storage technologies. It's not intended to support the individual power needs of an individual facility, be it a data centre or anything else. It's really about grid-forming generation and storage technologies.

**Senator HODGINS-MAY:** I think the rest of my questions will have to wait for estimates next year when the gas market review is released, and we've had time to digest it. Thank you for your time.

**CHAIR:** Thank you, Senator Hodgins-May. I'm going to Senator Smith.

**Senator DEAN SMITH:** This is on the same topic, in regard to data centre and future energy demands. That trajectory that you talked about: two per cent to six per cent to 12 per cent by 2050—that's the Australian context?

**Mr McKissack:** Yes, that's the National Electricity Market demand.

**Senator DEAN SMITH:** How does that compare with the international trajectory or the trajectory for similar countries to ourselves?

**Mr McKissack:** I couldn't answer that precisely but it is part of a global trend towards digitisation. Many economies have seen this pull forward in demand for digital services, particularly since the COVID period, where we all started doing a lot more things online—video conferencing, e-commerce et cetera. So it is very much a trend we're seeing across the globe, but I don't really have numbers on comparable countries.

**Senator Ayres:** There are reasons to think that Australia will be—already is, not just will be—a preferred destination for digital infrastructure development. Our landmass, our proximity to fast-growing digital markets, our Five Eyes security status, our good governance, the accessibility for low-cost solar and wind and storage, which is in demand in particular from these firms, does mean that Australia will be a destination for this kind of investment. We do see it as in the national interest to secure that investment. It's outside the scope of this portfolio and questions here. But of course, where it intersects here and with the work of the states and territories in this is that to the extent that those investments underpin parallel generation and storage and transmission investments, that is good for the efficiency and stability of our electricity network. But if it's unplanned, of course, it isn't.

**Senator DEAN SMITH:** The International Energy Agency has reported that data centres are powered approximately 60 per cent by fossil fuels and, I think, about 27 per cent by renewable energy. Is that

proportionality similar to our experience? And do you expect that to be the experience over the forward projections?

**Mr Duggan:** We have a higher degree of renewable penetration today than most OECD economies. So to the extent that these data centres are drawing on the grid, we would already have a higher degree of renewable, supported by gas, supported by battery support for data centres. When we look forward, of course, the expectation, again, to the extent that these data centres are connected to the grid—and of course you would have seen propositions; some are thinking about locating in places where they'd have their own dedicated electricity source, so we don't assume that's always the case. But yes, the expectation would be that you would see a growing reliance on firmed renewable energy as being the basis. I think that went to the minister's response, which is that Australia has some comparative advantage in providing that type of electricity to support data centres.

**Senator DEAN SMITH:** When considering the expansion of data centres in Australia, what are some of the key regulatory issues that need to be considered?

**Mr McKissack:** Certainly a pressure point for data centres is connection to the grid, particularly in our more populated metropolitan areas, Sydney and Melbourne. There's certainly some pressure on the regulators looking at new connections to ensure timely connection of these data centres to grid. Obviously we're interested—getting to your question earlier, Senator—to ensure that this growth in demand is consistent with the push towards a higher renewables penetration. So we are interested to see how demand unfolds in the sector. The sorts of data centres we're seeing in Australia currently are really focused on storage and distribution of data; they have quite flat loads, so they don't change particularly the shape of demand in the system at the moment. But questions around things like demand flexibility are questions we're quite interested in learning more about. Those are probably some of the key, from an energy sector perspective, regulatory issues we'd be thinking about. But across government, data centres are raising issues in other portfolios as well.

**Senator DEAN SMITH:** So a risk to that trajectory that you talked about before would be, for whatever reason, interruption or disruption to the renewable energy rollout?

**Mr McKissack:** I don't think we see it as a risk. As we look at demand evolving in the system going forward, we just want to understand what that demand looks like. I don't think we've identified a particular risk from this demand source, which is, as we mentioned earlier, currently about two per cent of total demand, ramping up to six per cent over five years. I don't think we've identified a particular risk in respect of that rollout.

**Senator Ayres:** But any effort to stop or slow down energy generation or transmission rollout is a risk to industry—no question. These characters whipping up misinformation and disinformation in regional communities are a danger to blue-collar jobs. They are killing jobs in industrial centres by trying to slow down nation-building electricity modernisation, whether it's in wind or solar or batteries or gas firming or transmission. Of course that's a risk. That's why we're trying to get on with it.

**Senator DEAN SMITH:** When you're calculating that expected trajectory, how do you do that? Do you look at data centres that are under consideration? Do you look at data centres that have been approved? What are the inputs into that trajectory?

**Mr McKissack:** We are relying quite a lot on the good work that AEMO has been doing, the Australian Energy Market Operator. They also have done a lot of detailed work talking to the sector, trying to understand, company by company, what that profile of demand looks like, and that will obviously feed into their 2026 ISP that will be released, I think, later this year. So it's very much that they're doing the more detailed work and we're relying very much on what AEMO is doing in this space.

**Senator DEAN SMITH:** Thank you.

**CHAIR:** Senator Henderson.

**Senator HENDERSON:** I will go back, Minister, to the big fat lie that energy is going to be cheaper. The front page of *The Australian* has 'Trapped in transition turmoil'. Minister, Australians are paying a very dear price, including many businesses which are either looking at closure or already being forced to close because of these skyrocketing electricity prices. When are electricity prices going to come down?

**Senator Ayres:** Electricity prices, as you're aware, from the Treasury analysis that we commissioned as part of looking at the approach, including the impact of alternative approaches—there are two pathways in front of Australia. One: lower cost.

**Senator HENDERSON:** Minister, prices are going up. You don't realise this.

**Senator Ayres:** I know you find this hard to imagine—

**Senator HENDERSON:** But Australians—

**CHAIR:** Senator Henderson, the minister's answering your question. You've got to give him a chance to answer that.

**Senator HENDERSON:** Minister, you have no credibility in arguing the prices are coming down.

**Senator Ayres:** Under your schemozzle, costs go starkly up. And what we saw is—no matter if you wave around *The New Statesmen*, *Prava Daily*, the *Australian* or whatever you've got here—

**Senator HENDERSON:** You can't address the question. The Prime Minister—

**CHAIR:** Senator Henderson. We've talked about this in different contexts. We just need the minister to be able to answer.

**Senator Ayres:** Disorderly transmission means sharply rising costs for Australians. There is a very basic controlled experiment that you can do. You can look at the decade, almost a decade, between 2013 and 2022. A period of disinvestment, which the Liberal Party used to worry about—they used to worry about sovereign risk, used to worry about the impact of policy dysfunction—

**Senator HENDERSON:** You're not going to answer the question. When are electricity prices going to come down?

**Senator Ayres:** They used to worry about—

**Senator HENDERSON:** You're just going to keep ducking and weaving and not address the question.

**Senator Ayres:** What I'm going to do is answer the question.

**Senator HENDERSON:** That is the question.

**CHAIR:** The question is being answered.

**Senator Ayres:** Your side of politics bears the responsibility for every power bill that goes up. Every cost increase for businesses is your responsibility. It is like the teenage arsonist complaining that the bushfire brigade didn't arrive on time.

**Senator HENDERSON:** You're like the emperor with no clothes. You're trotting down the street—

**Senator Ayres:** We are here as the government investing in energy—

**Senator HENDERSON:** Nothing to see here.

**Senator Ayres:** What you did is—

**Senator HENDERSON:** Energy prices are going through the roof.

**CHAIR:** Senator Henderson, the process needs to be allowed to play out: question and answer. The minister is answering your question.

**Senator Ayres:** That has lasting effects in the Australian energy market. It has done incredible damage to our national prosperity. Your side of politics, with four gigawatts leaving the system, with almost nothing going in to replace it, with 24 out of 28 coal-fired power stations announcing or bringing forward their closure over that period and nobody did anything about it, not a thing—just watched the electricity system deteriorate. That has meant that it has set back the national effort, has set back the Australian interest by a decade. We are working hard to recover the position in a sensible and straightforward way that's based on the best economics, the best investment strategy. I appreciate the Liberal Party's afraid of the modern world. I get it. You're not going to be on board with all that. But don't try to characterise it as a teenage arsonist—

**Senator HENDERSON:** Australians are afraid of your energy policies because they are failing Australians. They are failing Australians, your policies. Energy prices are going through the roof, and all you can do is—

**Senator Ayres:** Because Mr Morison, Mr Abbott, Mr Turnbull, couldn't get it together.

**Senator HENDERSON:** It's pathetic.

**Senator Ayres:** That's done an immeasurable damage to Australians. Every time your side of politics wrecks, Australians pay the price.

**Senator HENDERSON:** Businesses across this country are paying the price of your high energy prices. When you're—

**CHAIR:** All right, senators and Minister. Senator Henderson and Senator Ayres, I'm not sure this is getting us anywhere, particularly within the context of estimates.

**Senator HENDERSON:** And now—

**CHAIR:** No, Senator Henderson, just hold on for a moment. At this point, as I've said on a number of occasions today and at previous estimates, this format works best with a question and an answer. There is plenty of opportunity for both of you to argue in other contexts.

**Senator HENDERSON:** Thanks very much, Chair. Mr Kaiser, I'm not sure of the relevant official, but I'm wanting to know about how many gigawatts has been underwritten through the Capacity Investment Scheme to date.

**Mr Kaiser:** There are people here who can certainly help you with the answer to that question.

**Mr Brine:** I'll just add up the totals here. We have in total 63 projects totalling 18.2 gigawatts.

**Senator HENDERSON:** And of the capacity underwritten for that scheme, how much capacity is operating in the NEM for generation and storage capacity—both generation and storage?

**Mr Brine:** For generation, that's 37 projects totalling 12.2 gigawatts. And for storage, that's 26 projects totalling six gigawatts or 22.2 gigawatt hours of capacity. That excludes some of the storage that's been brought through the generation tender—

**Senator HENDERSON:** Are they all operating projects or are they just pending projects?

**Mr Brine:** The Capacity Investment Scheme targets early-stage projects. It targets projects to be delivered by 2030. Those projects will be delivered in the future.

**Senator HENDERSON:** So the 18 gigawatts of power has not yet been delivered?

**Mr Brine:** That's right. That is currently underwritten and contracted to be delivered by 2030. A lot of that will hit final investment decision in 2026 and commence construction after that.

**Senator HENDERSON:** Are these projects being tracked that are being underwritten under the CIS? And of those projects, how many are on schedule, how many behind? Can you give us information on that?

**Mr Brine:** They are all signed up to fairly detailed Capacity Investment Scheme agreements. As you'd imagine, once the projects are announced, there's a fairly detailed contractual negotiation process that follows that. Today, of the 63, we've signed contracts with 22 projects, worth 6.5 gigawatts. Now, a number of the options finished in August this year. We're still negotiating with them. So that's 41 projects that we're still in negotiations with. And as you'd understand, these are 15-year—

**Senator HENDERSON:** So you've only contracted 6.5 gigawatts?

**Mr Brine:** That's right. And those all have very detailed milestones, and they're all on track at the moment.

**Senator HENDERSON:** So the other projects are not? How many projects are on schedule?

**Mr Brine:** Of the ones we signed, they're all on schedule to meet their milestones.

**Senator HENDERSON:** What if the CIS does not deliver on time, meaning you've got all these unsigned contracts? What are the contingency plans that the government is making?

**Mr Brine:** I'm not sure I understand the question.

**Senator HENDERSON:** Well, you're looking to bring in another 18 gigawatts of power under the Capacity Investment Scheme. Do you have any contingency plans for if you do not deliver what you're proposing to do?

**Mr Brine:** There are a number of features of the scheme that are designed to help us with that. One of the features is that we have front loaded the tenders. In total, we're looking to contract 40 gigawatts, and we've front loaded them. A lot of the capacity has been contracted up front. That will allow us to re-tender towards the end of the scheme, the third year of the scheme, if the projects haven't been delivered. We do require a bond to be signed up front of up to \$4 million per project. If the project proponents don't deliver on time, they stand to lose that bond. But of course, ultimately, if they don't deliver on time, we'll work with them to deliver cure plans and appropriate mitigation strategies. But if the projects ultimately can't be delivered to our satisfaction, then they're cancelled and that capacity will be re-tendered.

**Senator HENDERSON:** Will the government need to consider the phase-out of coal, noting that recently all ministers gave themselves expanded legal powers to enter into orderly exit management contracts with generators?

**Mr Brine:** That might be out of my—

**Mr Duggan:** Senator, as you know, there was a body of work that was done through the Energy and Climate Ministerial Council, led by New South Wales, called the orderly exit management framework. That's a framework that all jurisdictions are able to opt into on a voluntary basis that helped them to think their way through and set some pretty clear pathways and criteria around supporting coal's exit from the electricity grid. New South Wales

has signed up to it. They're using it in the context of the Eraring power station. And, as I said, it is voluntary for other jurisdictions to sign up as they see fit. But it is very much managed at the state level, not something that the Commonwealth is actively engaged in.

**Senator HENDERSON:** On AEMO's report today saying that Eraring can't close in 2027 based on current circumstances because it would destabilise the grid—what do you say to that concerning development today?

**Mr Duggan:** What AEMO said was that new investments and reforms are needed to maintain system security in advance of what they call transition points. The exit of a large coal-fired power generation plant is one of those transition points. They talk about opportunities to co-optimise both reliability and system security investment to keep costs as low as possible. Then they go on to say that industry and governments have actions underway to manage the identified transition points and that AEMO will continue to work collaboratively to signal and support the required investments and reforms needed to maintain system security. What AEMO are doing is feeding into a body of work, again commissioned by the Energy and Climate Ministerial Council, around a system security action plan, which has been well publicised. It was something that was in the last communiqué of the ECMC. They'll get an update at their December meeting. What we're seeing as a result of that is states making investment in the replacement system security services—things like, in New South Wales, significant investment in synchronous condensers. In South Australia they've just commissioned a FERM mechanism working with AEMO Services Limited. So the states are leaning in to address some of the risks that AEMO talk about in the near term. But in the longer term there's a review underway, the National Electricity Market review led by Professor Tim Nelson, that is looking at system security services as one of the things that could be procured through what they're recommending be a new electricity system entry mechanism. So in the medium to long term there will be a NEM-wide market solution to this problem. In the near term, the states are leaning in to do the investment that would help to reduce that reliance on the spinning turbines that are currently provided at the moment by coal-fired power stations.

**Senator HENDERSON:** Just on the—

**CHAIR:** Senator Henderson, can you get in a position to wind up? Otherwise I'll move the call on.

**Senator HENDERSON:** I've got some more questions, Chair.

**CHAIR:** In which case I'll—

**Senator HENDERSON:** Can I just finish on this point as a follow-on from that particular response from Mr Duggan?

**CHAIR:** Very quickly, please.

**Senator HENDERSON:** In relation to AEMO's report and the Eraring coal-fired power station, AEMO is saying it may need to activate back-up contracts to preserve the grid stability or intervene in the market up to 30 per cent of the time at significant cost to consumers. So AEMO is deeply concerned about the current situation in relation to Eraring's closure.

**Mr Duggan:** The way I read the AEMO report is that they're outlining the tools and instruments that are at AEMO's disposal in the event that the investment doesn't come through in a timely enough manner to enable a Eraring to exit. So if we didn't have the new synchronous condensers, the other spinning turbine technologies that you need in order to maintain the inertia in the system as Eraring exits, then what I read AEMO as saying is they have other instruments that they could use. They're more temporary emergency instruments. And so what I read it as is a bit of a call for more investment in system security services. I think that was the intent.

**Senator HENDERSON:** Thanks, Mr Duggan. Thanks, Chair. I'll come back to this.

**CHAIR:** Thank you, Senator Henderson. Senator Walker.

**Senator WALKER:** Off the back of that line of questioning, do you think that unplanned outages of coal generators might have an effect on electricity prices?

**Mr Duggan:** What we've observed and what we have been observing over recent quarters is there's a very high relationship between unplanned outages of coal in the system and what we call high price events in the electricity market. When you have an unplanned outage, unfortunately the other generation capacity in the market doesn't have the opportunity to gear up in anticipation of the event. What then tends to happen is you're left relying on the other system services that are available. In this context, it's often back-up gas-fired power generation. On a marginal cost basis, that gas-fired generation tends to be the highest cost. When a coal-fired power generator goes out of the market in an unexpected way, you end up relying on the highest cost option, and that pushes up average prices through the course of the day. So yes, there is a correlation between coal outage and high prices.

**Senator WALKER:** What do you think the best way is to mitigate the reliability and price risks that we're seeing ageing coal plants are imposing?

**Mr Duggan:** Clearly, the best option here is to ensure that we get as much as we can of the replacement generation capacity in advance of the need. So if we've got enough supply of electricity in the market before those ageing coal-fired power generators retire—and, consistent with the response I gave to the previous question, it's not just the generation capacity; there are also the system services that a coal-fired power generator will provide. You need to be able to replace the generation capacity in those system services. If you can do that in advance of the exit and in advance of the coal-fired power stations becoming even more unreliable than they are today, then you can ensure that you avoid more of those high price events, and that would hold average electricity prices down.

**Senator WALKER:** Thanks. The Energy Security Board said in their 2022 report, the Capacity Mechanism High-Level Design Consultation Paper, that in the previous 10 years one gigawatt of new dispatchable capacity was built and 1.4 gigawatts was retired. Can you describe the lasting effect of a net loss of dispatchable capacity on the energy system, and what is this government doing to fix it?

**Mr Duggan:** Demand for electricity is rising over time for a variety of reasons. We're seeing businesses take the opportunity to electrify. You get rising electricity demand with economic growth, and we just had a discussion about data centres. All of that means that you need to get more and more generation capacity online in order to meet demand. At the same time, the average age of an Australian coal-fired power generator today is 38 years. The usual productive life is about 42 years. So we have a need over the next period to get more generation capacity in from alternative sources to be able to replace that ageing technology. To the extent that there are periods of underinvestment in electricity then you need to follow that with a period of strong investment in electricity in order to ensure that we can keep electricity prices down, meet reliability standards and meet all the system security services that we need in the market.

**Senator WALKER:** I also note that, in the latest Electricity Statement of Opportunities, a number of reliability gaps were identified, including from the retirement of ageing coal plants. How is the Capacity Investment Scheme filling those gaps and ensuring reliability of the system going forward?

**Mr Duggan:** We just heard from Mr Brine that the Capacity Investment Scheme is supporting new generation technology. It's also supporting new storage technology. So 40 gigawatts of additional capacity there is intended to be able to get the on-grid electricity to 82 per cent renewables by 2030. That is the objective of the Capacity Investment Scheme. In doing that, with the additional supply coming online, that is again intended to keep prices lower, keep reliability where it needs to be, so meeting the reliability standards, and keep system security where it needs to be. So the Capacity Investment Scheme is bringing on that supply that I talked about that we need to meet that rising electricity demand in the context of older generation technology coming out of the system.

**CHAIR:** Thank you very much. We're going to push out the break a little bit with a view to then trying to get to the Climate Change Authority immediately following our afternoon tea break.

**Senator HENDERSON:** Thank you, Chair. I appreciate your patience with us trying to get all our questions prioritised. Mr Duggan, can I just ask about what happens when the government writes a contract under the CIS? What steps are taken to make sure the project is viable? We've just heard about all these projects, many of which are not signed contracts. Do you check that they've gone through all the FIRB approvals, landholder approval and state planning; that they've got proper agreements with AEMO; that the energy project itself is viable; and that it can connect to the grid? We're just concerned there's a lot of big talk about the 18 gigawatts being underwritten by the CIS, but we're just very concerned about the nuts and bolts of the viability of these projects.

**Ms Wiltshire:** On the first part of your question, we have a very extensive assessment process to actually choose the projects in the first place, including a whole bunch of merit criteria that the projects must satisfy, and then our due diligence. Then, once the projects are successful and we write a contract with them, there are a number of developmental milestones that the projects have to reach—things like do they have their land tenure, their planning and environment approvals, AEMO notification, can they connect and all that thing. FIRB approval is not a condition of signing a contract, but they must have their FIRB approvals down the track. All of that is part of the contracting process.

**Senator HENDERSON:** Is it a requirement that a proponent must have delivered an energy project before signing up under the CIS?

**Ms Wiltshire:** It's not mandatory, but it does go to the assessment process. We do look at the track record of the proponents and what they have delivered in the past. If they do have a strong track record, they're likely to be found to be of higher merit under that criterion.

**Mr Brine:** Just to add to Ms Wiltshire's answer, from a policy perspective, you wouldn't want to limit yourself to people who've already delivered it. You'd want to have a competitive market where new consultants are coming in and adding pressure for lower cost bids.

**Senator HENDERSON:** Or you may want to be engaging companies that have got a track record in delivering other energy projects.

**Mr Brine:** That's right. They might be overseas, not just in Australia.

**Senator HENDERSON:** Or they could be Australian. On that, I do want to ask about whether the department is aware that it's using taxpayer money to underwrite capacity generation and storage projects with links to the Chinese government.

**Mr Brine:** What I'd say in relation to that, Senator, is that, as Ms Wiltshire said, any project will need to satisfy the FIRB approvals in the normal way. To the extent there are any concerns around that, that will be dealt with by Treasury.

**Senator HENDERSON:** Right. I just want to ask specifically about Genaspi Energy, which is outsourcing work to companies linked to the Chinese government. Also, Pacific Blue, even though they have local operations, is owned by the Chinese government. Has that raised any particular issues for the government?

**Ms Wiltshire:** Those projects, as Mr Brine said, have to go through the normal FIRB process, which, as you would be aware, is managed by Treasury. The Clements Gap project does have its FIRB approval, and Genaspi does not yet have its FIRB approval.

**Senator HENDERSON:** But you just gave evidence saying that getting FIRB approval was not a precondition to entering into a contract.

**Ms Wiltshire:** Correct.

**Mr Brine:** So just to explain, if they subsequently do not get their FIRB approval then they would have—the contractual negotiation ceases or, if a contract has been signed, that contract would be terminated.

**Senator HENDERSON:** So, of the 18 gigawatts we spoke about earlier, how many of those projects have FIRB approval?

**Mr Brine:** I might have to take that on notice, Senator, but we can get that number.

**Senator HENDERSON:** Has there been any FIRB approval?

**Mr Brine:** Yes, there have been FIRB approvals.

**Senator HENDERSON:** All right. Can you provide us with the details on how many gigawatts they involve.

**Mr Brine:** Yes.

**Senator HENDERSON:** Did the department seek any advice from FIRB or any national security agency in relation to the projects that have got ownership connections with the Chinese government?

**Mr Brine:** We don't seek advice from the national security agencies. We rely on the FIRB processes—the satisfaction of those normal processes that govern foreign investment into Australia. So there's nothing on top of those normal processes.

**Senator HENDERSON:** What about national security or sovereignty risks?

**Mr Brine:** That all gets picked up in that FIRB process.

**Senator HENDERSON:** So you go through the entire process. You might even contract companies—

**Mr Brine:** That's right.

**Senator HENDERSON:** which have got these deep connections or ownership with the Chinese government before they go through any interrogation through Treasury?

**Mr Brine:** Correct, Senator. As we said before, they're early stage processes. These are projects to be delivered by 2030. A number of them won't have their environmental approvals yet. They won't have their planning approvals. They won't have secured a contractor. They won't have their engineering plans. These are all milestones that will be achieved in the future. For some of them, one of their milestones will be securing FIRB approval. If they fail to meet that milestone then the contract is cancelled.

**Senator HENDERSON:** Just in relation to these agreements, can we get on notice the information about each of these agreements and where they're at, including copies of the agreements or draft agreements. In relation to any other issues, can we just get all that relevant correspondence, please.

**Mr Duggan:** Senator, just to be really clear here, to the extent that there is a CIS contract that is written with a company that then needs to go through a third process, if that FIRB process is not successful, that company, by definition, will never receive any taxpayer support. So the contract only comes into force, and there's only taxpayer support, at the point where they start generating and they start making revenue at that point. I just don't want to leave you with the impression that there's any chance here that someone that doesn't get FIRB approval actually receives underwriting support. They may get a contract, but that contract would be voided if they weren't successful in the FIRB process.

**Senator HENDERSON:** Hence my point about the number of uncontracted agreements. There seems to be so much uncertainty of that 18 gigawatts of additional power. There are so many unknowns about whether that will be delivered.

**Mr Duggan:** Senator, we are still at a relatively early stage in the rollout of the Capacity Investment Scheme. As Mr Brian pointed to, we've intentionally tried to front-load the contracting so that we have time to work with companies through the milestones that they'll need to meet in order to ultimately receive any support through the Capacity Investment Scheme. To the extent that a company fails one of those milestones, that gives us the opportunity later in the tendering process to retender what would otherwise have been—that's a helpful protection for us in making sure that the—

**Senator Ayres:** It's an official indicator before that front-loading process that means that, if a proponent doesn't meet one of the milestones, it's much easier to backfill with another project. They have to meet milestones. I mean, many of them require foreign investment. We're not going to build our electricity system with just Australian capital here. A foreign investment is a good thing. We welcome it. We've got a FIRB regime that deals with those kinds of questions. It's not a Port of Darwin kind of question, where your government flogged off that asset.

**Senator HENDERSON:** You promised to dispose of that asset, Minister. You promised to dispose of the Port of Darwin. That's another broken point by your government.

**Senator Ayres:** But there are other milestones that they have to meet as well. Some of them require capital raising. All of them will require development approvals, environmental approvals and a series of other agreements. They need to engage the right contractors. That process has to step its way out, and this initial contracting gives them the confidence to proceed with those other, sometimes quite expensive, processes for them.

**Senator HENDERSON:** All right. Thanks, Minister. I have to go through my questions so quickly. How many projects have a connection agreement with AEMO?

**Mr Brine:** We can take that on notice.

**Senator HENDERSON:** Do any projects?

**Mr Brine:** Yes, Senator.

**Senator HENDERSON:** Roughly, do you know?

**Mr Brine:** No, I wouldn't have it. I would take that on notice.

**Senator HENDERSON:** Okay. I just want to also ask, and I am trying to race through my questions as quickly as I can: can you detail what rebates, grants and any other financial payments or support the Commonwealth has made to underwrite or support coal generators since May 2022?

**Mr Duggan:** Senator, that's the Capacity Investment Scheme, if that's the instrument—

**Senator HENDERSON:** No, I'm asking—

**Mr Duggan:** In the context of the Energy Price Relief Plan undertaken at the end of 2022—

**Senator HENDERSON:** No, Mr Duggan, just so you understand my question, I'm asking right across Commonwealth spend, what rebates grants and any other financial payments or support has been provided by the Commonwealth in relation to underwriting or supporting coal generators—so right across the board.

**Mr Duggan:** Yes. I was going to the one that I'm aware of. As part of the Energy Price Relief Plan, what the government did with the Queensland and New South Wales governments at that time was target the source of the price pressure that was coming towards Australian consumers from Russia's invasion of Ukraine, which was an elevation in both coal prices and gas prices. You may recall at that time there was a gas price cap that was put in place. As well as that, the Commonwealth government ended into arrangements with the New South Wales and Queensland governments to decrease the cost of coal that was going into the coal generators to take pressure off electricity prices. As part of those arrangements, there was a coal price cap of \$135 a tonne that was put in place

for the coal inputs to electricity generation. To the extent that those coal generators had contracts that were worth more than that, the Commonwealth and New South Wales and Queensland governments had a financial sharing arrangement to share the costs of meeting the difference for the coal generator.

**Senator HENDERSON:** What's the Commonwealth's contribution to that scheme?

**Mr Duggan:** The Commonwealth's contribution was—the states dealt with the coal generator.

**Senator HENDERSON:** No, in the quantum of money.

**Mr Duggan:** In the quantum. It was three years ago now, Senator. I'd need to take that on notice. I can't recall the quantum.

**Senator Ayres:** But was your question about new generation capacity?

**Senator HENDERSON:** No, I was just simply asking—I did ask it twice, Minister—what rebates, grants or any other financial payments or support has the Commonwealth provided to underwrite or support coal generators since May 2022.

**Mr Duggan:** The one I'm aware of is the one I just described.

**Senator HENDERSON:** Are there any other payments that have been made?

**Mr Duggan:** Not that I'm aware of, Senator.

**Senator HENDERSON:** So you don't have any idea or you couldn't get that information back to the table?

**Mr Duggan:** I could take it on notice, Senator, whether there have been any others. I'm pretty confident there haven't, but I could take it on notice.

**Senator HENDERSON:** No, sorry, do you know the quantum, roughly?

**Mr Duggan:** The quantum?

**Senator HENDERSON:** Roughly. Are we talking 10 million? Are we talking 5, 50 or 100?

**Mr Duggan:** Ms Gowans will be able to answer that.

**Senator HENDERSON:** Ms Gowans, do you have that number?

**Ms Gowans:** I do, Senator. In the 2022-23 final budget outcome, 165.4 million was paid to New South Wales as payment for those coal arrangements. Another 34.6 million was paid to New South Wales. And in 2024-25 the final budget outcome was 191.1 million to New South Wales and 245.4 million paid to Queensland. All of that was paid through federation funding arrangements—so grant payments, Senator.

**Senator HENDERSON:** Okay, we're roughly talking about half a billion dollars or so?

**Ms Gowans:** Yes, in the ballpark.

**Senator HENDERSON:** Is there any further call on the Commonwealth in relation to supporting coal generation? Are any further requests pending?

**Ms Gowans:** Not that I'm aware of, Senator.

**Senator HENDERSON:** Mr Duggan?

**Mr Duggan:** Not that I'm aware of, Senator.

**Senator HENDERSON:** Okay. Chair, I just want to very quickly ask about some deep concerns. Minister, I can raise these with you. This is very much in your portfolio. It's about a number of different major manufacturers which have—

**CHAIR:** How long will this take?

**Senator HENDERSON:** If the minister is very quick with his answers, I think we should do this in three or four minutes.

**CHAIR:** I'm just going to flag that we've now been going for about 12 in this block.

**Senator HENDERSON:** Yes, sure. I'm trying to make it 15. I am trying to get through it very quickly. Minister, just in relation to the number of industrial facilities that are facing very grave threats, there is Tomago. That's one. There are rumours that there's going to be a relief package announced. Minister, could you please update the committee on what you're planning in relation to supporting Tomago?

**Senator Ayres:** I'll take it on notice, Senator. As I've indicated—

**Senator HENDERSON:** You can't take it on notice if you know the answer, Minister.

**Senator Ayres:** I can, and I will. This is an important facility. We are engaged in real-life negotiations and discussions. That will require, of course—from the owners of that facility's perspective, they want to see some

security around the future arrangements. But I know what would kill that facility stone dead: another five minutes of uncertainty like that from the previous government. The incapacity to build out the electricity system has endangered that facility. Incapacity to be able to build the transmission system over the previous decade has made it tougher for that facility. Continued policy uncertainty from the other side of politics isn't good for that facility either. The nuclear power plan that Mr Dutton and Mr Taylor brought to the last—

**Senator HENDERSON:** Sorry, Minister. I am not getting—

**Senator Ayres:** You've asked the question. What they brought to the last election was predicated on closing that facility. It was in the modelling to close that facility.

**Senator HENDERSON:** This is a serious issue, Minister.

**Senator Ayres:** You guys are trying to close the facility.

**Senator HENDERSON:** I actually want to talk about—

**Senator Ayres:** We're trying to keep it open. It's as simple as that.

**Senator HENDERSON:** the survival of these industrial facilities.

**Senator Ayres:** Your side of politics is trying to kill it stone dead. We are trying to keep it open.

**Senator HENDERSON:** Minister, there are also reports about the Gladstone power station. Can I just maybe ask you, Mr Duggan: do you have a list of facilities that are facing financial pressures or imminent closure or facilities with which you are dealing very closely in relation to financial pressures that they are facing? We're talking about thousands of jobs here.

**Mr Duggan:** The answer to your first question is no. The answer to your second question is that I'll just refer to the answer given by the minister about the sensitivity of the discussions that are being had with the Tomago facility.

**Senator HENDERSON:** Are any other facilities seeking any financial support from the Commonwealth at the moment?

**Senator Ayres:** These are questions for the department of industry, and I look forward to seeing you there.

**Senator HENDERSON:** Well, in so far as this department is concerned.

**Senator Ayres:** Really, within my responsibility—officials can answer to the extent that they can, but in terms of discussions around the place and the result of a decade of electricity and gas dysfunction from the previous government, we're working through those questions and trying to rebuild from the wreckage.

**Senator HENDERSON:** I'll leave it there. Thank you very much, Chair.

**CHAIR:** Thank you very much. I just have two quick questions to ask. First, if a Capacity Investment Scheme project doesn't finish construction, does it receive a deemed rate of return?

**Ms Wiltshire:** If it doesn't commence complete construction, one the conditions of receiving underwriting payments under the Capacity Investment Scheme is that you must have completed construction and you must be operational.

**CHAIR:** Okay, so there aren't any secret agreements that pay a deemed rate of return, even if they don't produce any power?

**Ms Wiltshire:** That's correct.

**CHAIR:** Okay. Thank you very much. We now move off outcome 1.2, and we are going to resume with the Climate Change Authority. Thank you very much.

**Proceedings suspended from 15:51 to 16:06**

**Climate Change Authority**

**CHAIR:** We will resume. I call officers from the Climate Change Authority. I welcome, in the room, the officers, and I also welcome, by video conference, the Hon. Matt Kean, the Chair of the Climate Change Authority. While the committee endeavours to be flexible around these things, I do just want to restate that it is our usual expectation for officers, particularly heads of agencies, to be present in person. Mr Kean, I understand that you're not doing so, because of caring responsibilities, but I'm just restating that expectation in terms of estimates. Now, do either Mr Kean or officers in the room wish to make an opening statement?

**Mr Kean:** No.

**CHAIR:** In that case, I will go immediately to questions.

**Senator McKIM:** Mr Kean, thanks very much for your attendance this afternoon. Sorry about the delays. I just wanted to firstly ask you about renewable energy, noting that, in your previous annual report, you stated, or the authority stated, your expectation that we will fall short of the 2030 renewables target by eight gigawatts. There's also been some other analysis that you might be aware of that thinks we'll end up around 63 or 64 per cent of renewables by 2030. Has the authority updated that work at all since your previous annual report?

**Mr Kean:** Senator McKim, we've just handed down our most recent annual report. Is that what you're referring to?

**Senator McKIM:** Yes, that's right.

**Mr Kean:** I think it's worth pointing out that some of the government's policies are still to get full traction in that, such as the Capacity Investment Scheme, for example. We expect the Capacity Investment Scheme will help drive many gigawatts of new renewable energy generation into the grid. We heard from your earlier witness that there are, in fact, 18.2 gigawatts from dozens of projects that are falling under that scheme. What we haven't done as well is factor in the exit of some of the coal-fired power stations in that annual report. I think Deputy Secretary Rowley pointed out that the emissions trajectory will be lumpy, and the replacement of existing sources of generation will also be lumpy. But we expect the Capacity Investment Scheme will underwrite the installation of new capacity that will be able to provide for the exit of the existing stations.

**Senator McKIM:** Alright, thanks. Is it the authority's view that we will or will not meet our 2030 renewables target?

**Mr Kean:** The authority's view is that we will meet the 2030 renewables target. In fact, it was in the assumptions that we baked into the 2035 targets that we advised the government on earlier. Our expectation is that the government will meet its 2035 target and 2030 renewables target. That was based on discussions with Daniel Westerman and AEMO. They fully expect the grid to meet that 83 per cent target.

**Senator McKIM:** Analysts at Rystad and Green Energy Markets think we'll end up at, say, 63 or 64 per cent renewables by 2030. You don't agree with that, obviously.

**Mr Kean:** No, I don't agree because I think you need to take into account additional government policies that have been put in place only last week with the support of the Greens, Senator. Much to your credit, you removed some of the green tape that was slowing down the installation of wind and solar projects. That is not only a good thing for business that they get certainty but it should also speed up the approval process. I can speak to New South Wales. A wind project currently takes about three years to go through the various green and red tape approval processes. That's before you get to financial close. That's before you actually build the infrastructure. It's taking about eight years, for example, for a wind project to get approved. The changes to the EPBC Act should speed that up. I think once you take that into account, the Capacity Investment Scheme and the requirement to build new capacity before old capacity exits, I have every confidence that we'll be able to hit that target.

**Senator McKIM:** Alright, thanks. I just wanted to go now to your 2035 emissions reduction target advice that you provided to the government earlier this year. Your interim advice or your interim report had a target range of 65 per cent to 75 per cent. What changed between then and your final advice to government, which was a range of 65 to 70 per cent—in other words, a decline of 5 per cent in ambition at the top level?

**Mr Kean:** Senator, the first thing that changed was that there was a new chair that came into the role. That consultation paper talking about 65 to 75 per cent was put out in the public domain before I was appointed to chair the Climate Change Authority. When I took on the role in roughly September, we were undertaking extensive community and stakeholder consultation. We received over 500 submissions from interested parties, ranging from community and First Nations to industry stakeholders. We conducted over 500 meetings with key stakeholders. I chaired a number of those meetings. I guess one thing that was apparent was the economics of some of the technologies that could have got us to that higher end of the range I had some question marks over, so we did some additional work on that to kick the tyres and see how far and how fast we could go in a practical sense. My focus was on how far and how fast we could go while still growing the economy. In addition to that, there were some geopolitical changes. I don't need to tell you, Senator McKim. Obviously, there was a change of leadership in the White House, which saw, I guess, the United States take a different posture when it comes to emissions reduction. They were some of the factors that became rate limiters on how far and how fast I thought we could go. But obviously, ultimately, the Climate Change Authority has made up of a number of members from diverse backgrounds, ranging from the Chief Scientist of Australia, Tony Haymet, right through the former chair of the National Farmers Federation. It was about bringing those various parties together to find common ground. I'm confident that the advice we landed on—62 to 70 per cent—was not only the consensus position of the Climate Change Authority and its membership, based on that extensive work that we've done, but it's also firmly

my view that it's in our national interest. Against the backdrop of those emissions reductions, we can continue to grow our economy, and that's what the modelling brought out.

**Senator McKIM:** I think it's more important to reduce emissions radically myself. I think you'll find that, unless we do that, our economy will decline significantly over time. But, rather than getting in a philosophical debate about that, I just wanted to go back to some of the specifics you mentioned in your question. You mentioned geopolitical events and specifically Trump's ascension to the White House. But you also mentioned you wanted to kick some tyres, I think you said, on some of the technology or the assumptions that were made around technology. Specifically, what tyres did you kick?

**Mr Kean:** Well, I think it was deep engagement with industry. Take, for example, carbon capture and storage. I mean, that was one technology that people were very bullish about. I had my doubts about that technology. Then, when we investigated it further with the scientists and a number of the industry participants, I think the ambitions of that technology did not meet the contribution that it could actually make towards emissions reduction. I'd like to think that I took a conservative approach. Where the technologies were available to be rolled out at scale that could assist families and businesses with cost of living pressures then we baked that. Where the technologies weren't available to be rolled out at scale and at a price point that made sense then we deferred to investing further in R and D. Renewable energy is one of those areas where we thought it made sense to replace—for the existing coal-fired power stations that were at end of life, it made sense to replace them with the cheapest, most affordable, most reliable and cleanest technology, which happens to be renewable. That's the work we did. But, at the end of the day, it came down to the experience of the members of the Climate Change Authority, bringing to bear their different backgrounds and perspectives on these matters. That's how we landed at 62 to 70 per cent.

**Senator McKIM:** Alright. What sort of engagement did you have with Mr Bowen or his office around the target range?

**Mr Kean:** The engagement we had was largely procedural, keeping him informed of the timing and keeping him informed of the process that we were going through. For example, I made a call earlier in the year that, in light of the changes to the geopolitical landscape, I'd need more time to consider that. That was the view of members of the authority. We kept the minister's office informed of that. Process and timing was the level of engagement. We didn't go to any matters of substance.

**Senator McKIM:** So you had no communications from either Minister Bowen or his office in terms of the substance of the target. Is that your evidence?

**Mr Kean:** That's correct, Senator.

**Senator McKIM:** Alright, thank you. You said in the executive summary of your 2035 targets advice that even meeting the lower end would require ceasing the logging of old growth forests and halving re-clearing rates. The government's been very clear—and the minister's here and can tell us if that's changed, but last time we had an exchange across this table, the minister was very clear the government had no intention of ending old growth logging. So what's the deficit in our emissions that will result from the government not implementing a policy of ending the logging of old growth forests?

**Mr Kean:** I might throw to my CEO, Brad Archer, to just go through the quantum of emissions reduction you get out of the old growth forests. From memory, it was about 3 million tonnes of emissions, but I'll let Mr Archer just clarify that. What I will say is that the Climate Change Authority's advice is not prescriptive. We provided advice on the pathways that we thought were the best ones for Australia to meet its emissions reduction goals. Again, it's up to the government of the day as to whether or not they accept that advice from the authority, as is the case when it comes to old growth logging. I might just hand over to Mr Archer for a moment.

**Mr Archer:** Thank you, Senator. We did publish, alongside the targets advice report, the data that sits behind the charts in the report. We have a chart in the report that does show illustratively the contributions that different sectors could make, and that was towards achieving the upper end of the target range. So that information is publicly available. As it happens in relation to forestry conversion—so that's reduction in primary and secondary forest conversion and native forest harvesting—we had the same scenario for both the upper end and the lower end of the target range that we recommended. Specifically, in total, the contribution in the year 2035 from reductions in those areas is 14 million tonnes.

**Senator McKIM:** In the one year or in all the years?

**Mr Archer:** No, in 2035. What would happen cumulatively between now and 2035 would depend on when you phased in any policies or any changes that delivered those elements.

**Senator McKIM:** Mr Archer, you can tell me if I'm wrong, but if you do something in 2035, it's not going to make much of a contribution to achieving a 2035 emissions reduction target, is it?

**Mr Archer:** I wasn't suggesting that's the way you should do it. I was just explaining that those figures relate to what happens in 2035. I don't have figures that I can give you cumulatively between now and 2035.

**Senator McKIM:** I'll come back to this, because I think it's an important point. Is that based on ceasing logging old growth forests, which is the language in the executive summary of your 2035 advice?

**Mr Archer:** Senator, it's a 50 per cent reduction in secondary forest conversion—that's regrowth. It's a 100 per cent reduction in primary forest conversion—that's ceasing converting old growth forests into other land uses. It's a 99 per cent reduction in native forest harvesting.

**Senator HENDERSON:** Good afternoon. Apologies, we've kept you waiting today. I just want to go back to the comments and the conclusion made in your most recent annual report about the 2030 and 2035 targets. Mr Archer, I've just heard the evidence of Mr Kean, but you were quite definitive in your report that, based on the current trajectory, the government would not reach the 2030 and 2035 targets.

**Mr Archer:** That's not quite an accurate characterisation of what we said in the report. What we've said in the report is that the rates of emissions reductions will need to increase for the targets to be met. That's a different statement to saying the targets won't be met or can't be met.

**Senator HENDERSON:** Okay, before we go on, let me quote from the report: 'Current rates of emissions reductions are too slow to meet Australia's 2030 or 2035 emissions targets'. So you stand by that comment?

**Mr Archer:** Yes, I do. It's just the mathematics of what we need to do to achieve the government's targets. We do go on to explain in the report that a number of policies have been put in place by the government, and they have yet to take full effect. So you could expect that emissions reductions will accelerate as those policies do take fuller effect.

**Senator HENDERSON:** You go on to say that the average reduction in emissions per year since the government was elected is about a million tonnes. You go on to say that, to meet Australia's 2030 target of cutting emissions by 43 per cent from 2005 levels, emissions must fall by an average of at least 18 million tonnes per year over the next five years. Based on the current trajectory, we're not going to get anywhere close to that. On the basis of what you are seeing currently, do you have the confidence that we will have got any chance at all of getting there?

**Mr Archer:** I think there was an earlier discussion about the choice of base year for doing these calculations. In our report, when we look at the last five years, we do see that the rate of annual emissions reductions, I think, has been more like eight million tonnes a year. So you can pick different base years and it'll give you a different equation as to what change is needed. But our advice is that emissions reductions do need to accelerate to achieve the government's targets. The government is well aware of that. It's on official projections to show it getting close to the 2030 target. That, again, is on the basis, as was explained by the department earlier, that there are a range of policies in place that we would expect to continue to deliver increasing emissions reductions between now and then.

**Senator HENDERSON:** Okay, so just going to the mathematics, last year you said that we need to reduce emissions by 15 million tonnes. So now you're saying 18 million tonnes to get to 2030?

**Mr Archer:** These are all averages, of course. So you don't necessarily have to have the average outcome every year. You can do it in different ways.

**Senator HENDERSON:** Why is that number increasing from 15 million tonnes to 18 million tonnes?

**Mr Archer:** When you don't achieve the average, when you're below the average, necessarily the amount you have to achieve on average over the remaining years to the target date must necessarily increase.

**Senator HENDERSON:** And that's the issue, isn't it? The government isn't achieving and isn't anywhere close to achieving what it needs to achieve to reduce emissions and get to the target of 43 per cent.

**Mr Archer:** I've already really answered that question by explaining that, yes, the rate of emissions reductions needs to increase, and there are good reasons to expect why that will be the case.

**Senator HENDERSON:** And that's interesting. Mr Kean, maybe I can go to you. You've made it very clear in your report that current rates of emissions reductions are too slow to meet Australia's 2030 or 2035 emissions targets. We've just heard you say you're confident we can get there. It's a massive increase in emissions reduction that we need to achieve. On what basis do you now form that view, and when did you form that view?

**Mr Kean:** I think you're right. We do need to pick up the pace if we're going to hit the 2030 and 2035 target. But, as I pointed out, a number of the government's policies that they've put in place—and they've put a lot of architecture in place to help us get to those targets—are yet to come into full effect. The Capacity Investment Scheme is one that I cited earlier to Senator McKim, but there are other policies such as the safeguard mechanism and the new vehicle efficiency standards. They'll add momentum to the emissions reduction efforts. We have always factored that in—those policies ramping up and how they will impact on our emissions trajectory pathways. We haven't done our own projections, Senator, but I know DCCEEW has the country on track for a 42 per cent reduction in emissions versus 2005. That's not far off the 43 per cent, and we'd urge the government not to throw the towel in but to stay the course and go a bit harder where possible.

**Senator HENDERSON:** Mr Kean, I would suggest to you that the government, to get to that target, doesn't need to go just a bit harder. It needs to dramatically ramp up its emissions reduction. I put to you that, based on what we're saying so far, the government is not going to get anywhere close to that. Your job as an independent agency is to call the government out, isn't it, when they're not achieving what they say they're achieving?

**Mr Kean:** That's why we've provided the advice in the annual report. But we also acknowledge that the architecture has been put in place to get there. We're relying on the department's modelling, which shows that, based on those policies that have been put in place, the 43 per cent will be achieved. We projected a number of those policies. Take, for example, the safeguard mechanism, which ratchets down by 2030 to around two per cent to continue on the current emissions reductions of five per cent out to 2035, underpinning our 2035 advice, for example. The assumptions that we've made are reasonable based on the policies that the government has legislated and put in place. I guess what we're saying is that there does need to be a level of ambition if we're going to hit these targets. No one's preparing for the Olympics based on your current time, Senator. You're preparing for what best—I think that's what my frame is when it comes to emissions reductions.

**Senator HENDERSON:** But isn't it the problem? I mean, already there's been slippage on the projection for the 2030 target. The government's now saying it'll be 42 per cent, not 43 per cent. Looking credibly at where we are, we're now only five years away. We've got a massive gap to achieve. If we don't get anywhere close to the 2030 target, we're not going to get anywhere close to the 2035 target. This is creeping up on us pretty quickly, wouldn't you say, Mr Kean?

**Mr Kean:** Senator, you're right. We do need to pick up the pace. But, again, this is not going to be a linear emissions reduction trajectory to 2030. It will be very lumpy, as Deputy Secretary Rowley pointed out just before. Some of the coal-fired power stations come out and they're replaced with renewables, for example. There will be steep emissions reduction cuts. We've looked closely at the assumptions that underpinned the 43 per cent, and obviously we've baked that into the assumptions that we've made for the 62 per cent, and we've got every confidence that we'll not only hit the 2030 target but that we will hit the 2035 target as well.

**Senator HENDERSON:** Can I just go to your advice on page 4. There are a number of elements required to be delivered in order to reach the 62 to 70 per cent range of emissions reduction by 2035. You're saying that, in order to get there, we need a sixfold increase in utility storage, a quadrupling of wind, and a tripling of utility solar by 2035, equating to about 90 per cent of renewables by 2035. We also would need to extend the safeguard decline rate out to 2035, and half of all light vehicles sold between now and 2035 need to be EVs. The government has not made those commitments, Mr Kean. On that basis, you can dream what you like, I guess, and I'm not saying that disrespectfully, but the government has not confirmed that it's going to deliver the policies that will support a 2035 target of that magnitude. Surely, as the independent agency advising the government, you would be concerned.

**Mr Kean:** This is why we provide an annual progress report, giving the public and the parliament an update as to how we're tracking and the policies required to get us there. The one thing we do know is that clear targets and good policy can achieve the objective set out. That's certainly what my focus is as the chair of the Climate Change Authority. When it comes to the 2035 target, our advice is grounded in evidence and science and the economics of technologies. Again, I'll come back to the point that I'm making. Clear policies and clear targets are exactly what's needed to hit where we need to go, and that's what the government is putting in place.

**Senator HENDERSON:** I don't disagree with you on the clear evidence and the clear science. But the bottom line is that your predictions are based on policies which are actually not being delivered by the government. For instance, the government has not committed to ensuring that all cars sold by 2035 are EVs. Given the shortfall, as you would say, in the policy delivery of the government, how then can you realistically say that we're going to get there, Mr Kean?

**Mr Kean:** Take EVs, for example. Yes, the government hasn't committed to that. However, what we know is that the economics are changing with EVs. And, just like we saw when it came to rooftop solar and now battery

storage, once the economics change of those technologies, the momentum becomes unstoppable. I mean, who would have thought that Australia would have the highest penetration of rooftop solar by 2025?

**Senator HENDERSON:** But we're only at about seven per cent of EV sales currently. I guess my concern, Mr Kean, is that you've presented a wish list saying, 'This is what we need to do to get to the target', but the government is not delivering on that wish list. There's this massive gap between where we are currently at in terms of emissions reduction and what your wish list or your dream is as to how we'll get there. Surely part of your job, Mr Kean, is to call the government out because they cannot get to these targets unless they change their policy settings.

**Mr Kean:** That's exactly why we have a platform annually to provide frank and fearless advice, not only to the government but also to the parliament of Australia, as to what the gap is between where we're aiming to be and where we're currently at and what policies are required to fill that gap. We continue to put forward advice as to what the government can do to meet those targets, but it's up to the government whether or not it follows that advice. Again, we've mapped out a pathway, but there are other ways to get to those targets.

**Senator HENDERSON:** Thank you.

**Senator ANANDA-RAJAH:** The climate deniers and the climate delayers in this place have abandoned net zero. Can you outline for us what the economic cost will be if Australia was to abandon net zero? Also, what impact would this have on our international standing?

**Mr Kean:** As I said earlier, clear targets and good policies matter. Abandoning net zero, in my view, would be a huge mistake. It would come at the expense of attracting capital that we require to build the infrastructure that drives our nation. That means jobs and that means economic growth. That's all at risk when you have policy uncertainty. Today, the majority of the world has signed up to net zero emissions. I've just come back from COP in Brazil, where I heard firsthand that some of our closest allies are absolutely committed to this, notwithstanding what's happening in the White House, I should say. Take, for example, Korea, where I heard from the most senior levels of their government that they'll be out of coal-fired power generation by 2040. Now, what does that mean for Australia? It means—

**Senator HENDERSON:** Sorry—

**CHAIR:** Please don't cut across Mr Kean.

**Mr Kean:** It means that, by 2040, 10 per cent of our thermal coal export revenue may not be able to be realised by Australia. We need to be thinking about other materials that can fill that gap. That's just one example. We know that the majority of the world's population has signed up to net zero. I think 87 per cent of the world's population is covered by net zero targets and 80 per cent of the world's GDP is covered by net zero targets and 78 per cent of total emissions. You'd be a very brave person to bet Australia's future on the rest of the world not heading in this direction. For a small open market economy that relies on trade with the rest of the world, I just think putting your head in the sand and denying economic reality and geopolitical reality would be a huge disadvantage for our country and our future.

**Senator ANANDA-RAJAH:** Thank you. With respect to the economic opportunities, in one of your statements, which I think came out with the Net Zero Plan, and I'm just going to paraphrase, you did suggest that Australia, although we produce about one to two per cent of emissions, can lower the world's emissions by nearly 10 per cent. Can you elaborate on what you mean by that? How does a country like ours lower the world's emissions and play such a big role in that?

**Mr Kean:** As the world decarbonises and the markets that have underwritten our prosperity for generations are starting to shift how they power their economies, we go from, I guess, contributing four per cent of the world's total emissions through our fossil fuel exports—if we realise the opportunity of using our cheap renewable energy and go with the value chain on things like iron production, we can displace around nine per cent of the world's emissions. We can do well as a nation by doing good. The markets are shifting. They're wanting different types of materials, resources and energy products from Australia. If we don't provide them, someone else will. That will come at the expense of Australian jobs and Australian economic growth, and that's too high a price for us to pay.

**Senator ANANDA-RAJAH:** I have a question for Mr Archer. Firstly, I just want to thank you for your seven years of service to the CCA. I wondered if you could use this moment to perhaps describe for us how you have built up the CCA since 2022 and why this is important for Australia's climate policy going forward. It's effectively your legacy, and I just want to give you a little bit of time to advise the committee on what that legacy is and, I guess, describe what should the next steward do.

**Mr Archer:** Thank you, Senator. When I first arrived, we had a staff of nine. We had a budget at one stage of \$1.5 million per year. That was increased to \$2.5 million a year. The main statutory functions that the authority

was originally established with back in 2012 to advise on targets had been stripped away, although we did retain responsibility for advising on some aspects of climate policy legislation. Following the 2022 election, the government did provide the authority with a renewed mandate to advise on Australia's emissions reductions targets under the Paris Agreement and on Australia's progress towards those targets. That's all set out in the Climate Change Act. It did provide a significant increase in funding to resource a larger organisation, and it did ensure that a full complement of authority members were appointed. The task over the last three and a bit years has been to rebuild the capability of the authority, primarily through re-establishing and building on a larger complement of staff and re-establishing a lot of internal organisational systems, which, unfortunately, had necessarily withered under the previous period, and to build the organisational capacity back up while also immediately delivering on the new mandate that the government had provided the authority with—so delivering the annual progress reports, continuing to deliver the statutory reviews that we were mandated to deliver, and then, on top of that, the Sector Pathways Review and the recent advice on the 2035 target. At times, we talked about building the plane while flying it. It was certainly challenging. But I think that, from our perspective, we've done the best we can to deliver on that renewed mandate and establish the foundations for the authority to continue to play a central role in providing independent evidence-based advice to the government on climate change policy. I think the government's mandate, rightly, was to ensure that the authority was well placed to provide that advice and to hold it to account on its progress against its targets. I think we've laid the foundations to continue to do that. I wouldn't presume to offer advice to the incoming CEO, but wish her and the organisation all the very best.

**Senator ANANDA-RAJAH:** Thank you, Mr Archer. I believe this is your last estimates, right?

**Mr Archer:** Certainly in this role, at least, Senator, that would be the case. Thank you.

**Senator ANANDA-RAJAH:** Thank you very much. I have one question to Mr Kean. Just going back to the 2035 target, because there's been a lot of discussion about this target, in your report you said it's ambitious, achievable and firmly in Australia's national interest. Do you still maintain that this 2035 target is achievable? What are some of the headwinds you see?

**Mr Kean:** The main headwinds are political ones. The technologies are there at an economic price point that is in Australia's interest and Australians' interests. That was borne out by the CSIRO modelling that we comprehensively undertook and the industry and stakeholder analysis that we conducted. Against the backdrop of those emissions reduction targets, Senator, we were able to demonstrate that there would be continued economic growth between now and 2035—every year between now and 2035—notwithstanding those emissions reduction cuts. That's as a result of changes in technology, improvement in the efficiency of wind, solar and storage. EVs are coming down the cost curve. Already today, the total life cost of an electric vehicle is cheaper than the total life cost on average of a combustion engine vehicle. The gap will only get wider. As we expect by 2029, the sticker price of an EV will be cheaper than its combustion vehicle equivalent. So again, the technologies are changing, they're improving and they're getting better. And those technologies not only happen to be the cheapest technologies but they are also increasingly becoming the cleanest technologies. And, as I said to Senator Henderson before, once the technology and the economics around those technologies change then the momentum becomes unstoppable. We have every confidence that our targets for 2035—yes, they are ambitious, but we've got every confidence that they're achievable based on international trends, economic trends and the scientific imperative that's required to reduce global warming as soon as we can.

**Senator ANANDA-RAJAH:** My final question is just on electric vehicles, because the coalition seem to be obsessed with electric vehicles. I know that Norway is held up as an exemplar, but there is another country in the developing world, Nepal, that has also done very well. Do you know much about Nepal and what targets they've hit in a relatively short time with respect to EV sales?

**Mr Kean:** I know that Nepal, Denmark, Albania and Ethiopia all have EV sales grabbing more than half the market at the moment. It shows what's possible. They're not the only markets, but they're good examples of how the right policies and the right incentives being put in place will see people moving towards accessing better technology that's also better for their hip pocket. We saw in New South Wales this weekend, based on policies that I put in place as a former coalition minister, that 100,000 EVs have been sold into that market. Again, we put in place policies that incentivised people to get an EV, whether they were around dealing with range anxiety by putting in more charging infrastructure, giving rebates around stamp duty or even something simple like letting an EV drive in the bus lane. These policies in place saw people consider the options and decide that EV was in their economic interests. Again, as the economics get better around EVs, the momentum will become unstoppable no matter what the vested interests try to do to stand in the way.

**CHAIR:** Senator Roberts.

**Senator ROBERTS:** Thank you for appearing again today. Mr Kean, my questions go to you. Your responsibility is to give the government correct advice. Is that correct?

**Mr Kean:** Frank and fearless correct advice—that's right.

**Senator ROBERTS:** That advice could steer the direction of our entire country and potentially affect every one of the 28 million people in Australia. Is that correct?

**Mr Kean:** We provide advice that's frank and fearless to the government of the day. It's up to the government of the day as to whether or not they'll accept that advice.

**Senator ROBERTS:** So you'd agree that it's vital for the country that your advice is accurate and correct?

**Mr Kean:** We provide the best advice based on evidence and science to the government. As you well know, Senator, it goes through the cabinet process, the party room process and the parliamentary process. It's up to the government and the parliament as to whether or not they accept the CCA's advice.

**Senator ROBERTS:** I'd like to go to your track record and some forecasts. I'm going to quote you from the Energy Insiders podcast in 2020 with Renew Economy. You said: 'If they're looking for a global competitive advantage when it comes to low-cost energy, we can provide it. But we've got to move quickly and we've got to move now. That is an opportunity for us to be an economic superpower—not just an energy superpower but an economic superpower. It's too big an opportunity not to grab.' Since you said that you can provide low-cost energy in 2020, power prices have increased astronomically. When are Australians going to get the cheap power you promised?

**Mr Kean:** According to the Australian Bureau of Statistics, they are already seeing those power prices coming down as a result of renewables. Look at power prices in October. They were 10.2 per cent lower than in the previous month. We know that they bounce around, particularly as state and Commonwealth rebates come into force or conclude, as it just happened to be. I, as a former energy minister in New South Wales, and we, as the Climate Change Authority, are acutely aware that some households and businesses are doing it tough and are looking at what costs they can contain. In the energy and climate war that we seem to be mired in yet again, perspective can be the first casualty. In the present consumer price index basket of goods and services that the Australian Bureau of Statistics uses to track inflation in the economy, electricity prices have a 1.84 per cent weighting. That's not nothing, but I think it's an important bit of context for you.

Going back to those price trends that you talked about and that I stand by, no doubt you will have noted that wholesale prices have largely been in retreat of late, and that's because renewable energy's share of the grid is increasing. Check out AEMO's *Quarterly energy dynamics* report for the September quarter. If you need the facts, they're right there available to you. You'll see that wholesale power prices across the national electricity market were on average 38 per cent below those of the June quarter this year. Compared with the September quarter last year, the fall was 27 per cent. That's not because more fossil fuels have entered the market; that's because renewable energy is pushing down wholesale prices. The more cheap energy we get into the market, the better off consumers and businesses will be.

**Senator ROBERTS:** Are wholesale prices going to be cheaper or more expensive than they were five or 10 years ago? Are they cheaper or more expensive than they were?

**Mr Kean:** As I said, just look at the *Quarterly energy dynamics* report that AEMO has just put out. It is clearly showing that wholesale prices are only heading in one direction. They make up about a third of a typical household's—

**Senator ROBERTS:** Are they cheaper than they were five or 10 years ago?

**Mr Kean:** I'm not referring to the wholesale dynamics report comparing them to 10 years ago. I'm referring to the most recent one, which shows that wholesale prices are coming down.

**Senator ROBERTS:** My question was: are they cheaper or more expensive than they were five or 10 years ago?

**Mr Kean:** I don't have that data in front of me, but I'm very happy to table that data for you.

**Senator ROBERTS:** Thank you. Wholesale prices are only one part of someone's bill. There will be many people watching here—small businesses, large businesses, families—who will have taken issue with what you said. An increasing part is the network charges, especially for transmission. Are the network charges going down as well?

**Mr Kean:** As I said, wholesale prices make up about a third of the typical household bill, and we know that the cheapest form of new generation is renewables. We know that ageing coal-fired and even gas-fired power plants will shut in the coming decade or so. So, to unlock that cheap wholesale energy produced by renewables,

you will need more networks built. That's for sure. Certainly I can talk to the situation in New South Wales, and perhaps some of these questions can be directed to the energy minister, which I am no longer. But what I will say, as the former energy minister in New South Wales, is that, when we legislated the roadmap, we looked at the net impact on consumer bills of transitioning towards a firmed renewables-based grid, including transmission line upgrades. What we were able to clearly demonstrate is that net, on average, consumers would be much better off as a result of the transition.

**Senator ROBERTS:** In your role as New South Wales energy minister you commissioned the \$1 billion Waratah battery, which recently suffered a catastrophic failure. You commissioned and designated as a top-priority project this huge expenditure as a stopgap for the closure of Eraring this year. It was forecast to close this year. Eraring didn't close this year. Experts are saying it might not close before 2030. So the \$1 billion shock absorber you put in place as New South Wales energy minister isn't needed anymore as a stopgap. If you wasted \$1 billion on a battery that wasn't needed, why should we trust that you can provide good advice to the federal government? Can you explain exactly how a 0.7 gigawatt battery that lasts for two hours is meant to replace a coal-fired power station that can run at 2.8 gigawatts for 23 hours a day.

**Mr Kean:** I'm very happy to explain what we did when it came to considering the exit of Eraring. It's a matter of public record that Origin Energy suggested they would bring forward the closure of that coal-fired power station seven years earlier than we anticipated. As the former minister for energy, I can say we conducted an arms-length process headed up by a number of experts, including Kerry Schott, the former chair of the Energy Security Board. We ran a competitive tender process for different technologies to fill that gap. We had input from AEMO, the Australian Energy Market Operator, the engineers who run the system, and we compared the cost of extending Eraring for 18 months with a number of other options to fill that capacity gap.

In terms of the work that was done by independent expert advice, we were advised that the best option for the total New South Wales power grid was to build a systems battery, a SIPS battery, that would unlock greater capacity in the transmission networks to be able to sweat the other coal-fired power stations harder and would open up the ability to bring more renewable energy into the system. You're characterising the battery as a storage battery. It's not a storage battery; it's a systems battery that unlocks more capacity and new transmission networks. That means you can run your existing coal-fired power stations harder—think Vales Point and Bayswater—and you can get more renewable capacity stored. That was the basis from which we went down that path, and anyone suggesting otherwise is being dishonest.

**Senator ROBERTS:** On New South Wales election night, when your government was defeated in 2023, I distinctly remember the incoming Labor energy minister flagging the need to keep Eraring open. She was quite clear about it. She was on a panel and on the night of the election she said, 'We're going to have to do something about keeping Eraring.' They weren't her words, but that was basically what she said. Why would she have that point there? Many people think that New South Wales cannot operate as an industrial economy without Eraring continuing, and now there are talks of Eraring continuing. What did she know as opposition energy minister and spokesman that you didn't?

**Mr Kean:** Maybe I could refer you to the evidence of Deputy Secretary Duggan who just appeared before the inquiry. He made the point that the average age of our coal-fired power stations in the national energy market is 38 years and the average end closure date of coal-fired power stations is 42 years. We can't keep putting bandaids or temporary solutions in place. We need to plan for the future. What you need are clear targets and good policies to get new capacity installed. Just because you say you're going to extend an aged, clapped-out coal-fired power station doesn't mean it's going to work. We need to build new capacity before the old capacity closes. That's the responsible thing to do. Whether it be in my role as the former New South Wales energy minister or in my current role as the independent chair of the Climate Change Authority, I will always act on the best evidence and advice of experts. I'm advising you to do likewise.

**Senator ROBERTS:** You're hiding behind averages. A lot of damage can be done doing that.

**Mr Kean:** No. I'm just making the point.

**Senator ROBERTS:** I asked you a question about Eraring. Why did the incoming Labor energy minister want to keep Eraring open?

**Mr Kean:** It's another question for—

**Senator Ayres:** I think it's outside of—it's pretty hard for Mr Kean to put—

**Senator ROBERTS:** It goes to the accuracy of forecasts.

**Senator Ayres:** himself into the mind of the current New South Wales energy minister. I think that's a very difficult thing for him to do. But Mr Kean's right—the biggest driver of cost in the electricity system at the

moment is our ageing coal generators and the incessant, regular outages. There has not been a single day over the last three weeks where there hasn't been an unplanned outage. A couple of days ago we had Bayswater, Gladstone, Loy Yang, Vales Point and Yallourn—a total of 2½ gigawatts of unplanned outage. That drives cost in the system. Mr Kean's point is right. The way to deal with that is to build more renewables, build more storage and build more transmission. Nobody from Cape York to Bruny Island or from Sydney to Perth is going to build a coal-fired power station, because it's a dumb idea. It's a dumb idea economically.

**Senator ROBERTS:** Has the national electricity market been tested?

**Senator Ayres:** It's a dumb idea in commercial terms. It's a bad idea for the grid. It builds additional cost into the system. At the moment we are dealing with the reality of the fact that it's coal that's driving cost. A decade of disinvestment is compounding that. That's the truth of it. If you want to keep prosecuting the imported culture wars, go for your life.

**Senator ROBERTS:** Last question?

**CHAIR:** Yes.

**Senator ROBERTS:** Okay. The minister seems to be unaware of the electricity rules and the national electricity market, which favour solar and wind and destroy coal. We'll leave that aside. You say: 'The world is moving in this direction. Fifty-three per cent of the world's GDP has signed up to achieve zero net emissions by 2050, so it's only going in one direction.' Yet we've seen the USA, China and India—we've seen massive numbers of countries—walk away from net zero, and others don't bother complying. Do you still stand by your figure that 53 per cent are committed to achieving net zero by 2050?

**Mr Kean:** No, I don't. I'd like to revise that number. It's now 165 countries that have announced a net zero target. These countries account for 78 per cent of global emissions, 79 per cent of GDP and 87 per cent of the global population. That was in 2022. That's a vast increase since I cited those figures a few years ago. So 149 countries have announced a net zero target by 2050 or sooner and around 50 countries have enshrined their net zero target in domestic legislation—including Australia—with more planning to do so. That's 37 out of 38 OECD member countries having a net zero target. So, no, I don't stand by those previous comments. They've been exceeded since then, and people denying the reality of the momentum behind the need to reduce our emissions are not acting in Australia's interests.

**CHAIR:** Senator McKim.

**Senator McKIM:** Mr Kean, I confess I'm at a little bit of a loss to understand your optimism that the 2030 and 2035 targets are going to be met. Is it your evidence that we're on track to meet those targets under current policy settings?

**Mr Kean:** It's my evidence that the policy architecture has been put in place that can help us achieve those targets, yes. That is my evidence.

**Senator McKIM:** Alright, but you said earlier that you've got every confidence that we're going to meet those targets, didn't you?

**Mr Kean:** We did work looking at the impact of the rollout of renewables. In our 2035 targets, we took the AEMO 'step change' scenario from the integrated system plan, which looks at a 90 per cent penetration of renewables into the grid, replacing coal-fired power stations—so about a third of the total emissions. We assumed that 50 per cent of all new car sales would be EVs. The government has the vehicle efficiency standards in place. That will go some way, but there are other things that governments can do—for example, rolling out charging infrastructure and putting other incentives in place that will encourage the uptake of EVs. We think that is absolutely possible. With regard to the safeguard mechanism, obviously the ratchet rate declines from 2030. We have assumed that the government will continue at the five per cent trajectory to 2035. They're assumptions we've made. They're not necessarily the policies the government will follow, but do I have confidence that we can get there? Yes, I do.

**Senator McKIM:** So you've got confidence that we can get to our 2035 target despite the department confirming that, under existing policy settings, we're headed for a 48 per cent reduction by 2035, which is obviously a 14 per cent shortfall on even the very low bottom of your target range. On what basis do you have such a high degree of confidence, given that under existing policy settings we are falling abjectly short of even the very low bottom of your range, and the government hasn't announced any new policies? You're pinning your hopes and dreams on the Labor government putting in place an entirely new suite of policy settings across a range of policy areas, aren't you?

**Mr Kean:** No, that's not right. Let me give you the perfect example: electric vehicles. Obviously, the government has policies in place, but those policies don't take into account the economic costs, or the changes in the economics, of some of those technologies. We know that today an electric vehicle—total life cost—is cheaper than the equivalent combustion engine vehicle, and the sticker price for that same vehicle will be cheaper by 2029. So, again, that will just mean the savings and the economic incentives for consumers will become pronounced. The assumption that I made—

**Senator McKIM:** So the market's going to get us there, is it?

**Mr Kean:** The market will help. Good policies, clear targets and economics will get us there. We need all of these things to work together.

**Senator McKIM:** It's a 48 per cent reduction by 2035 on existing policy settings according to the department, and the government has ruled out some of the measures that you have said are 'required'—your words—to get to the bottom of your target range by 2035, and yet you have an extremely high degree of confidence that we're going to get there. With respect, that doesn't stack up.

**Mr Kean:** Well, I absolutely have a high degree of confidence that we will get there, based on past experience. When the CSIRO was modelling transport emissions just 10 years ago, it didn't even factor in EVs, and now EVs are about 10 per cent of total new car sales. Technologies arrive that you don't foresee. I didn't bet on that in our modelling, but I've assumed that the tailwinds of technology and economics, as well as good targets and good government policy, which I'm sure you would be all for supporting, will help us achieve those pathways that we've set out in our advice.

**Senator McKIM:** In fact, the Greens did the government a massive solid in terms of its emissions reduction targets last week by insisting that the 'continuous use' exemption for land clearing be removed from the EPBC Act and that the exemption enjoyed by logging under regional forest agreements also be removed. I'll put my credibility on the fact that both of those measures will result in massive reductions in greenhouse gas emissions in Australia in the LULUCF sector. We've done the government a massive solid there, but it strikes me that we're doing more heavy lifting than the government in terms of meeting your targets. Thanks for listening, by the way, Mr Kean. You can just take that as a comment. If it's okay I'll go to Mr Archer, because you threw this topic to him earlier. Mr Archer, I think you gave evidence that ceasing the logging of old-growth forests and halving reclearing rates would result in 14 million tonnes in 2035. Was that what you said?

**Mr Archer:** That's correct.

**Senator McKIM:** That's on the assumption that those two actions happen in 2035, correct?

**Mr Archer:** At the very least—yes, that's right. That's what you would need in 2035. That's not to say that it couldn't be done sooner than 2035, per our earlier conversation.

**Senator McKIM:** So, just to be clear, you're saying that, if those actions occurred in 2035, the emissions savings in 2035 would be 14 million tonnes. Have I got that right?

**Mr Archer:** That's right, but I think it's more likely that you would achieve that progressively, between now and 2035, than by flicking a switch.

**Senator McKIM:** In fact the government has ruled out—

**Mr Archer:** No—I'm just explaining. Leaving aside what the government has or hasn't done, in terms of our analysis, we're not saying that you flick a switch in 2035 and make it happen in that year, but, through our illustrative scenario, that's how you achieve what we've recommended in terms of the target range from the contribution from those areas.

**Senator McKIM:** I see. You said that you would be required to cease logging old-growth forests and halve reclearing rates in order to meet the bottom of the target range, but in regard to that matter in particular—ceasing old-growth logging and halving reclearing rates—your view is that that would only need to happen in 2035 in order for the bottom of your target range to be met, as long as all those other matters that you've outlined in your executive summary were delivered. Is that right?

**Mr Archer:** Yes. I think I made the point that, in the case of these particular parts of the economy, the numbers are the same, in terms of our scenarios, whether you're looking at the lower end or the upper end of the range. Per what I described, it would be hard to get much more from those areas to achieve the whole—

**Senator McKIM:** Well, you could get more from them by doing it earlier.

**Mr Archer:** That's a separate conversation—

**Senator McKIM:** That's the question I want to go to.

**Mr Archer:** and I fully acknowledge that. What we've put together here is an illustrative scenario of what would be required in 2035. There are a lot of different pathways to get there, and it's also the case—and we explain this later in the report—that you could have different contributions from different sectors, including from these land based sectors, to achieve that outcome in 2035. You could do less in this sector and do more in other sectors.

**Senator McKIM:** I understand that, but I asked Minister Ayres about this last time, when he made it very clear the government had no intention of ending old-growth logging, and he blithely waved his arms around and said the government would find the savings somewhere else in the economy. It's hardly enough to give Australians confidence. Perhaps it's a question better addressed to Mr Kean, but I'm happy for anyone to answer it. It's a simple fact, isn't it—the government does not have a pathway outlined to meet either its 2030 or its 2035 targets, does it?

**Mr Kean:** The government has clearly accepted that there's more to be done—to refine and review existing policies and to introduce new ones. The point that I'd make to you is that technology and capital aren't static, and I doubt the government will be, either. As I was saying to Senator Henderson just a bit earlier, if you were training for the 2032 Olympics now, you wouldn't set and forget; you'd constantly adjust and evolve your plan as you learnt about your own capabilities and those of your rivals. Preparing to meet and beat targets five, 10 and 25 years out shouldn't be any different.

**Mr Archer:** As part of our targets advice, we also recommended that the government adopt a carbon budget target, which it did. That's based on a straight-line trajectory. So we certainly haven't ignored the idea that you need to be reducing emissions between now and 2035. The sooner we do that, the better.

**CHAIR:** Senator Canavan.

**Senator CANAVAN:** I have some follow-up questions to Senator Henderson's questions. She raised the issue of the safeguard mechanism, the recommendation you made to extend the decline rate. I'm sure you're aware, the decline rate is currently set at a rate of 4.9 per cent, roughly, as a default. Have you calculated what the decline rate would need to be between 2030 and 2035 to hit at least a 67 per cent reduction?

**Mr Archer:** The way we went about developing our recommendations in the industry and resources sector involved doing our own what we've called ground-up analysis of where we think technologies currently are.

**Senator CANAVAN:** I'm not a voting member of this committee; I'm not sure if you know that, Mr Archer. I've got to get back to other committees, and I'm trying to be productive and helpful to this committee. I just asked a question. I don't need to know all that other extraneous detail. Have you calculated what the decline rate would need to be between 2030 and 2035 to hit your targets as proposed?

**Mr Archer:** That's not how we went about developing the advice, and so—

**Senator CANAVAN:** Just a no would suffice.

**Senator Ayres:** I appreciate that you might have to run back to your other committee. I appreciate that it may not be convenient, but the witness gets to answer the questions in the way they see fit, and, if it requires additional detail, he's entitled to do it. You don't get to boss him around about how he answers the question. That's not the way this works.

**CHAIR:** Let me just take back the call; I'm sorry, Mr Kean. Yes, Senator Henderson, you've raised a point of order.

**Senator HENDERSON:** On a point of order, Chair, Senator Canavan is entitled to ask the witness to be directly relevant to his question. That is within the standing orders.

**CHAIR:** It is. I understand the point of order, as it's been taken. I also understand Senator Canavan's question. I think the witness was being relevant in response to it, and it's appropriate that the witness provide an answer they feel is contextually and substantively right. I don't think the witness had gone on for too long at that point.

**Senator CANAVAN:** Fair enough, Chair.

**CHAIR:** The witness will have an opportunity to answer the question, and then I'll come back to you, Senator Canavan.

**Mr Archer:** I'll just check in with Matt. Matt, were you trying to come in then?

**Mr Kean:** Senator Canavan, the only thing I'd say is that we didn't model to get to a specific number. We took an assumption that we would just extend the existing decline rate on the existing cohort of businesses that the safeguard mechanism currently applied to.

**Senator CANAVAN:** So your recommendation is that the 4.9 per cent continue to 2035?

**Mr Kean:** Correct. Well, the assumption that we made is that the 4.9 per cent continues to 2035. But, again, that's up to the government as to whether they accept that or not.

**Senator CANAVAN:** On my calculations—I would have thought you'd probably do this yourself; it's not that hard—to go from the 43 per cent to the 67 per cent, at least to 67 per cent, if the safeguard mechanism facilities were to make their proportionate reduction based on that 67 per cent cut, we'd need to increase the decline rate on a compound annual growth calculation to 7.8 per cent reduction a year. Have you calculated that?

**Mr Kean:** We didn't do it that way. We just assumed the existing 4.9 per cent continues to 2035, and then we looked for the emissions reductions in other parts of the economy.

**Senator CANAVAN:** Even if it wasn't your recommendation, you have said that, as an economy-wide, we should go from 43 per cent to 67 per cent in just five years. It's a fair jump, I think you admit in your report. It's quite challenging. But yet you don't even calculate for a smelter, a refinery or a mine what that annual reduction would need to be. Are you telling me that you haven't even calculated that figure?

**Mr Kean:** No, that's not what I'm telling you.

**Senator CANAVAN:** Well, what is the figure?

**Mr Kean:** What I'm telling you is that we projected that the existing safeguard settings remain in place to 2035.

**Senator CANAVAN:** I mean, it makes sense—I believe the 4.9 per cent figure is roughly to get to net zero. The problem here, and one of the issues I've got with the advice you've given, is that you're trying to go faster earlier, which seems a little strange to me. Your recommendation, if adopted, to get the safeguard facilities down to a 67 per cent reduction would require a nearly eight per cent annual reduction for these firms, which are already struggling to achieve the 4.9 per cent, clearly. It's just a basic calculation. I can tell you the CAGR formula, if you like. It's just in a spreadsheet. It's just one year over another, to the power of one, divided by year and minus one. That's it.

**Mr Kean:** The assumption that we made in our ground-up analysis is that the existing safeguard settings stay in place until 2035 and that other parts of the economy, primarily energy and electricity, would do more of the heavy lifting.

**Senator CANAVAN:** So, in your advice for modelling, then, do you work out, 'Okay, we need to get this much abatement'? My understanding of the way we do the NDCs is that it's a budget, so it's not just hitting a 67 per cent target by 2035; it's actually the area under the curve. Have you worked out which parts of the economy, which parts of the sectors, as per how we divide our emissions under the Paris Agreement, would make the contribution to get to the 67 per cent?

**Mr Kean:** What we did was a ground-up analysis, looking at all sections of the Australian economy, looking at all the technologies that were available at the different price points, and then took assumptions as to which ones were viable and could be rolled out at scale, which ones would require a green premium to roll out at scale and which ones we didn't think were feasible. That was the basis on which the 62 to 70 per cent was arrived at.

**Senator CANAVAN:** I'll move on, but I'll stay within the safeguard mechanism situation. I met with a cement manufacturer the other day. They are getting undercut like there's no tomorrow from Indonesian cement products, to the point that they're considering having to close cement production facilities here in this country. A big part of what they said to me was about the safeguard mechanism—that's the big problem, relative to Indonesia, which does not face a carbon tax. Did you meet with the cement industry or other related industries that are currently suffering under the safeguard mechanism before recommending the extension of the decline rate?

**Mr Kean:** I'll throw that to the CEO, but we did meet with over 500 businesses and had submissions from the industry association—

**Senator CANAVAN:** Did anyone meet with the cement industry?

**Mr Archer:** I'd have to take that on notice. As the chair said, we've had a lot of meetings and received a lot of submissions. We certainly had meetings with a range of industry groups at which the Cement Industry Federation was represented, but I would have to check our records to see whether we specifically met with the industry through the course of the review.

**Senator CANAVAN:** Did you consider the issue of carbon tariffs at all?

**Mr Archer:** We did note that the government was exploring a carbon border adjustment mechanism, which we think is an important part of the policy toolkit when one is working out how best to facilitate the transition of industry to lower emissions, because there are very real international competitiveness issues that need to be addressed. Of course, there are already some elements of that built into the safeguard mechanism through the

adjustments for the baseline adjusted facilities, which are trade exposed. So, yes, we have considered that, and we think that that's an important part of the policy toolkit.

**Senator CANAVAN:** So you think it should be considered? Try to help me out here. The contention that Mr Kean put earlier and that I've heard often from many people is that pursuing net zero will actually lower our energy prices. There's all this technology, and it's going to be clean and green and also more efficient. If that were the case, why would we need to put on a carbon tariff to protect our own industry? Wouldn't we be more efficient than those countries that do not have net zero policies or plans in place sufficient for us to apply the carbon tariff?

**Mr Archer:** It's not simply a case of deploying renewable energy, but there are plant and equipment upgrades that are needed. We're often talking about very large pieces of kit and talking about—

**Senator CANAVAN:** So it's not cheaper then. You've got to invest all this money.

**Mr Archer:** No, Senator—

**Senator CANAVAN:** If it's cheaper, why would you need a tariff?

**Mr Archer:** What I'm trying to convey is that it's a far more nuanced picture than what you're describing.

**Senator CANAVAN:** You weren't not nuanced before. Before Mr Kean was saying that this is all rosy.

*Senator Ananda-Rajah interjecting—*

**Senator CANAVAN:** If you've got a point of order, make one, Senator Ananda-Rajah. You said before it would be cheaper for us and that there's going to be an economic opportunity for us as a country. I just don't seem to get, though, if it's cheaper for Australian businesses to pursue net zero—to lower emissions and to have these safeguard mechanisms and carbon taxes apply to them—why we would then need to impose a tariff on our border for two countries that are not doing it.

**Mr Archer:** What I was trying to explain was that there are transitional issues that we are working through in the economy as part of this transition to net zero emissions. The authority has certainly not said that it was going to be easy or that the journey will be the same for all industries across the economy.

**Senator CANAVAN:** So in the transition it's more expensive? I'm just trying to work it out here. In the transition—

*Senator Ananda-Rajah interjecting—*

**CHAIR:** Senator—

**Senator CANAVAN:** I thought he was finished. You're trying to help him out because he's clearly struggling, but fair enough.

*Senator Ananda-Rajah interjecting—*

**CHAIR:** Senator Ananda-Rajah, please.

*Senator Ananda-Rajah interjecting—*

**Senator CANAVAN:** You're kind of doing the same thing you're accusing me of right now, but anyway.

**CHAIR:** We are getting to that stage of the evening it seems, but I think what was happening was—and I say this respectfully, Senator Canavan. You should give the official—

**Senator CANAVAN:** I thought he was finished.

**CHAIR:** I don't think he quite was, so I think he needs a chance to respond to your question, and then we can go back to you—actually, I will need to move the call on after that.

**Senator CANAVAN:** Can I have one more?

**CHAIR:** You may have one more. Mr Archer or Mr Kean, did you want to finish that response?

**Mr Kean:** Only to add that you're not quite reflecting the advice. We clearly say that some sectors of the economy can go further and faster based on the technologies available to it. In some sectors the technologies aren't available, so we discounted the contribution that they could make. Cement is one of those areas.

**Senator CANAVAN:** I just want to finish this line with the situation in Indonesia, which I'm very, very concerned about, but no-one seems to be. Did you look at the relative costs of production in our competing countries like Indonesia? According to the IEA, Indonesia now has an electricity price for industry that's less than a third of what Australian industries face. Indonesia has already effectively stolen our nickel industry through the pursuit of a green premium, which failed, on the behalf of BHP, and now the new president of Indonesia is explicitly targeting copper and aluminium. Have you looked at this competitive threat here? Indonesia in 12 years has doubled its coal production. It's building coal-fired power stations like they're going out of fashion, financed

by China. Have you at all looked at this threat to our industry and our competitiveness from one of our closest neighbours who is barely even paying lip service to net zero and stealing all of our jobs?

**Mr Archer:** I make the observation that clearly electricity prices and energy prices are a very significant element of the competitiveness of our economy and industries within our economy. I think we've heard a lot of discussion today about the way forward to ensure that we have the lowest possible energy prices in Australia while also addressing the imperative to reduce emissions. At the same time, we're dealing with an ageing coal-fired power station fleet. Certainly today and in previous hearings we have gone over this ground a number of times. All the evidence is that renewables firmed with other technologies provide the lowest cost pathways forward for energy.

**Senator CANAVAN:** Can you explain why Indonesia has a third of the electricity prices of us when it has expanded its coal production by so much. If it was not investing in the cheapest form of power, why is it able to deliver electricity to its factories at a rate—

*Senator Ananda-Rajah interjecting—*

**CHAIR:** Senator Ananda-Rajah—Senator Canavan, this will really be your last question.

**Senator CANAVAN:** Anyway, if I could just start again after that rude interruption—as I was saying, I'm just seeking an explanation here. If renewable energy is the cheapest form of power, how is it that Indonesia—who are investing so much in coal that the extent of their expansion in that 12-year period is the size of the Australian coal industry. They've expanded coal mining by 450 million tonnes in 12 years—a doubling, as I said. How is it that they now have industrial electricity prices, according to the International Energy Agency, at a rate less than a third of Australia's?

**Mr Archer:** I haven't done any analysis of Indonesian electricity prices, so I'm not in a position to answer your question.

**Senator CANAVAN:** That's a bit of a problem. If we're going to make advice on climate change targets—

**CHAIR:** Senator Canavan, I'm now going to—

**Senator CANAVAN:** you'd think you'd look at what competing countries are doing. They're competing for our jobs and our industry.

**Senator Ayres:** Of course, Indonesia—

**Senator CANAVAN:** No, I'm not done.

**Senator Ayres:** is not the only economy where there are—

**Senator CANAVAN:** I've got other examples, if you like.

**Senator Ayres:** lower labour costs, where there are subsidies behind the border. I know lower labour costs are fine with you, but they're not with me.

**Senator CANAVAN:** No, they're not. No, you're going to get lower labour costs if you drive our energy prices up. The reason we can have high wages—

**CHAIR:** Senator Canavan, just as—

**Senator CANAVAN:** is because we had cheap energy.

**Senator Ayres:** And your prescription—

**Senator CANAVAN:** Now we don't, because you're pursuing madness and—

**CHAIR:** Senator Canavan, Minister, just for one moment—

**Senator Ayres:** I don't want to trigger your weird identity politics with an assertion of what the facts are.

**CHAIR:** Senator Canavan, please don't interrupt the minister. Minister, you have the call.

**Senator Ayres:** It's interesting that he doesn't want to hear it, doesn't want to hear the evidence on these positions. He just wants to go back to get on the keyboard and engage with the silly-billies, basically. There's no point engaging with them, so we won't.

**CHAIR:** Senator Hodgins-May.

**Senator HODGINS-MAY:** To reach 1.5 degrees, we have to shut down existing fossil fuel infrastructure and obviously not open any more. Your report was silent on doing anything about coal and gas exports, despite the report acknowledging that our exports are more than double our domestic emissions. Have CCA given up on 1.5 degrees, or are we turning a blind eye to exports because it's politically uncomfortable for the government? I'd love some intel on that, please.

**Mr Archer:** I would point you to part 4 of the *2035 targets advice* report, where we actually do discuss at some length the idea of Australia working with its trading partners to decarbonise supply chains. So I think to say that we've completely ignored this issue is a little bit of unfair characterisation of the advice that we have provided. We did also include the idea that Australia could consider looking at making statements about scope 3 emissions in its nationally determined contributions. This goes to the idea that Australia can contribute to the global goals of the Paris Agreement beyond just looking at its domestic emissions, and then, in fact, it will be in our economic interests to do so.

The example that I would point to—I think it might have been referred to earlier today, actually, by our chair—is that the Republic of Korea has announced a schedule to close its coal-fired power station fleet. Korea is a significant importer of Australian coal. That just highlights what we can expect more of in the future. So it would be in Australia's interests to be working with our trading partners as they seek to determine their pathways to decarbonising their economy to ensure that we can play a part in that and help underpin Australia's continuing economic prosperity.

**Senator HODGINS-MAY:** Would you say that Australia has a role to be a leader, not just wait to see what our trading partners want? It brings to mind the drug-dealer defence—if we're not providing it, someone else will, and let's wait to see what they want. If we're leaders—and we purported to be when we wanted to hold COP next year—it seems the sort of thing that maybe we should be setting parameters around, not waiting for others to tell us what they do or don't want.

**Mr Archer:** I think the authority's perspective is that this is something we need to do in partnership with our trading partners. It's not going to work so well—again, I think this was discussed earlier today—if we simply choose to exit—

**Senator HODGINS-MAY:** We're a sovereign country though.

**Mr Archer:** What I'm trying to say is that it's going to be in our economic interests to work with our trading partners so that we continue to partner with them on those low-emissions solutions, which they will require. That's not going to be achieved if we just simply walk away from them in the markets that we are currently operating in. I think this reflects a broader point that tackling global emissions is a collective challenge and that countries need to work together if we're going to find ways forward to do it such that our economies also collectively continue to prosper.

**Senator HODGINS-MAY:** With respect, that sounds like a very bureaucratic answer. Of course we can keep relationships with these countries, but I'm just thinking of parents listening in thinking, 'Okay, so we just keep selling and exporting coal and gas until they say that they don't want it anymore.' It feels like leadership, in that respect, is really void and absent.

**Mr Archer:** Senator, again, I think you're mischaracterising my comments. I'm not saying that Australia should not show leadership in these areas, I think it—

**Senator HODGINS-MAY:** Well, how are we showing leadership?

**Mr Archer:** behoves Australia to do that. I think, through some of the protocols or agreements that have been coming forward in the Paris Agreement—Australia has been a signatory to them; that was discussed earlier in the proceedings today. Certainly, having a leading role in negotiations on COP31 presents further opportunities for Australia to take that further.

**Senator HODGINS-MAY:** Your sector plans report tallied up around 70 to 80 million tonnes of domestic emissions created each year in the export of coal and gas. I think it's probably a little more due to the underreporting of methane. That's a huge amount of emissions left untouched. Do you think more should be done diplomatically to set timelines and pathways? I hear what you're saying—we've signed some agreements; we signed the Belem pledge—but do you think that we're doing enough?

**Mr Archer:** Those emissions are not untouched or whatever the phrase was that you used, because we do have the safeguard mechanism in place. In our annual progress report this year we have said that we would like to have a closer look at what more we could do to rapidly reduce fossil fugitive emissions. The government accepted the recommendation that we do that, so that's a piece of work that the authority will be doing over the course of this year. If you look back over previous recommendations in our annual progress reports and in our review of the National Greenhouse and Energy Reporting Scheme, we have been spending quite a lot of attention on the issue of what more we can do to address the fugitive emissions that are associated with our fossil fuel exports.

**Senator HODGINS-MAY:** Thanks. No further questions.

**CHAIR:** I note that we are running approximately five hours and 45 minutes behind schedule. On that basis, it's very unlikely that we'll get to the Inspector-General of Water Compliance and the Department of Climate Change, Energy, the Environment and Water in relation to outcome 4 and the subsidiary. So, with gratitude to my colleagues, I am able to release those agencies this evening. I appreciate the cooperation that it took to get us there and say thank you to those involved. Now I'm going back to the coalition. Senator McKenzie.

**Senator McKENZIE:** Mr Kean, welcome. In September you released your advice on the 2035 emissions reduction targets. Part of that advice impacts the transport sector, where you have said that, to meet the 62 to 70 per cent target, the following is required:

Around half of all light vehicles sold between now and 2035 would need to be EVs.

On industry's calculations, that's around six million new cars. What departments did you consult with in reaching that target for electric vehicle sales?

**Mr Kean:** Thanks, Senator; it's good to see you. We consulted broadly throughout the target-setting process. I think that the evidence I provided earlier to some of your colleagues was that we consulted with over 500 stakeholders. We received over 500 submissions. I personally conducted a number of—

**Senator McKENZIE:** Sorry. As the shadow minister for transport, I am specifically interested in the transport stakeholders you consulted with. I know time is short. I've been dying to see you. I really just need you to be super specific.

**Mr Kean:** We can table the transport sector stakeholders that we met with through this process.

**Senator McKENZIE:** Thank you. What has been the nature of the engagements that you and your authority have had with the federal infrastructure and transport department?

**Mr Kean:** I will hand to Brad Archer to deal with those technical issues.

**Senator McKENZIE:** Thank you.

**Mr Archer:** It's certainly my understanding that we have had discussions between officials of the Climate Change Authority and the department of infrastructure on the issues relating to emissions reductions in the transport sector. I don't have the specifics in front of me, but I'm confident that the conversations have been had.

**Senator McKENZIE:** The transport sector makes up around 24 per cent of Australia's emissions—the third-largest sector. Passenger and light commercial vehicles only make up a share of 59 per cent of that sector's contribution. What contribution, if any, does the CCA project other sectors—including rail, heavy vehicle, aviation and maritime—need to make in order to achieve the range of 62 to 70 per cent emission reduction?

**Mr Kean:** Brad, would you like me to have a go at that?

**Mr Archer:** Certainly.

**Mr Kean:** Perhaps I can walk through some of the pathways that we thought were possible in the transport sector. Obviously, the headline figure that's gotten a lot of attention is the sale of EVs for light passenger vehicles, but we have also assumed an uptick of EV sales for light commercial vehicles—around 70 per cent, I believe. When it comes to rigid trucks, heavy rigid trucks, articulated trucks and buses, we assumed fewer sales of EVs. For SAF, we didn't really lean in on that. I think we took Qantas's voluntary target, which was around 10 per cent for SAF—we just took the number that Qantas advised that they were pursuing in their target. Then we had small emissions reductions coming from active and public transport and electrification of rail. They were only small. The main game was in the light passenger and commercial vehicles.

**Senator McKENZIE:** Thank you. That makes a lot of sense. What modelling did you actually rely on? I know you've got a list of stakeholders, but what actual data did you use? Given the commentary—you will have seen it; the vehicle manufacturers, including those representing EV manufacturers, say it's impossible to get to the target that you've set in terms of new vehicle sales in that timeframe—I'm very interested to understand what data you used to come up with that figure.

**Mr Archer:** I think there are a couple of things. I will say that you quoted FACI earlier, and they've been trying to stand in the way of Australians getting access to better and cheaper technologies since day one, backed up by some of their big donors—like Toyota, for example. There are more voices that do believe that this is possible. Take, for example, the Electric Vehicle Council. Julie Delvecchio has a very different view on these matters.

**Senator McKENZIE:** They don't have any vested interest, do they? Let's keep the politics out of it.

**Mr Kean:** They represent—

**Senator McKENZIE:** Let's keep the politics out of it. I'm interested in the facts.

**Mr Kean:** They obviously represent—

**Senator McKENZIE:** What data and what assumptions did you use to come up with the figures? I don't care who donated to who, Matt, because we can all play that game—

**CHAIR:** Hold on.

**Mr Kean:** We engaged extensively—

**Senator McKENZIE:** Let's stick to the facts. What data did you use?

**Mr Kean:** We engaged extensively with stakeholders—

**Senator McKENZIE:** What data?

**CHAIR:** Sorry. Senator McKenzie, I think the question is now clear. Please give the witness a chance to answer.

**Mr Kean:** We engaged extensively with stakeholders, and we obviously looked at a number of market trends. The policies that we put in place in New South Wales under the coalition government, for example, will see 100,000 EVs on New South Wales roads this weekend. It just shows that clear targets and good policies work. As I said, we looked at the economic trends, which showed that today the total life cost of an electric vehicle is now less than its combustion and new vehicle equivalent. The sticker price, we project, will be cheaper than the combustion engine equivalent by 2029, based on data we relied on. And, as I said, when economics change, the momentum becomes unstoppable. So we think it was reasonable to assume that 50 per cent of new sales will be EVs by 2050, but, again, it's up to the government and to the parliament as to whether or not they pursue that pathway.

**Senator McKENZIE:** Absolutely. Yes. Thank you, Mr Kean. I didn't hear—were there any reports you relied on, other than the momentum or this week's EVs hitting the roads?

**Mr Kean:** Well, the facts, Senator. And maybe I could just say that, in recent months—

**Senator McKENZIE:** Which reports?

**Mr Kean:** The facts—the data of sales. In recent months we've seen EVs and hybrids take 30 per cent of the market, a record high, and one we can expect will be regularly beaten. In recent months we've seen EVs grab 30 per cent of global new car sales, and some nations are well ahead of that.

**Senator McKENZIE:** Did you just get the 30 per cent and times it by the 10 years?

**Mr Kean:** No. We made assumptions based on evidence and data from—

**Senator McKENZIE:** That's what I want you to tell me—what are the assumptions?

**Mr Kean:** Assumptions based on evidence and data—

**Senator McKENZIE:** Is there modelling you can table?

**Mr Kean:** and real-world facts and figures. And working with industry and stakeholders, we thought the assumptions were reasonable and in line with what's happening with other jurisdictions.

**Senator McKENZIE:** If that is what you believe and that is what you did to bring down this report that the government's used, that Treasury's used and that my department of transport's used to come up with a whole lot of other documents, I think this is only reasonable and proper: you talked about the assumptions you used, what are the assumptions?

**Mr Kean:** Well, I've just quoted a number of the assumptions. The assumptions that underpin the projections, as I said—

**Senator McKENZIE:** Can you table the document you are quoting from, please?

**Mr Kean:** We are very happy to table those documents, yes.

**Senator McKENZIE:** Thank you. I want to see the modelling. If you can, table the modelling behind that. And, Mr Archer, you might not see that Mr Kean is nodding at me. Hansard, they nodded.

**Mr Kean:** Yes.

**Senator McKENZIE:** I will get my modelling. Excellent.

**Mr Kean:** Senator, we'll provide you all the data that we based our assumptions on, but, at the end of the day—

**Senator McKENZIE:** It didn't need to be this hard.

**Mr Kean:** The authority is made up of a number of members with different backgrounds, and they then assume certain things in the modelling.

**Senator McKENZIE:** You're outrageous. When you wrote your opinion piece in the *AFR*, you said Norway had achieved 98 per cent EV take-up in August and had shown the world how to do it. I did ask the department earlier about the regulatory approaches taken in Norway to achieve this level of take-up, because my understanding is that it isn't just subsidies of electric vehicles. Can you talk me through the regulatory environment for Norway that you based those comments on?

**Mr Kean:** Yes. I'll just find the right table. If you refer to our *Sector pathways review*, page 56 actually goes into the policies that the Norwegian government put in place to encourage that uptake. They did a number of things. I'm just reading directly from that page. For example, they had policy incentives around targets. They had clear targets in place. They rolled out charging infrastructure. They made it easier to install charging infrastructure in units and in houses. They put in additional benefits like free municipal parking. They reduced EV company tax for fleet cars. They had no annual road tax for EVs and no purchase or import tax for EVs. So there were a number of incentives that they put in place that saw that massive uptake.

**Senator McKENZIE:** And did they have taxes, then, on non-EVs?

**Senator McKENZIE:** I don't have that in our figures here, but—

**Senator McKENZIE:** If you're saying, 'EVs weren't subjected to this tax,' that means other types of vehicles were subjected to those taxes. But you don't have that data?

**Mr Kean:** I'm not an expert on the Norwegian EV situation, other than the table that we've referred to in our *Sector pathways review*.

**Senator McKENZIE:** So are you aware that, in Australia, people can buy a Toyota HiLux for about \$61,000, while the same car would cost \$110,000 in Norway because of the taxes, including a registration fee of \$30,840. All of these figures are in Australian dollars.

**Senator Ayres:** People should just buy their cars here. They should just buy their cars here.

**Senator McKENZIE:** You know, minister, it's been so joyous—

**Senator Ayres:** What are you talking about?

**Senator McKENZIE:** to sit here for 20 minutes without having to listen to your voice.

**Senator Ayres:** Car prices in Norway!

**Senator McKENZIE:** It's not question time.

**CHAIR:** Senators, before we head down this road—

**Senator McKENZIE:** You can save the theatrics for next year.

**Senator Ayres:** What about Uzbekistan, or the car prices in Latvia?

**Senator McKENZIE:** Please, have more carbs at lunch. Have a little nap or a little scotch. Someone bring this guy a scotch.

**Senator Ayres:** Are there any other jurisdictions?

**CHAIR:** Senators.

**Senator McKENZIE:** Have a little nap

**Senator Ayres:** Tonga? Uganda?

**CHAIR:** Senator McKenzie, could you put your question and give the minister and the witness a chance to answer.

**Senator McKENZIE:** The concern, Mr Kean, is that the Norwegian example—and I think it was the *Australian* that googled car prices in Norway and Australia. Taking the Norwegian example, a HiLux is in the top 3 of car purchases in this country—and it's not because everyone's a tradie; it's because it's a car that people love and need to drive. That's not changing. No matter how much Chris Bowen wants to talk about the big utes, no-one on a farm would drive one of those utes. Anyway, I'm getting distracted. It costs 61 grand, but the same car would cost \$110,000 in Norway. That is the concern—that this policy isn't just about encouraging electric vehicle take up; it's about taxing other vehicles out of the market and driving up the cost of those out of the purchase ability of everyday Australians. That's the concern. Do you appreciate that concern?

**Senator Ayres:** This is a bow long enough to reach Norway.

**Senator McKENZIE:** He's at an independent agency. Stop overriding him. When I was a minister you weren't allowed to do that.

**Senator Ayres:** This is a bow that could go around the world twice and then end up in Norway.

**Senator McKENZIE:** You have to let independent agencies do their thing. Chair, can you stop the minister bullying the agency?

**Senator Ayres:** The price of a Goggomobil in Kenya—what are you talking about?

**Senator McKENZIE:** A point of order.

**CHAIR:** Certainly.

**Senator McKENZIE:** Mr Kean is chair of an independent agency and should be free of government interference and override. The minister should know better.

**CHAIR:** Let me tell you what we're—

**Senator McKENZIE:** He's either independent or he's not, Tim.

**CHAIR:** Thank you for that point of order. Let me tell you how we're going to run this. We're going to give both the minister and the chair an opportunity to reply to that.

**Senator McKENZIE:** My question was to the independent agency.

**CHAIR:** Yes; I understand that.

**Senator McKENZIE:** We've had enough of the minister.

**CHAIR:** I can understand that proposition as you've expressed it, but nevertheless both will have a chance to respond, and I don't mind in which order they do it. So Minister or Mr Kean, as you like.

**Senator Ayres:** I'd be delighted to let Mr Kean answer it if we want questions about Toyotas in Thailand or Goggomobils in Pakistan. Honestly, I just don't know where this gets us. But proceed, Mr Kean.

**Senator McKENZIE:** You don't have to. You get to sit on the blue carpet. I don't, so I get to ask the questions.

**Senator Ayres:** It's not in the same—

**Mr Kean:** Senator McKenzie.

**Senator McKENZIE:** Thank you, Mr Kean.

**Senator Ayres:** It's just not in the same suburb; it's not in the same galaxy.

**Senator McKENZIE:** Please let the chair speak! Free the chair!

**CHAIR:** Senators and minister, Mr Kean was about to start speaking when everybody jumped in again. On that basis, I'm going to go to Mr Kean.

**Mr Kean:** I understand your concern. Certainly, my track record as the New South Wales Treasurer and my philosophical background has always been for lower taxes not higher taxes. I cited the example of Norway to highlight what is possible, but that's not the only jurisdiction where you are seeing a high uptake of EVs because of clear targets and strong incentives. For example, China, the world's largest auto market, now has a 58.7 per cent share of EVs. It's selling more EVs than all types of vehicles in the US. It's the second biggest auto market in the world. Other nations that one of your colleagues referred to before—Nepal, Denmark, Albania and Ethiopia—all have EVs grabbing more than half of the market with different policies in place. Auto-makers are pouring their R&D dollars into EVs, and battery prices are plunging not just for home storage but also for EVs. We can expect these trends to consolidate if not gain more momentum. Australia is somewhat of a laggard. But, as consumers get more confident about the availability of on-street and highway fast chargers, we can expect our EV share to rise steadily. That's the point I tried to make in the op-ed.

**Senator McKENZIE:** Okay, so you're not advocating for a Norwegian system as the model for Australia in your op-ed?

**Mr Kean:** No. I'm saying that with good policies, like we put in place in New South Wales, you can see a huge uptake in consumer choice that will move them towards EVs and better technology.

**Senator McKENZIE:** I'm just going to run you through something very quickly, in the interests of time. The Federal Chamber of Automotive Industries, which also represents electric vehicle makers overseas, says that it's almost impossible—and that the demand was not there—to buy the amount of cars claimed by the Climate Change Authority. What is your response to Tony Weber?

**Mr Kean:** Tony Weber has been trying to block Australians getting cheaper and better vehicles since day one, because he's advocating for businesses whose products are losing the technology war. I think we should be allowing consumers to make a choice to access better, cheaper and cleaner technology if they want to.

**Senator HENDERSON:** That sounds like the National Party.

**Senator McKENZIE:** It is very National Party there—'better, cheaper, fairer energy policy'—but we'll do that another day. The fact is Mr Weber does represent electric vehicle manufacturers, so we'll leave that there.

**Mr Kean:** Well, it would be nice if he represented them for a change.

**Senator McKENZIE:** Some of the stakeholders that have been voicing their concerns to me over the last two years are the dealer associations. They say that it's naive to conclude that the adoption of electric vehicles will escalate significantly over the next five years without significant costs, and it goes to that penalty regime, not the incentive regime that I've been trying to highlight. Has the Climate Change Authority done modelling as to the cost to industry and Australian car buyers of forcing Australians to buy one out of every two cars as an EV between September 2025 and 2035.

**Mr Kean:** No, because we're not suggesting anyone be forced to buy an EV. That's the point, Senator.

**Senator McKENZIE:** But that's the hope. Isn't that the hope?

**Mr Kean:** The point is that the economics are changing around electric vehicles, compared to their internal combustion engine vehicle equivalents, and as the economics change the momentum becomes unstoppable. Families will make decisions that are in their financial interests.

**Senator McKENZIE:** The economics have seen BYD and Chery electric vehicles being dumped here to game the system that's been set up by the government to incentivise electric vehicle uptake. It's an absolute rort. I'm happy to take you to Ipswich, Kiama or Kilmore.

**Senator Ayres:** No, no. If you want to defend expensive cars—higher taxes, expensive cars. If that's the coalition's position, no problems.

**Senator McKENZIE:** Save it, Minister.

**Senator HENDERSON:** Chair, can you shut the minister down.

**CHAIR:** Senator McKenzie, the minister needs an opportunity to respond now.

**Senator McKENZIE:** I didn't ask the minister a question.

**CHAIR:** Well, you've made a statement, and he's entitled to respond.

**Senator McKENZIE:** I would like you to get advice from the secretary about ministers' involvement in independent agencies for Senate committees.

**CHAIR:** I'm happy to, but at this point in time I'm going to give Senator Ayres the call.

**Senator Ayres:** You have asserted that the government's position is to force people to buy a particular kind of vehicle. The government's position is that Australians should have choice. Our message to vehicle manufacturers is: 'Send Australians in the suburbs cheaper vehicles.' And that's what I want to see. Now, we used to have an automotive industry here. We could have been making these cars here, but you closed that industry down—40,000 jobs left because of your previous government.

**CHAIR:** Senator McKenzie, I'm going to have to move the call in a moment. That's the last question in this block, and then we can come back to the coalition afterwards.

**Senator McKENZIE:** Now that the minister has finished his tirade, Mr Kean, did the Climate Change Authority have input into the transport sector road map?

**Mr Kean:** I might hand that to Mr Archer, if that's okay.

**Senator McKENZIE:** Thank you.

**Mr Archer:** We of course prepared our report, the 2024 *Sector pathways review*. That was input that the authority provided to the government for the development of its net zero and sector plans. I think I mentioned earlier that there have been conversations between us and the department of infrastructure over a period of time, but we did not have any formal input or role in the development of the transport sector plan, beyond the provision of the *Sector pathways review*.

**Senator McKENZIE:** Did Treasury use your work in setting the government's policy?

**Mr Archer:** You would really need to ask Treasury for the extent to which it used—

**Senator McKENZIE:** I did last estimates, and they said they did.

**Mr Archer:** Then you have your answer.

**Senator McKENZIE:** Were there aspects to your work that you would have preferred the government to take up that they haven't, in setting their policy?

**Mr Archer:** That's a very broad question. I think if you look across—

**Senator McKENZIE:** I shouldn't ask you, as an official, your opinion. So I'm going to ask the chair. Chair—

**Mr Kean:** It's a matter for the government.

**Senator McKENZIE:** No—your opinion.

**Mr Kean:** It's a matter for government.

**Senator McKENZIE:** Their policy is their decision—absolutely. You're an independent agency that put forward a body of work to inform their decision-making, and my question to you, as the chair of that work, is: are you happy with the level of influence your paper had in the government's final policy settings, or is there something you would have liked them to do that they didn't?

**Mr Kean:** We've set out our views very clearly in the annual progress report, which we've just handed down.

**Senator McKENZIE:** I'll take that as a yes. Thank you.

**CHAIR:** I'm just going to come briefly to Senator Ananda-Rajah.

**Senator ANANDA-RAJAH:** Mr Kean, about 80 per cent of the world's economies have signed up to net zero. Do you see net zero as an economic growth opportunity or a drag on our economy?

**Mr Kean:** It's a massive economic growth opportunity. It's probably the biggest economic growth opportunity Australia has ever seen. The global shift represents a huge opportunity for Australia. It's a megatrend happening, whether some people like it or not. By acting decisively, Australia can position itself as a clean energy leader and benefit from emerging markets.

I cited Korea earlier. They're going to be out of importing thermal coal by 2040, according to their prime minister's senior public servants that I met with in Belem. I just want to make it very clear that moving slowly to address these trends would risk losing competitiveness, as raw commodities are increasingly processed overseas using clean energy driven by other nations' national interests, like the one I just cited. So Australia must be proactive to remain relevant in a rapidly decarbonising global economy. As I said, those statistics are compelling. Nearly 80 per cent of the world's GDP has signed up to net zero. That covers the majority of the world's population, and those markets now have prosperity for generations. We need to move to make sure that we can continue to be a strong, prosperous nation for generations to come. That's the chance we need to grab, and anyone suggesting we go in the other direction is putting our economic prosperity at risk.

**Senator ANANDA-RAJAH:** Thank you. You mentioned earlier the topic of reforms to the environmental laws. Why are they significant and relevant to our path to net zero?

**Mr Kean:** I think what they do is speed things up when it comes to getting renewable energy projects approved and reducing our carbon emissions. If you want to protect our environment, the biggest threat to our environment is a warming climate. We know the main source of warming is emissions from, particularly, electricity and energy generation. The sooner we are part of a global effort to decarbonise our economy and our world, the better chance we have of protecting our way of life. That's the reality.

So we need to get on with the job. We can't stick our head in the sand. We're on the front line of the impacts of climate change, so there is a scientific imperative for us being part of a global effort to reduce emissions. But, as I outlined, there are huge economic opportunities which someone else will grab if we don't. And that will come at the expense of Australian jobs and Australian prosperity.

**Senator ANANDA-RAJAH:** A lot of year 12 students would have completed school now; they are keenly awaiting their exam results. If you were speaking to a cohort of year 12 students—and their parents behind them and their grandparents behind them—what would you say to them in terms of the job opportunities for our children?

**Senator McKENZIE:** Not in forestry.

**Mr Kean:** My firm view is that, based on our natural advantages—a huge land mass with an abundance of renewable energy—we can get our energy costs to be some of the cheapest anywhere in the world by harnessing that renewable energy. What that means is it underpins the growth and development of energy-intensive industries like some of the ones that Senator Canavan pointed out before—cement, steel, iron. In all these things that Australia has been losing its competitive advantage on in past decades, we will all of a sudden have a competitive advantage. That means jobs, investment and economic opportunities that no generation of Australians has ever imagined were possible.

But it requires clear leadership. It requires us to grab the chance and embrace the future, not hold onto the past. That's what our work at the Climate Change Authority is focused on—not only making sure we meet the scientific

imperative but also doing so in a way that sets us up for more prosperity and more success as a nation. That's what I want to see, and that's what I will continue to argue for.

**Senator ANANDA-RAJAH:** I have one more. On the topic of electric vehicles, because we've had a lot of discussion about EVs, can you talk us through the next innovation in vehicle-to-grid charging and what that means for power prices, for homeowners and for the wider grid.

**Mr Kean:** We've already seen a stampede of Australians rushing out to take advantage of the government's home battery scheme. I think, as of today, 140,000 Australians have gone out and purchased a battery to be able to capture that cheap renewable energy that they're grabbing from their rooftops as we speak. They're not doing it because they're woke greenies; they're doing it because it makes economic sense to their household bills.

Electric vehicle battery prices are plunging, which means that they can also save on fuel costs. We know today that, if you have an EV, you can save around 60 per cent on your fuel costs. That will only get more pronounced if you're also able to take that cheap electricity from the sunshine in the middle of the day and use it during areas of peak demand, where, unfortunately, coal-fired electricity is really, really expensive. Gas-fired electricity is even more expensive. That's before you even think about nuclear.

So the benefits of renewables and storage are seeing households and families and businesses save money. It makes economic sense. We need to be installing more renewable capacity, not less, if we want to get prices down and economic growth up for our economy. Anyone arguing elsewhere is just pushing a political agenda that flies in the face of the facts. The facts are that today, in Australia, renewable energy is the cheapest form of energy and underwrites our chance of being a stronger and even more prosperous nation.

**Senator ANANDA-RAJAH:** Thank you.

**CHAIR:** Before I return the call to the coalition, I'm in a position now—and I thank my colleagues again for this—to release officials from the Australian Energy Regulator, the Australian Renewable Energy Agency, and the Offshore Infrastructure Registrar and Offshore Infrastructure Regulator. Thank you for your attendance today. Senator Henderson.

**Senator HENDERSON:** You've cited Korea and its decision to get out of coal. Are you celebrating that decision?

**Mr Kean:** No, I'm not. I'm just saying that that was what was communicated to me by the Korean government when I was at COP.

**Senator HENDERSON:** So you're not celebrating that decision?

**Mr Kean:** I was just pointing out a fact.

**Senator HENDERSON:** You've referred to what's happening in South Korea on a couple of occasions. Are you aware that 31 per cent of South Korea's total electricity generation is produced by nuclear energy?

**Mr Kean:** Yes, I am.

**Senator HENDERSON:** So, when you were quoting the changes that are happening in the energy market in South Korea, why didn't you refer to nuclear?

**Mr Kean:** I think the question was specifically with regard to—I was trying to make the point that we export our coal to Korea to help them with their energy generation. That market is going to soon close if the current policy settings are delivered upon, and we need to be preparing for that reality. That was the only point I was trying to make.

**Senator HENDERSON:** I just want to raise concerns about the selective reference that you've made to what's happening in South Korea. There is no way that South Korea could move out of coal without moving to emissions-free nuclear. You've told me you're a supporter of the science and evidence. Do you support nuclear?

**Mr Kean:** As a general proposition or in the context of Australia?

**Senator HENDERSON:** Yes, as a general proposition.

**Mr Kean:** Obviously, nuclear energy has a role to play, and each jurisdiction needs to determine whether that is the best way forward to power their economies. Certainly, in the Australian context, it's hugely expensive compared to firmed renewables. That's not me saying that; that's all the energy institutions that we rely on for our energy policy.

**Senator HENDERSON:** South Korea already has an established nuclear industry. They're moving out of coal. A very substantial part of their electricity generation is nuclear, so do you recognise that nuclear's playing a very significant role already in many parts of the world?

**Mr Kean:** There's no doubt that in some jurisdictions nuclear makes sense. Korea may be one of them, but what I would say from that conversation that I had with the Korean government is that that capacity will not be made up with new nuclear. Although there will be some, the majority of it, they stressed to me, would be made up with renewables.

**Senator HENDERSON:** Alright. I want to go back to the discussion we had earlier about EV cars. You've premised the 2035 target on the need to achieve 50 per cent of sales as EV cars by 2035. Now, clearly, the government's policy is not that, as it stands. Do you have any concerns about such a large take-up of EV cars?

**Mr Kean:** Sorry, I couldn't understand the question.

**Senator HENDERSON:** There have been significant concerns raised about connected vehicles, including EVs. For instance, the Australian Signals Directorate highlighted in the last estimates that connected vehicles pose real risks like remote hijacking and data privacy breaches through hacking, and the ASD's *Cyber threat report 2022-2023* also shows a significant increase in exploitation of vulnerabilities by malicious actors which can impact connected vehicles due to their reliance on software and internet connectivity. Governments—and that includes their defences—are taking these matters very seriously. Shouldn't all Australians take these issues of national security seriously also?

**Mr Kean:** Of course we want our defence capability and our intelligence agencies to keep an eye on any of these trends whether it be for transport products or mobile phones or any technologies. I'm assuming that our intelligence agencies and defence capabilities are factoring in these things. What I'm arguing for is that Australians get access to the latest technology that also happens to be the cheapest and the cleanest and give them choice, but that's assuming that we manage security risks in the way that we would do for any products coming into Australia.

**Senator HENDERSON:** There's been particular concern about countries with very high proportions of EVs. They are considered to be at greater risk of cyberespionage and other national security risks. I appreciate this is not within your remit, but I just wanted to raise this—outmanoeuvre

**Senator Ayres:** It was the point I was going to make. It's hard for the Chair of the Climate Change Authority—

**Senator HENDERSON:** No, please, Minister.

**Senator Ayres:** to speculate about security advice.

**Senator HENDERSON:** Minister, I appreciate that, and I raised that very point. But I'm just making the point that, in terms of furthering the take-up of EV cars, we've had a very, very strong warning from some of our national security agencies about those risks. There may well be a good reason why the government will never, in fact, embrace that dramatic take-up of EV cars in this country.

*Senator McKenzie interjecting—*

**Senator HENDERSON:** Does that concern you at all?

**Senator Ayres:** Oh yeah, sure—

**Mr Kean:** Well, obviously, sure.

**Senator McKENZIE:** I just asked a question.

**Senator HENDERSON:** Sorry, Mr Kean.

**Senator Ayres:** I mean, honestly! Grow up.

**Senator McKENZIE:** I will send you the *Hansard*—

**Senator HENDERSON:** Have you in fact—

**Senator McKENZIE:** from my home affairs questioning.

**Senator HENDERSON:** Sorry, Senator.

**Senator Ayres:** Honestly! The record's very different actually.

**Senator HENDERSON:** Mr Kean, have you factored that into your thinking at all, given that you are backing the 50 per cent target?

**Mr Kean:** I think it goes without saying that our security agencies and our defence capabilities should be managing all kinds of risks that you refer to, whether it be around these technologies or any other technologies that come into the country. I think that's a given.

**Senator HENDERSON:** In your 2025 progress report released last week, it says that gross emissions from safeguard facilities decreased by 3.2 million tonnes, or 2.4 per cent, over 2024-25—and I'm referring to page 99

of your report. On that same page, you also say that the 2.4 per cent decline in gross emissions 'were largely due to permanent closures, decreased production and temporary shutdowns', which is of enormous concern. How much of the total emissions reductions across the economy that you've reported is due to permanent closures, decreased production or temporary shutdowns?

**Mr Kean:** I will take that on notice, but I might just hand to Mr Archer.

**Mr Archer:** I think it best to take that one on notice.

**Senator HENDERSON:** Mr Kean, has the Climate Change Authority undertaken any further modelling as to how many other facilities are expected to permanently close, decrease their production or temporarily shut down.

**Senator Ayres:** The hypocrisy, honestly.

**Senator McKENZIE:** Let her ask her questions.

**Senator Ayres:** Your whole approach was predicated on closing things down.

**Senator HENDERSON:** Minister, stop it. You are outrageous!

**Senator Ayres:** Mr Taylor planned the whole approach based on closing industry down.

**Senator McKENZIE:** Stop trying to shut down senators—

**Senator Ayres:** That's how you got it all—

**CHAIR:** Senators—

**Senator HENDERSON:** You are speaking over an independent agency—

**CHAIR:** Senators, sorry, we've got a number of—

**Senator Ayres:** It's like a cat burglar complaining about home security.

**CHAIR:** We've got a number of senators speaking at the same time.

**Senator Ayres:** I mean, honestly, that's outrageous! This is outrageous!

**CHAIR:** Senators!

**Senator HENDERSON:** Stop bullying the Climate Change Authority, Minister.

**CHAIR:** Senators! Senators and Minister, we now have a number of senators speaking at the same time. Senator Henderson was asking a question.

**Senator HENDERSON:** Thank you—and it wasn't of the minister.

**CHAIR:** If you would please continue with your question, Senator Henderson.

**Senator HENDERSON:** Mr Kean or Mr Archer, have you conducted any modelling? Is this factored into your assertions, or do you believe these shutdowns are going to be used for the government to reach its targets?

**Mr Kean:** Not at all. We've assumed that industry is able to continue and that government will put in place the policies to support industry continuing as it transitions to a low carbon future.

**CHAIR:** Senator McKenzie.

**Senator McKENZIE:** Mr Kean, in August, there were 100,539 new cars sold in Australia. If that happened every month this year, we would record about 1.2 million new cars sales in this calendar year. With electric vehicle take-up now sitting at less than eight per cent, that means Australians will need to buy 600,000 new electric vehicles each year, for the next decade, off the current figure of less than \$100,000 a year. What information do you have to assure this committee that your target is achievable without new subsidies for electric vehicles or new taxes for the sale of non-EVs. My question was for the chair.

**Senator Ayres:** That's just incorrect. Last month, year to date, in October, 12.7 per cent—don't try and mislead a witness who's coming in by TV.

**Senator McKENZIE:** I've just been in the transport estimates all day. I'm sorry; you're not the shadow transport minister; you're nowhere near it, so let me ask the chair my question.

**Senator Ayres:** Don't try and mislead the witness—honestly!

**Senator McKENZIE:** Chair, you need to put this minister in his place.

**CHAIR:** I think everyone needs to just take step back for a moment. I will—

**Senator HENDERSON:** Minister, you are misleading the committee!

**CHAIR:** Senator Henderson! For now, we just need to take—

**Senator HENDERSON:** That includes—

**CHAIR:** Thank you, senators. I don't need—

**Senator HENDERSON:** You are misleading this committee. That includes hybrid vehicles.

**Senator Ayres:** They're eligible. I know you don't like them.

**Senator HENDERSON:** Senator McKenzie was accurate. You are misleading this committee, and we are sick of it!

**Senator Ayres:** People are biting.

**Senator HENDERSON:** No, we are sick of it, Minister. I'm sorry, Chair, but it's just ridiculous.

**CHAIR:** Senator Henderson, Senator McKenzie and Senator Ayres.

**Senator HENDERSON:** I know, but we've had enough. I've had this all day and I've had enough.

**CHAIR:** What is sauce for the goose in this place is sauce for the gander, so, when people talk over each other, they tend to get the same response or a louder one back. What I need to have happen here is: a question has been asked, the minister had begun an answer, and we will go to Mr Kean to provide the answer.

**Senator McKENZIE:** I wonder if you could leave the room for a little while.

**CHAIR:** Senator Henderson, again! Sorry, Senator Henderson. Senator McKenzie, I was cautioning your interjection.

**Senator McKENZIE:** Mr Kean understands my question. I want to know the data that he used. Can he assure this committee that a target is achievable without new subsidies for electric vehicles or new taxes on the sale of non-EVs?

**Mr Kean:** I don't think we're suggesting the government be static on these matters. Good policy will put the right tailwind behind the uptake of EVs. I cite the policies that the coalition put in place in New South Wales which have seen New South Wales lead the way when it comes to new EV sales. That looked like some supports around stamp duty and fleet buyers but also more incentives like off-street parking and the ability to use bus lanes. But don't just cite the policies; also look at the international experience. We have talked about jurisdictions other than just Norway. There's China, Denmark, Albania—

**Senator McKENZIE:** I think you've answered my question. Thank you.

**Mr Kean:** No, there's one more point I'd like to make, with respect, and that is on what the automakers are doing with their R&D dollars and where they're going. We don't have a car industry here, so we have to accept the vehicles that are sold to the Australian market, and they're increasingly becoming EVs. With battery prices plunging, Australians know it makes economic sense for their next car to be a cheaper and better one. That's why we have every confidence in the EV recommendations that we have made. We think they are very much possible and achievable.

**Senator McKENZIE:** Did the Climate Change Authority request any changes to the transport and infrastructure road map as proposed by the infrastructure department and, if so, what were those changes?

**Mr Archer:** No, we did not.

**Senator McKENZIE:** Has the Climate Change Authority modelled the action plan and the existing departmental programs that make up the action plan to determine how much abatement it will deliver and the marginal cost of abatement for each action?

**Mr Archer:** No, we have not modelled the government's plans.

**Senator McKENZIE:** Do you have plans to?

**Mr Archer:** Not at this time, no.

**Senator McKENZIE:** Noting that range anxiety continues to be cited as a barrier to EV uptake, has the Climate Change Authority undertaken quantitative work to determine the extent and cost of charging infrastructure required to support the target uptake of electric vehicles?

**Mr Archer:** Not specifically. Certainly the authority has recommended that the government look at ensuring that the rollout of EV charging keeps pace with the take-up of electric vehicles.

**Senator McKENZIE:** I just want to go to the inherent disadvantage for rail transport with the safeguard mechanism. Rail freight produces 16 times less carbon emissions than road freight for every tonne-kilometre travelled. An 1,800-metre interstate freight train removes the equivalent of 110 B-double trucks from the road. Has the Climate Change Authority investigated this issue? I know you mentioned light rail, Mr Kean, in your assessment of the transport sector's contribution. But have you investigated freight rail and, if so, what advice

have you provided to the government about correcting the disadvantage that exists under the safeguard mechanism for rail?

**Mr Kean:** For freight rail, we have seen that it could play an increasingly important role in emissions reduction. I am a big supporter of incentives and support for freight to do more heavy lifting. It will obviously make a big difference.

**Senator McKENZIE:** Have you provided any advice to government?

**Mr Kean:** No, not as yet, but we would welcome the opportunity to work closely with them to see what contribution they could make.

**Senator McKENZIE:** I have just got some questions on the diesel fuel tax credits. Does the Climate Change Authority consider fuel tax credits to be a subsidy to industry?

**Mr Kean:** Is that to me?

**Senator McKENZIE:** Yes. I'm giving all my questions to you unless you flick them to Mr Archer.

**Mr Kean:** Thank you. I have made some comments about the diesel fuel rebate. They're a personal view; they're not the view of the Climate Change Authority.

**Senator McKENZIE:** I know I read your op-ed, but I haven't read those comments. For the committee's benefit, what's your view?

**Mr Kean:** My view is that we should be incentivising business and industry and putting incentives in place to help them decarbonise, where possible, rather than continue to burn fossil fuels.

**Senator McKENZIE:** So the Climate Change Authority doesn't consider the fuel tax credit to be a subsidy to industry; that's only your personal view?

**Mr Kean:** This is not the Climate Change Authority's view. This is my view.

**Senator McKENZIE:** As you're the head of the Climate Change Authority, has the Climate Change Authority investigated, modelled or considered any changes to fuel tax credits for heavy-vehicle operators?

**Mr Kean:** No.

**Senator McKENZIE:** Has the Climate Change Authority provided any briefings to the minister in relation to changes to the fuel tax credit scheme?

**Mr Kean:** No.

**Senator McKENZIE:** Minister, will your government commit to preserving the fuel tax credit mechanism for heavy-vehicle operators?

**Senator Ayres:** I think our position goes much broader than that part of the economy. There are diesel fuel rebates available in various parts of the economy. There is no thought being given to any of those arrangements.

**Senator McKENZIE:** Thank you.

**Senator HENDERSON:** Mr Kean, I haven't had the pleasure of asking you questions in Senate estimates before. I know you've been asked questions about your role with Wollemi Capital and I appreciate the answers that you've provided in the past, but can you give this committee an update. I think you've got a new role now: the head of fundraising. Have there been any declarations of conflict of interest, and have there been any determinations made in relation to conflicts of interest where you've had to either step aside or make appropriate declarations which excluded you from certain decisions?

**Mr Kean:** As I have provided in evidence in the past, the Climate Change Authority Act considers that the chair could be an industry participant. That was the case with my predecessors and that is the case with me. There is a strong governance framework which requires me to make disclosures around my role or the investments that the firm I work for makes. I follow that process.

With regard to your question around whether I have recused myself from any decisions, there is chief legal counsel that can provide me advice on matters that could give rise to a conflict. I follow the advice of legal counsel. Have there been matters where I have recused myself? Yes. I'm happy to table that evidence to the committee.

**Senator HENDERSON:** Can you provide an overview of what matters you've recused yourself from in relation to the dual roles that you occupy.

**Mr Kean:** Yes. Wollemi Capital has exposure to investments in carbon markets, for example. So I have recused myself from decisions or advice around that. There are a number of investments where advice we give

could give the perception of a conflict. That is dealt with through legal counsel and the governance framework, and I follow that advice.

**Senator HENDERSON:** When you say that you've recused yourself, have you recused yourself as an employee of Wollemi Capital in stepping aside from decisions or have you recused yourself as the chair of the Climate Change Authority?

**Mr Kean:** As the chair of the Climate Change Authority.

**Senator HENDERSON:** How many times have you recused yourself?

**Mr Kean:** We will table that. It would be a small number. I don't want to guess here. It's around three, from memory, but we will table that evidence for you.

**Senator HENDERSON:** So one of the matters concerned carbon markets, and that's because Wollemi is involved in carbon market trading; is that right?

**Mr Kean:** We have some investments in natural capital. I don't participate in advice regarding those matters.

**Senator HENDERSON:** Sorry, can you just explain what 'natural capital' means?

**Mr Kean:** Carbon sequestration and planting trees, for example.

**Senator HENDERSON:** So, on those matters, in your role as chair, you step outside the room, do you, and don't involve yourself in those decisions?

**Mr Kean:** I follow the advice of chief legal counsel. That can range from stepping outside the room to noting the pecuniary interests that I could have. Again, we follow the guidelines that have been legislated, that applied to my predecessors and that have been strengthened since I've taken on the role. I follow that advice from chief legal counsel and the CEO. For your information, Mr Archer, as the CEO, provides that advice. So, if you'd like to run through the process with him, I'm sure he could outline the process we follow.

**Senator HENDERSON:** Just to be clear, the fact that someone like yourself receives salary or equity from a private firm does not in itself automatically disqualify you from holding both roles. But it clearly creates an interest that needs to be declared and managed. You've referred to the fact that you've recused yourself on two or three—maybe more—occasions. What are the types of matters you have been required to recuse yourself from?

**Mr Kean:** Again, we'll table all those minutes. I think that's appropriate. We follow the guidelines around pecuniary interests. That's not just applicable to me; that's applicable to other members of the authority who could have interests. So this is not unique to me nor other participants that have held this role in the past. We follow that advice.

**Senator HENDERSON:** Can I just you to explain in general terms: what are the other matters that have required you to recuse yourself?

**Mr Kean:** I want to provide accurate advice, so I think it'd best if we table the minutes of each of the occasions. But we follow the legal counsel's advice and the CEO's advice with regard to managing pecuniary interests. As I said, off the top of my head, that relates to natural capital and carbon markets related matters. But there may have been other things. I can't think of them at the moment, but there may have been. I don't want to rule out that possibility, which is why we'll provide all the evidence.

**Senator HENDERSON:** Has the relevant minister raised any concerns about the dual roles? Now that you're in this fundraising role, you're raising funds for Wollemi generally in terms of all its activities, I imagine. I even thought before that it would be very hard to put a Chinese wall through yourself. So when you say, 'I'm addressing questions in a personal capacity,' you are the chair of the Climate Change Authority and you can't step away from that. So is it becoming more complex by reason of your new role, and has the government raised any concerns about that at all? If I were the minister, I must say that I would be pretty concerned.

**Mr Kean:** There is a strong legislative governance process that's been put in place. I follow that. We've advised the minister of any changes to my pecuniary interests, as is required under the law. I will meet the highest levels of integrity and ethical standards, as one would expect, and as I have always done in my previous roles as a minister and now in my current role as Chair of the Climate Change Authority.

**Senator HENDERSON:** Can I ask what fundraising you've done in your new role and whether that relates to any specific deals?

**Mr Kean:** No, I have done no fundraising in my new role.

**Senator HENDERSON:** But you are the head of fundraising?

**Mr Kean:** My title has changed in recent weeks.

**Senator HENDERSON:** In recent weeks.

**Mr Kean:** That's correct.

**Senator HENDERSON:** Right. So you were the head of fundraising. Is that correct?

**Mr Kean:** No. I've just become head of fundraising.

**Senator HENDERSON:** You've just become head of fundraising. So it was just a couple of weeks ago?

**Mr Kean:** Yes. That's correct.

**Senator HENDERSON:** Under those circumstances, have you raised any funds to date—

**Mr Kean:** No.

**Senator HENDERSON:** or been engaged in any activities which might give rise to further conflicts of interest?

**Mr Kean:** No, and any changes to my pecuniary interests have been updated as is appropriate.

**Senator HENDERSON:** I understand that you need to declare these things. I'm raising concerns about whether it has got to the point where, now that you are raising funds for Wollemi Capital across its operations, I imagine, that gives rise to such a serious conflict of interest that maybe occupying both positions is becoming more difficult for you.

**Mr Kean:** No, we operate in line with the strong governance framework that I think was legislated by the previous coalition government and that applied to my predecessor Grant King, who sat as chair and board director of a number of fossil fuel related companies. The coalition put the standards in place with good reason. They have been strengthened since, and I stick to those strong governance standards, as is appropriate.

**Senator HENDERSON:** I totally appreciate that they are important and that you're not suggesting that they don't apply to you. But, because of the nature of your new role as the head of fundraising, I'm wondering whether there have been any concerns raised given the new role that you've now occupied?

**Mr Kean:** We have, again, raised the issues, following the highest governance standards, taking chief legal counsel's advice. We're meeting all the high standards one would expect of a civil servant in my position, as other civil servants in my position have been required to meet, and I'll continue to meet them.

**Senator HENDERSON:** In relation to your role as head of fundraising, can you describe it? What sorts of funds are you trying to raise and what are your KPIs? Do you have to reach a certain benchmark in terms of how much funds you're expected to raise in a given year?

**Mr Kean:** I don't have any benchmarks.

**Senator HENDERSON:** Okay. Could you describe the nature of the new role?

**Mr Kean:** The nature of the new role is raising capital for Wollemi. It is an investor, and they manage other people's money, effectively.

**Senator HENDERSON:** I would put to you, Mr Kean—and I'm not being accusatory at all—that I think there is a very high likelihood that the conflict is now so acute that it may not be possible to properly do both roles. So—

**Senator Ayres:** Senator—

**Senator HENDERSON:** Minister, I'm in the middle of a question.

**Senator Ayres:** Well, finish your question and then I'll—

**Senator HENDERSON:** I'm entitled to ask Mr Kean this question. He's very capable of answering his own questions.

**Senator Ayres:** And he's done it four times so far—the same question.

**Senator HENDERSON:** No, this is a different question.

**Senator Ayres:** Well, let's see if you can make it different.

**Senator HENDERSON:** Minister, please do not comment in the middle of me asking a question. Mr Kean, given the new role that you're now occupying—I did ask you and I'm not sure I got an exact answer—has anyone raised concerns within government about the new role that you're now occupying from a governance or—

**Mr Kean:** No. We have disclosed my role, as we've always done. We're acting in line with the strong legislated governance standards. I've always acted with the highest level of integrity in any role that I have had and I'll continue to do that.

**Senator HENDERSON:** Are you concerned that this could give rise to such an evident conflict of interest that it might become difficult in the future to do both roles?

**Senator Ayres:** Chair, I am going to intervene.

**Senator HENDERSON:** You don't have to—Mr Kean was in the middle of answering a question.

**Senator Ayres:** This question has been asked several times.

**Senator HENDERSON:** No, it hasn't; it's a different question.

**Senator Ayres:** It's in no way different. It has been asked four or five times. Mr Kean has answered it.

**Senator HENDERSON:** Chair, could you please allow me to ask my questions?

**CHAIR:** You have asked that question. I'm going to give the minister a chance to respond, then Mr Kean has a chance to respond.

**Senator Ayres:** You cannot badger the witness by asking the same question over and over again.

**Senator HENDERSON:** I have not badgered the witness—

**Senator Ayres:** You have.

**Senator HENDERSON:** and I have not asked the same question over and over. Mr Kean is very capable and is very capably addressing my questions. I made it very—

**Senator Ayres:** For the fourth time.

**Senator HENDERSON:** Excuse me, Minister. Stop interrupting and badgering me; I'm doing my job. So, Mr Kean, this is a different question. I'm wondering whether, in light of your new role and looking to the future, do you have concerns that it may be difficult to occupy both roles successfully?

**Mr Kean:** No, I think this is exactly why the previous coalition government put in place these strong frameworks. They were comfortable enough that they worked for Grant King, my predecessor who chaired amongst other things Origin Energy. Again, it's appropriate that I operate with the highest level of integrity within the strongest governance standards. That's what I've always done; that's what I'll continue to do. Just because you have a pecuniary interest, it doesn't necessarily give rise to a conflict of interest, and that's exactly how we'll approach this. It's a pecuniary interest. We'll manage it appropriately to make sure that there is no conflict of interest.

**Senator HENDERSON:** I don't disagree with what you're saying in that respect. Could I ask on notice if you could provide the committee with the minutes to which you have referred along with the advice that you have received both from legal counsel and also from Mr Archer, and any other correspondence between you or the Climate Change Authority and the government in relation to the issues of pecuniary interests?

**Mr Kean:** I think they're a matter of public record, but of course we'll provide them to the committee.

**Senator HENDERSON:** Thank you so much.

**CHAIR:** With that, we now excuse the Climate Change Authority. Thank you, Mr Kean, and thank you to all the witnesses in the room. May I also pass on the committee's thanks to Mr Archer and wish you well in your next endeavour.

**Mr Archer:** Thank you, Chair. It's been a team effort, and I would like to acknowledge my deep gratitude to all the staff, both past and present, of the authority who have supported me in my time in the agency.

**Mr Kean:** On indulgence, can I acknowledge the outstanding leadership that Brad Archer has provided to the Climate Change Authority over a long period of time and over some difficult periods in the authority's history? He has led with distinction and high capability, and, in my opinion—having worked with a number of very senior civil servants—he represents the very best of the Australian Public Service. He has left huge shoes to fill, and we wish him every success with his next adventure.

**Senator HENDERSON:** On behalf of the coalition, thank you very much for your service, Mr Archer. We wish you all the very best for the future.

**CHAIR:** Thank you very much.

#### Clean Energy Finance Corporation

[18:37]

**CHAIR:** Mr Learmonth, do you wish to make an opening statement?

**Mr Learmonth:** No, I don't wish to.

**CHAIR:** Thank you. Senator Hodgins-May.

**Senator HODGINS-MAY:** Thank you very much for appearing here today. Can I ask what your current working capital is and how much is currently available for the CEFC to commit the projects?

**Mr Learmonth:** When you say 'working capital', that's maybe a slightly different concept. The CEFC has about \$33 billion in terms of its whole funding remit or appropriation. Today, in the commitments—what we've legally committed to—there's something in the order of about \$16.2 billion of funds on risk. That gives you a feel for approximately half our \$33 billion being currently committed. If you'd like a more precise answer around the undrawn component of the special account, we can give you that as well.

**Senator HODGINS-MAY:** Sure, thank you.

**Mr Powell:** In terms of the funds available in the special account, there's \$25 billion in round numbers because we've drawn down, effectively, \$8 billion of the \$33 billion. So, of the \$16.2 billion that Mr Learmonth talked about for commitments, about eight have been funded from the special account. There's about another half a billion dollars that we've funded from earnings that we have generated.

**Senator HODGINS-MAY:** Thank you. That is quite a large amount of money. I'm curious to know whether the extra \$2 billion that was committed in October—I think it was for the lowering energy bills—is going to do anything that your current funding couldn't have already done?

**Mr Powell:** Absolutely, and it's probably worth exploring how that number breaks down. We talked about a \$25 billion number, but, effectively, our headroom for commitments—so what's left out of all the funding—is only about \$17 billion. But it's broken into different buckets. There is \$4.5 billion in the general fund. There's \$284,000 in the Advancing Hydrogen Fund, \$11.3 billion in the Rewiring the Nation fund, \$300 million in the Powering Australia Technology Fund and \$643 million in the Housing Energy Upgrades Fund. That means that the bulk of the funds is dedicated to the Rewiring the Nation program. We can't use those funds for any purpose other than Rewiring the Nation. The \$2 billion that was committed was towards the general portfolio. In the absence of that funding, we were on a path where we would have to either scale back the amount of investment we were making or look to try and sell in the open market and potentially incur significant losses on some of our facilities just to regenerate capital.

**Senator HODGINS-MAY:** Thank you for that detailed answer. Was that \$2 billion dollars requested for any particular purpose, or was it just offered to you by the government?

**Mr Learmonth:** We didn't request the \$2 billion, per se. We're in constant dialogue with the government and the department about our investment activity, including around renewables. Remember, also, that this has been announced but not yet appropriated. At this stage, it's still an announcement.

**Senator HODGINS-MAY:** I'm curious to know—the media release says that the \$2 billion is to continue to drive downward pressure on electricity prices. Did you get any more specific instructions on how this money should be spent?

**Mr Learmonth:** It has been announced, and we have the same information that's in the public arena. That's about investing in renewable energy projects. So I guess, by definition, there'll be an increase in generation—wind and solar storage, potentially—that would help drive down our prices. But there is nothing more specific at this stage than that. I think there's a bit to play out.

**Ms Munro:** That would be part of the updated CEFC investment [inaudible].

**Senator HODGINS-MAY:** Just to be clear, the money wasn't requested specifically for a project, and no specific instructions were provided around how that money should be spent beyond what was in that media release?

**Mr Learmonth:** Not at this stage. Having said that, we have a very active pipeline of transactions in our general portfolio, particularly with a number of large renewables transactions on the horizon. So it's a welcome announcement, and we believe we'd put it to good use.

**Mr Every:** To add, we provide the government with our forward estimates and visibility to what our investment pipeline is. As the CFO went through, there are a number of funding buckets. The general portfolio is the one where constraint was creeping in for the medium to long term. The government has appropriated this money. If the government wants to make directions as to specifically what to do with it—for example, targeting affordability measures—then that is something that would be done later through the investment mandate process.

**Senator HODGINS-MAY:** I suppose the cynic in me feels that this announcement was made without a plan for how it would be spent and at a fairly convenient time. It seemed more of a media prop than a genuine commitment to driving energy prices, and that's from someone on the outside. Hearing what you gentleman are contributing today, I feel that that's confirmed.

**Mr Learmonth:** What we're trying to do at the Clean Energy Finance Corporation is bring on more supply of electricity through stimulating investment in the renewables storage grid. If we can bring on that additional supply, that will place downward pressure on wholesale prices and then retail prices as well.

**Senator Ayres:** Cynicism is an obstacle of progress.

**Senator HODGINS-MAY:** Tell me—do you have more specific instructions that you think should be followed with that \$2 billion?

**Senator Ayres:** It's a very significant additional contribution. As the fund has indicated, there is work that they must do in due course. The design around how that additional contribution will be deployed will be reflected in the investment mandate and some internal work that the fund must do. Two billion dollars of additional capital doesn't just mean \$2 billion worth of additional projects; the CEFC's job here is to crowd in investment around wind and solar projects. That is the job that they have been very successfully doing I can tell you, as an industry minister, I want to see more and more. We need more wind, we need more solar, we need more storage and we need more gas peaking in order to deliver more low-cost energy for Australians and Australian businesses and all the factories and facilities that we want to see being built around the joint. So I wouldn't approach this with cynicism. As they've indicated, there's a very significant amount of capital there. We're adding to it. That's what you get to do in government—make big things bigger.

**Senator HODGINS-MAY:** Moving on, the profile of funding under the Household Energy Upgrades Fund was that \$399 million would be spent in 2024-25. Was that met?

**Mr Powell:** Through to the end of November 2025 from program inception on 1 December 2023, we've committed \$405 million against that HEUF program.

**Senator HODGINS-MAY:** That's a total \$1 billion?

**Mr Powell:** Correct.

**Mr Every:** So we're on track.

**Senator HODGINS-MAY:** Good. Did all of this money end up in owner-occupier housing, or has it also found its way to social and community housing? Do you have some stats on that?

**Mr Learmonth:** At this stage, it's gone out to private housing, but we're working with other financiers to provide funds to rental accommodations as well. So there's an expansion of the market that we're financing. But, to date, the vast majority of it is in private housing.

**Senator HODGINS-MAY:** The vast majority or all?

**Mr Learmonth:** All of it at this stage.

**Senator HODGINS-MAY:** To confirm, has that \$405 million been allocated or spent?

**Mr Learmonth:** That's been committed, but not all of it has been drawn down. Of that amount, \$180 million has been deployed. So there is still a bit to go on that. We've made some very good progress working with banks and non-bank lenders. Tapping into the social and affordable housing world or public housing and rental accommodation has had some challenges, but we are about to make an announcement about a deal with a strata financier.

**Mr Every:** The other thing to note about this is that the original budget measure had two elements, one of which was directed at public, social and affordable housing, and that program was administered by DCCEEW, not by the CEFC. That separate program has now, because of the name confusion between the two funds, been renamed. It's no longer called the Household Energy Upgrades Fund. I don't know what the new name of it is, but that separate element is with DCCEEW, not the CEFC.

**Senator HODGINS-MAY:** So the HEUF is no longer—

**Mr Every:** The HEUF is ours. There were two measures originally under the HEUF. The first measure was for the CEFC, \$1 billion. I believe the second measure was \$300 million—but officials might be able to confirm that.

**Senator ANANDA-RAJAH:** The SHEPI.

**Mr Every:** It went directly to social and affordable housing programs.

**Senator Ayres:** So this was a \$500 million commitment over four years from 2025-26 through to 2029, I think. We expect it to reach more than 100,000 social housing properties, and it is, as Senator Ananda-Rajah called it, the SHEPI, the Social Housing Energy Performance Initiative. I don't know whether there are officials who are able to update you on progress, but it was announced at the end of last year. I'm not sure how much has been committed in that.

**CHAIR:** Senator Hodgins-May?

**Senator HODGINS-MAY:** Thanks. I've only got a couple more questions. I'll just finish following up this line of inquiry, if I may. Has that DCCEEW money been spent, do you know?

**Mr Learmonth:** I'll defer to DCCEEW on that.

**Ms Munro:** That's actually under outcome 1.2, so those officials have now left. We can take that on notice.

**Senator Ayres:** We're happy to take it on notice, Senator, if that helps.

**Senator HODGINS-MAY:** I appreciate that; thank you. Final question: homeowners are fairly well placed already to shift towards electrification, which is great. I really support that. But I hear from a lot of renters who would like to be able to do the same to reduce their emissions. Can you tell me just a little bit more about how you're going to get money available to renters to transition?

**Mr Learmonth:** One of the ways is to work with a financier that is providing finance to strata or through the strata mechanism, where it would be lending to apartments, for example. They would put solar or batteries into that building, and then that renewable energy would be shared amongst the various people renting. There are challenges with the technology. Sometimes we've also looked at making some investments in helping with that—the sharing of solar power, for example. But working with strata financiers is one way we're looking to tackle renters and provide cheap-cost finance for them to then buy and make improvements to rental accommodation.

**Senator HODGINS-MAY:** Thank you. I'll follow up that line of questioning around renters when we see you in the new year.

**CHAIR:** We will break now for dinner. There will still be some ongoing questions to the CEFC at that point. Thank you very much.

**Proceedings suspended from 18:51 to 19:39**

**CHAIR:** We're still with the Clean Energy Finance Corporation, and I'm going to Senator Hodgins-May.

**Senator HODGINS-MAY:** Around that previous line of questioning, is there anything in the legislation that prevents the Clean Energy Finance Corporation from installing and owning solar and storage at a landlord's place and then recuperating those costs when it's sold?

**Mr Learmonth:** As the CEFC we can't own capital equipment per se, so we couldn't own solar and battery, for example, and lease it to tenants in a home. All our assets are required—more under government principles and accounting—to be financial assets. So we are in the business of making loans or equity investments to other people who might play that role.

**Senator HODGINS-MAY:** So, if it's not you directly, you could play that role to fund battery—

**Mr Learmonth:** Yes, we fund many financiers, of course, who buy equipment and then lease it to end users. We do that with electric trucks and electric vehicles, for example.

**Mr Every:** We do it with electric batteries through programs like the HUEF. We are lending to a counterparty and then, if the counterparty is a bank, the bank is providing that finance to the borrower-homeowner, who then puts the solar and batteries on their roof. They repay the bank, and the bank repays us.

**Senator HODGINS-MAY:** Would you appreciate any more financial flexibility in the instruments that you use?

**Mr Learmonth:** Do you mean more broadly or just related to the HUEF?

**Senator HODGINS-MAY:** Both.

**Mr Learmonth:** Okay. I guess we take what we're given. Sometimes there are changes made to the investment mandate around some of our instruments. We have been in conversations with the Household Energy Upgrade Fund that has to mature. All loans have to be repaid within 10 years of the commencement of the program, so we have been looking at whether or not that can be extended. Because we're probably nearly two years into that program, it means that we can't lend for more than eight years, for example. So there are those sorts of adjustments from time to time that we talk to ministers and the department about. But, otherwise, we have very considerable flexibility with our financing generally. As I say, we can provide debt, equity and mezzanine finance; preference shares; and first-loss pieces of debt. So we are quite flexible and creative.

**Senator HODGINS-MAY:** Yes, okay. But you wouldn't necessarily oppose any changes to the legislation that allowed you a wider array of financial instruments that might do some of these things that we've talked about.

**Mr Learmonth:** If you look at the legislation, the CEFC Act talks about being able to provide debt or equity. That can be broadly defined. It's not really up to us, of course, to seek out legislative changes. That's going to be up to the minister and the government.

**Senator HODGINS-MAY:** So, to clarify, you can't own any assets directly?

**Mr Learmonth:** We don't own assets directly. We own, only in the smallest of ways, potentially fixtures or a printer and so on, but our business is about financing and investing.

**Senator HODGINS-MAY:** You can't be in the business or you choose not to be?

**Mr Powell:** Legally, we cannot be in the business of owning a non-financial asset through our investment portfolio, and that has to do with the rules for government budgeting—what the implications are. If we were to own those tangible assets, there are very different implications for the government's budget.

**Mr Every:** Section 63, Financial assets, provides that all the CEFC's investments must be made through financial assets. The other provisions in the act relate to derivatives or guarantees, and they can only be made in limited circumstances.

**Senator HODGINS-MAY:** I haven't familiarised myself with all those sections yet, but I'm glad you have. Thank you.

**Mr Powell:** Senator, I might just correct something. Earlier I mentioned \$284,000 for the hydrogen fund. My colleague corrected me. That should actually have been \$284 million.

**Senator HODGINS-MAY:** I did think it was a very modest amount!

**Mr Powell:** Sorry, I missed a decimal point there.

**Senator HODGINS-MAY:** No, that's fine, thank you.

**CHAIR:** Senator Whitten.

**Senator WHITTEN:** It was reported in an article on News.com on 9 July this year that Wesfarmers had secured a \$100 million loan to install more batteries, EV chargers and solar panels. Is that correct?

**Mr Learmonth:** We were involved in a transaction and provided financing to Wesfarmers, particularly to put more EV charging in Bunnings and Officeworks, which was important. By doing that with those very well-known brands with high-volume and highly visited locations, people saw some of the work that Wesfarmers was doing there, and I think it therefore had a significant impact. We're proud to have been involved in that transaction.

**Senator WHITTEN:** It's a pretty good bet—Wesfarmers. They're a pretty profitable company with an NPAT of about \$2.6 billion. Do you think they required a loan?

**Mr Learmonth:** This was about accelerating decisions that they were otherwise contemplating or deferring. They were then in the position of building out some of these things—putting solar onto their store rooftops on some of their stores that previously may have been deferred, or, as I said, putting in EV charging in car parks, for example. Yes, the credit is good. It wasn't about taking a risk and return, necessarily, on Wesfarmers; it was about bringing forward decarbonisation and demonstrating to the market and their competitors what they were doing. It was about having an impact.

**Senator WHITTEN:** The loan was for seven years?

**Mr Learmonth:** I'd have to confirm, but I suspect that's right.

**Senator WHITTEN:** That's what was reported, so I'm assuming that was correct.

**Mr Learmonth:** I believe that's right.

**Senator WHITTEN:** What was the interest rate?

**Mr Learmonth:** I don't have that on hand. We can take that on notice if we don't have that. We can provide you with that. It was not on a concessional basis.

**Senator Watt:** As I understand it, these sorts of loans from the CEFC deliver a positive return to taxpayers as well, which I'm sure they can explain if needed.

**Mr Learmonth:** That's right. It will be at a base rate plus a margin, commensurate with the sort of risk that it is. It was a positive return to the taxpayer and not provided on a concessional basis.

**Senator WHITTEN:** That's where I was going. I wanted to make sure the taxpayer was getting a fair return.

**Mr Learmonth:** Understandably.

**Senator WHITTEN:** Thank you.

**CHAIR:** On that note, I will excuse the Clean Energy Finance Corporation. Thank you very much for your evidence and your attendance here today, and we move on to the Emission Reduction Assurance Committee.

**Department of Climate Change, Energy, the Environment and Water**

[19:47]

**CHAIR:** I welcome Professor Karen Hussey, the Chair of the Emissions Reduction Assurance Committee. Do you wish to make an opening statement?

**Prof. Hussey:** No, thank you.

**CHAIR:** I will now go to the coalition, if you've got questions.

**Senator HENDERSON:** We have. However, the relevant senator is not here. Do you mind giving the call to someone else?

**CHAIR:** Okay. This is an interesting moment in time where no-one is ready.

**Senator HENDERSON:** Just bear with us. Apologies.

**CHAIR:** Senator Hodgins-May.

**Senator HODGINS-MAY:** Can you please tell us whether the ERAC has approved the improved native forestry method?

**Prof. Hussey:** No, we have not.

**Senator HODGINS-MAY:** Can you give an update on that and where it's up to please?

**Prof. Hussey:** Going back to September last year, we recommended to the minister that it be one of four methods to be prioritised for development. The minister made that announcement in October last year. The proponent, through the proponent led method development process, is then responsible for developing that method and undertaking some consultation on it. That took place over the first half of this year. It then came back to ERAC in our October meeting of this year, where we reviewed the materials in front of us, consistent with what needed to be in them under the act, in terms of a detailed outline which we could then put out for consultation. At this point, I would anticipate those papers to be released for consultation in a matter of days. We're just waiting for a wee bit of advice from the department and indeed the proponent in relation to the implications of last week's reforms to the EPBC Act and what it might mean for the method.

**Senator HODGINS-MAY:** So that will come out for consultation? Is that time bound?

**Prof. Hussey:** Yes. It's a minimum of 14 days and a maximum of 28.

**Senator HODGINS-MAY:** What is the step after that?

**Prof. Hussey:** We will then, as a committee, take on board all of the feedback that we get through the consultation process. We will assess whether or not we think that consultation has raised issues with the method's alignment with the offsets integrity standards. If the answer is, 'Yes, we do think that there are issues now with the alignment against the offsets integrity standards,' we would request and work with the proponent to bring the method into alignment with the offsets integrity standards. We would then assess the method and provide advice to the minister in relation to that.

**Senator HODGINS-MAY:** This might come through in your consultation, but we've heard from stakeholders right across the political spectrum that the integrity of the extended logging rotation is very dubious. It's wide open for manipulation and exploitation. Have you formed any preliminary views on that?

**Prof. Hussey:** No, not yet. We were obviously quite convinced by the expression of interest that the method had the potential, and it did at that stage also include delayed logging as well as cessation of logging to meet the offsets integrity standards. I think you're right. I anticipate receiving quite a lot of feedback from a range of different quarters in response to the outline that we'll release shortly. There are two areas with the method that we'll be particularly probing. One is in relation to additionality, and the other is in relation to carbon leakage. I would say though that, as will become obvious when the method is released in a few days, in the world of ACCU scheme methods, this one has quite a number of belts and braces associated with it in terms of bringing it into alignment with the offsets integrity standards, particularly with respect to additionality and carbon leakage, but we really want to stress test that, and that's what the consultation process will do.

**Senator HODGINS-MAY:** How does additionality happen with a place like the New South Wales Great Koala National Park, where it has been announced but they're awaiting your approval?

**Prof. Hussey:** The concept of additionality in the offsets integrity standards relies on us making a judgement about what would happen in the absence of the method. The New South Wales government has made it very

clear, certainly in the last 18 months since ERAC has been involved, that the creation of the Great Koala National Park is contingent on the method being approved so that it can then generate the ACCUs which would support the development of the park. That's that aspect of additionality, and that's the argument that they've put forward. The introduction of a moratorium raises an interesting question about the extent to which that cessation of harvesting in that 12-month period ought to be considered in the calculations of the baseline or whether it shouldn't be. That's one of the areas that we'd like to press on in the consultation process.

**Senator HODGINS-MAY:** Is it a bit of a chicken and egg situation? They aren't creating it until you approve it, but then surely it is an additional.

**Prof. Hussey:** I think if we were talking about private land it might be slightly different, but we're talking about publicly owned forests. I think, and certainly the committee felt, that it was reasonable that a state government that intended to register a project for the purposes of either ceasing or delaying harvesting would need to do a feasibility study and do an enormous amount of public consultation around that potential intervention. As long as you've made it clear from the outset that you intend to do this and it's contingent on that happening, in order for us to have a sensible conversation with communities about what this might look like when it's rolled out, you would need to bring in something like a moratorium to temporarily cease harvesting. I hear you; that argument of the chicken and egg has certainly come through to the committee from stakeholders along the way, but, at this point in time and subject to consultation, we're quite comfortable with that aspect of additionality.

**Senator HODGINS-MAY:** The New South Wales government announced it before they were elected to office. How does that not allude to the fact that they were going to do it anyway?

**Prof. Hussey:** Is this the announcement from 2015?

**Senator HODGINS-MAY:** Yes—for the Great Koala National Park.

**Prof. Hussey:** I think it's the fact that it was announced in 2015 and wasn't delivered.

**Senator HODGINS-MAY:** I don't have any further questions. Thank you.

**CHAIR:** Senator Cadell.

**Senator CADELL:** I have questions in a very similar vein. Once again the Greens and the Nats team up. Often that happens. The additionality issue is very much a concern for us. You mentioned leakage, but there are also the measurability and the inventory stockpiles there. You mentioned that it's locked up now. So do we consider that additionality? There's so much around there. What is the process going forward? We've got a consultation going on there. I think the states have responded with their version of Macintosh on this. Is that what's going on here?

**Prof. Hussey:** That's what will go out for consultation.

**Senator CADELL:** That states version? You've got it?

**Prof. Hussey:** It is only a states version. There is no ERAC version. The proponent is the New South Wales government. They were the ones who wrote the EOI. They're the proponent that writes the method. We then make a preliminary assessment as to whether or not we're comfortable with what's in the paperwork, the detailed outline per the act, and for it to go out for consultation. We use that consultation, as a committee, to broaden our perspectives vis-a-vis the extent to which the method aligns with the offsets integrity standards.

**Senator CADELL:** In response to questions from Senator Hodgins-May, you mentioned that New South Wales has said that the Great Koala National Park is contingent upon this method being approved. In the second reading debate, the premier said that it was not—that they would just deliver it in a different way. Does that affect how you will look at this?

**Prof. Hussey:** I'm not familiar with what the premier said.

**Senator CADELL:** I don't want to verbal him, but, if he had said that, would that affect how you look at it?

**Prof. Hussey:** I'd have to see the exact language, but certainly everything that we've been told in formal communication among the department, the secretariat and the proponent has been that it is contingent on the method being approved.

**Senator CADELL:** I have confidence he said it would still be delivered but in a different method, but I'll get back to you. While we're going there, delayed harvesting, potential harvesting and reduced harvesting are all activities that the forest managers do at the moment, aren't they? We're talking about a different scale. They all already happen. So what is the additionally that they're proposing?

**Prof. Hussey:** The method proposes one or both of two activities. One is to cease harvesting full stop, and the other is to delay the period at which you harvest. Essentially, instead of being in 40-year or 80-year cycles, you allow the trees to grow for longer to sequester. The method has what's called a sustainable yield calculation. What it allows for is an adjustment to take account of the sustainable yield that might have happened and the actual yield that did happen as a consequence of actual logging activity. As long as the baseline itself is an accurate reflection of what we believe would have happened otherwise, evidence of carbon having been avoided or sequestered after that fact would be considered additional. So you have to prove with a high level of confidence what you think the baseline harvesting would have looked like and then you have to accurately measure what has happened as a consequence of the project's intervention.

You're right; it's about scale. The way the method works at moment is there are about 10 different settings in the method to allow for additionality challenges, but it is things like making sure that nobody gets any ACCUs, the state doesn't get any ACCUs, unless at least 20 per cent of the baseline harvest has been reduced in aggregate over the life of the project, which is a 15-year crediting period, and each 12-month period within the reporting period. That allows for that scale or that structural adjustment that makes it different from what you've said, quite rightly, might happen now. So there's a scale component to it. In the design features of the method, it allows for what's called the carbon protection area, which is where the cessation of the harvesting actually happens. But the calculations for abatement and the issuance of ACCUs is undertaken with reference to the entire forest area or region. That is to allow for the calculation of consequences of that intervention taking place. It speaks to the leakage, but it also speaks—

**Senator CADELL:** I'm going to leakage as my next point. It's not all on the mid-north coast of New South Wales. There are pockets that still go there. Do we look at additional harvesting there offsetting the Koala National Park?

**Prof. Hussey:** Yes. I should stress, because it's something that I think is often forgotten, when the committee assessed the EOI—and it is still the case now—the method was not designed exclusively for a New South Wales scenario; it was designed for the three states that still conduct commercial harvesting in native forests. There are a number of settings that speak to the leakage piece, and these are the ones that we'll be testing through that consultation process. The design that includes the whole forest area allows you to track any additional harvesting that has happened as a consequence of the drop in supply from the carbon protection area.

**Senator CADELL:** Over what landscape? Close? Adjacent to?

**Prof. Hussey:** The RFA.

**Senator CADELL:** The whole RFA.

**Prof. Hussey:** Or, where there isn't an RFA, the project area has to be at least 150 million hectares. Correct me if I'm wrong.

**Senator CADELL:** I will not take you literally!

**Prof. Hussey:** There's also a setting within the method that requires the reporting of any uplift in harvesting that takes place on private land. That's for the obvious risk, which is that if you reduce your supply over here, it's going to pop up over there. That's within the state boundary. Then there's a five per cent catch-all discount rate, which is for carbon leakage more generally. We've got four main settings currently in the method that get our arms around, collectively, what we think the carbon leakage risk might be. Obviously, the consultation process is open to different perspectives.

**Senator CADELL:** I'm pleased. I don't see a really robust leakage mechanism in the Macintosh scheme—I haven't seen the latest things but previous models have not had a really robust leakage mechanism. Going back to the statement that Koala National Park 'doesn't happen without this method'—that's of some concern. Is there a risk this method will credit decisions made for non-carbon reasons, such as Koala National Park's acts of conservation or regulatory constraints. Is that part of your process that, with RFA limits and all this, this method gets credit for stuff that isn't really carbon related, because it's linked to such a program?

**Prof. Hussey:** It's a risk. The method needs to be designed to manage that risk. We all need to have confidence in it, because nobody wants ACCUs issued off the back of a method that doesn't have integrity. That will be ERAC's responsibility.

**Senator CADELL:** In previous iterations of estimates, not the latest one—I won't ask you to comment on one that's actually going on—you have raised some concerns around these two things, especially leakage and additionality. Have you discussed these things prior with DCCEEW in previous iterations? Have you previously discussed with DCCEEW these concerns around leakage and additionality?

**Prof. Hussey:** Yes. Our secretariat is in DCCEEW. In preparation for receiving this method or any method under the proponent-led method development process, the secretariat engages with the proponent on questions that they have—or questions that the committee will have which they think they might be able to pre-empt—so the proponent is as prepared as they can be when they eventually come to the committee. It would be entirely accurate to say that we have had conversations about all of the Offsets Integrity Standards with respect to this method, not just additionality and carbon leakage, but when we look at a draft method, we're looking at it with respect to the six OIS. More recently, after last week, we did put to the proponent—or we put it to the department and then asked the department to put it to the proponent—that we'd really appreciate some advice on what last week might mean with respect to that method.

**Senator CADELL:** We're getting to the consultation phase of the proponent.

**Prof. Hussey:** Yes.

**Senator CADELL:** I'm hearing that can be as short as 28 days; is that correct?

**Prof. Hussey:** Under the act—

**Senator CADELL:** It's at least 28 days, I think.

**Prof. Hussey:** No, it's a maximum of 28 days.

**Senator CADELL:** Have we started pre-consultation consultations or speaking with stakeholders?

**Prof. Hussey:** Well, there's a good point. This is not the first time the method has been out in the community, if you like. There was very extensive consultation undertaken by the proponent earlier this year. This is the ERAC phase of the consultation process. I think, in all honesty, Senator, there probably would be a little bit of leeway, with some extensions at the end of the 28 days, should push come to shove—just because it is Christmas—which we have done with the savanna fire management method, as well. So that's not unique to this method. But the 28—

**Senator CADELL:** So it's not 28 business days; it is 28 days, and we have Christmas, New Year's and every day throughout that period.

**Prof. Hussey:** It's 28 days, yes.

**Senator CADELL:** Okay. That's suboptimal, one might say—but anyway. You can't do that.

**Senator Watt:** Professor Hussey made the point that there is some leeway.

**Senator CADELL:** Yes, but legislation is legislation. ERAC hasn't been able to start its consultation in any way with stakeholders, forestry managers or anything? There has been nothing to date?

**Prof. Hussey:** No, and that's very deliberate. The proponent has had the method, and, as soon as we release it for consultation, it's with ERAC.

**Senator Watt:** I think, Senator Cadell, you missed the very beginning of this, where Professor Hussey made the point that the consultation was—I don't want to say 'held up'. The opportunity has been taken to update or amend the proposal in light of last week's EPBC reforms.

**Senator CADELL:** Yes, we've been refreshing, waiting for it to come up. It hasn't come up. My concern—and I think I said something similar in the third reading in the chamber—is best endeavours leading to suboptimal outcomes. I use the Pilliga state forest as an example. There was a community of 15,000 koalas. It had logging. It reduced logging. That was stopped. There was overcrowding of non-native species. There was lack of fire maintenance. It came through and destroyed it. The habitat with an estimated 15,000 koalas is now estimated to have between 50 and 450. It's that thing. When we're weighing messes and what happens, do we look at the potential consequence of changing management of the area as well? That burnt most of the Pilliga in 2017 and 2018. No-one won in that. It wasn't good for the environment; it wasn't good for loggers. Do you look at things that might have an effect, like change of management?

**Prof. Hussey:** The method accounts for disturbance events like bushfires in the calculation of the sustainable harvest yield baseline. That is a material impact in terms of bushfires. With respect to broader biodiversity impacts, to koalas in particular, there was one point where ERAC was involved, then there's another point which I'll speak to. When we were asked to assess the 39 expressions of interest, one of the criterion we were asked to look at was the broader co-benefits of the 39 expressions of interest. In that context, we looked at the biodiversity outcomes of any of the land sector methods.

The next point is the broader impacts of a method that comes via ERAC to the minister for approval. The act requires that the minister be given advice on the broader social, economic and environmental impacts of a

method, and that advice is provided not by us, ERAC, but the department. That would be the next bite of that cherry, if you like.

**Senator CADELL:** Makes me wish I came up when the department was here! What me throw a Dorothy Dixer that gets knocked back due to not being proper! The department might have comments on the study that the male koalas in the state forestry areas were healthier and more active than in the national park, where they were leaner, malnourished and not as healthy.

**Prof. Hussey:** I could possibly comment, Senator, on what we would say!

**Senator CADELL:** How do you assess permanence of the IFM method, given the method is based on avoided harvest rather than sequestration?

**Prof. Hussey:** Permanence is 100 years and only 100 years. In the other ACCU Scheme methods around sequestration, there's a 25-year option. For this particular method there is no 25-year option; it is only 100 years. Then there are provisions within the method for very expensive relinquishment requirements should a circumstance arise where the cessation or delaying of the logging is then reversed. So that risk is accounted for at the moment in the method.

**Senator CADELL:** So we're really signing off on a method that can be reversed. If it goes through, we would be signing off on a method that may be reversed in the future. It's really about nonactions rather than real sequestration if this is what they propose.

**Prof. Hussey:** It's really about—

**Senator CADELL:** It's nonactions rather than real sequestration.

**Prof. Hussey:** The atmosphere—we'll see the outcome. There's no doubt about that. In terms of whether it can be reversed, I'll come back to one of the issues that was raised earlier in the day, around scale. If all three states that have the possibility of using the method were to use the method—and there's a lot of ifs, buts and maybes in that—in terms of scale, that would mean just under three million tonnes of CO<sub>2</sub> equivalent sequestered per year for 15 years. That's a lot of sequestration, which the atmosphere will really appreciate. In terms of reversal, if you do the maths on what that's worth, there is an enormous financial disincentive to then reverse that action. The way the method is at the moment—again, I can't stress this enough; the committee is very interested in feedback to make sure that the method is indeed compliant with the offsets integrity standards—if you look at those settings, they provide more of a disincentive than some of the other methods.

**Senator CADELL:** I understand that. I'm answering my own questions just from what you've previously said. The potential economic impacts will be assessed by the department, not by you. That will be part of the external briefing. Is that correct? That's the job losses and potential job losses. We've been up there to the mills, and they've already got concerns about that. Basically, if Pentarch goes, all the small mills go. That seems to be the thing.

I'll go back to the announcement. I want to give you the information from that speech that I'm aware of. Linking that will still happen some other way, because I think they might have some stuff. If it were the other way, if these things weren't said, do you think a government coming out and saying that the creation of this is contingent upon the government accepting this method undermines the integrity a little bit in the process of what you're doing? Saying you can't have this good thing unless you agree is a bit of a gun to the head of government here, isn't it, in ERAC?

**Prof. Hussey:** I don't think the committee feels that way. I think I can say that confidently. There are a couple of things that underpin the ACCU scheme that can give us some confidence and faith here. The first is that the application of any or all the methods is entirely voluntary, so there is no gun to anyone's head to deploy a method. I think the fact that—since 2022 or 2023 there has been a consistent narrative that I'm aware of. Certainly, it's been the case in my fairly limited engagement with the proponent up until now, but consistent in that engagement has been the requirement of the method to be able to give effect to that policy intervention. That strikes me as—somebody worked out somewhere that, financially, they needed the method in order to be able to make that possible. That, in and of itself, I think is what governments do. They search for things that allow them to do things in a way that is cost effective and efficient. I suppose one of the ways to think about this is that instead of the New South Wales taxpayers paying for the park, it's, instead, the people who buy offsets or companies that buy offsets. So it's shifting it. We can argue until the cows come home about whether or not that's a good idea or a bad idea. It's not ERAC's role to weigh in on that.

**Senator CADELL:** I'm sure many miners are very excited about this proposal

**Prof. Hussey:** So I would suggest that we're relatively comfortable with where it is, just because of the belts and braces that exist within the method to ensure its alignment of the offsets integrity standards. But I'll see you in February.

**Senator CADELL:** Yes, you will. By way of editorial in the final question: I find it inappropriate that the state government comes to you lobbying for a method to create an outcome, at the financial level they need, that shuts down an industry. I think you do something because it's the right thing to do, or you do something because it's a policy setting; you don't do stuff provided someone else pays for it. I think that's a different setting. If this ACCU method is approved, and granted, is it—you said you think it's reasonable that state governments make policy decisions on things that aren't funded and then come to you and hope that they'll be funded that way?

**Prof. Hussey:** In my previous life I was a public servant in the Queensland government, and—

**Senator CADELL:** I apologise!

**Prof. Hussey:** there were a number of election commitments that were made in the hope that the funding would be found in order to deliver on them. I don't think that, in and of itself, is unusual; I think governments are entitled to say they have an aspiration and an ambition and then figure out the best policy mechanism and funding mechanism to achieve it.

**Senator CADELL:** For the people on the north coast who phoned me about the estimated timing—I will not hold you to this, because I think your evidence has been wonderful, honest and open—from today, how soon do you think we'll have a sign-off, potential or otherwise, for this method being approved, if it is approved?

**Prof. Hussey:** We would do the consultation for 28 days, with a little bit of leeway. Our next meeting is in the third week of February, so I would suggest that—depending on what we hear and how many changes, if any, are required, et cetera—the advice to the minister would probably go in around late March or April. But don't hold me to it, because I don't know what we'll get through the consultation.

**Senator CADELL:** No, I think you have been wonderful here today. I will not question anything. I look forward to talking to you in the second week of February.

**Prof. Hussey:** Indeed.

**CHAIR:** Thank you, Professor Hussey and ERAC.

#### **Snowy Hydro Ltd**

[20:16]

**CHAIR:** I now call officers from Snowy Hydro Ltd to come to the table. I welcome you, Mr Barnes. Mr Duggan, welcome back. Do you have an opening statement?

**Mr Barnes:** I do. If you'd give me the time to read it out, that would be great.

**CHAIR:** Yes, certainly.

**Mr Barnes:** Thank you for the opportunity. I'd like to acknowledge the Ngunnawal people, who are the traditional custodians of the land on which we are meeting. Snowy Hydro's role at the centre of the National Electricity Market's transition to renewable energy continues. Last week we announced two new offtake agreements, adding 120 megawatts of wind and 105 megawatts of battery capacity, bringing our total wind, solar and battery offtake capacity to over 2,100 megawatts. The wind, solar and battery storage capacity, together with our existing portfolio of faster on-demand hydro, pumped hydro and gas, means we make a material enabling contribution to the decarbonisation of the NEM. Our retail operation continues to express strong customer growth, and we now serve more than 1.6 million customers.

Snowy 2.0 will provide more than half of the long-duration storage the Australian Energy Market Operator says the network needs by 2050. This project is now close to 70 per cent complete, and our target remains for completion in December 2028. In 2023 we completed a project reset of Snowy 2.0. This was about getting Snowy 2.0 moving again by fostering a more collaborative relationship with our principal contractor and achieving progress safely. While we have done both, the productivity uplift has not been to the degree required. The project has experienced persistent and material cost pressures.

To address this, in October, we directed FGJV, our principal contractor, to undertake a line-by-line reassessment of those costs. Independent construction cost experts have been engaged to scrutinise a process that will take up to nine months. Kurri Kurri Power Station, previously known as the Hunter Power Project, has one generator now available to provide power to the grid, if needed. The second is scheduled to be available by the end of the year. Our focus has been on ensuring the station can operate on gas, it's primary fuel. We will complete commissioning on its backup diesel fuel early next year.

Finally, if you would indulge me, I'd like to take a moment to acknowledge Snowy's former chief operating officer, Roger Whitby, who retired on Friday—regrettably missing this opportunity to join me at estimates for one last time! With a remarkable 41-year career at Snowy, Roger's a skilled engineer and popular people leader. His expertise and effectiveness were only matched by his calmness and humility. Roger was one of the architects of the National Electricity Market, and his contributions to Snowy Hydro and the energy industry cannot be understated. Thank you. I welcome your questions.

**CHAIR:** Senator Cadell?

**Senator CADELL:** I'd like to start with Kurri Kurri if I can. You mentioned that one's operational and one's going through. There were obviously lots of locals concerned with the—I'll say 'pollution' for want of another word—visible emissions from the plant when it started. Is that over and done with? It won't be seen on the other one?

**Mr Barnes:** In July, we started to commission unit 1 on diesel because gas wasn't quite available. A combination of the process to commission the diesel and the burning off of the preservation oils created those visible plumes. All that on unit 1 has now passed, so, if we move to diesel commissioning—gas is finished on unit 1. Early January will probably complete the last bit of diesel commissioning, and we don't expect that same level of—

**Senator CADELL:** You don't, or you do?

**Mr Barnes:** We don't. Unit 2 is undergoing gas commissioning this month. We will then commission on diesel sometime next year, maybe early in the year. Because we've committed on gas first, again, we don't expect that level of plumes. But you can never say never. You're turning a plant on for the first time. We're strongly engaged with the community. To be frank, that was amiss when we turned it on in July.

**Senator CADELL:** You applied for the extension for the number of days it could operate on the diesel. If we're fully commissioning gas now, you won't require those? The gas is connected?

**Mr Barnes:** The gas is fully connected.

**Senator CADELL:** So we won't require those diesel days?

**Mr Barnes:** The diesel days for commissioning?

**Senator CADELL:** You extended the number of days or number of operating hours per year you can operate with diesel?

**Mr Barnes:** We don't need those for commissioning.

**Senator CADELL:** But for using?

**Mr Barnes:** For using, it's the original approval of—I think the approval for the plant is to be able to run 10 per cent of the time, and, for one per cent of the time, it can be on diesel.

**Senator CADELL:** How's the hydrogen going? It's my favourite question every time. Have you sourced green hydrogen? Are we ready to run it? What's going on?

**Mr Barnes:** We have completed the technical studies to determine that the Kurri Kurri Power Station can run at 30 per cent hydrogen loading. That advice is with the departments, and we've done no more work on sourcing green hydrogen.

**Senator CADELL:** How much diesel is run through the plant at all at the moment? Do you know by volume or number of days?

**Mr Barnes:** I don't know. I can get that on notice.

**Senator CADELL:** On a totally non-related question that I think you'll take notice, what's the outsourcing of diesel supplies down the supply chain? Are we sure we're not taking Russian diesel via intermediaries on this?

**Mr Barnes:** When we run our plant on diesel—because Kurri Kurri won't be the only one that has diesel capability—we tend to buy it short term on the local Australian market. That supply chain might not have visibility too, but we can check that on notice.

**Senator CADELL:** There is nothing in place to prevent us buying Russian diesel as a government entity?

**Mr Barnes:** We are covered by the sanctions policy, of course.

**Senator CADELL:** Yes, as opposed to private enterprise. You are.

**Mr Barnes:** We would not enter into a contract with a sanctioned country. We buy our fuel from the likes of Ampol and Shell on the local market.

**Senator CADELL:** Can you ask them for undertakings that it's not sourced by third-party countries?

**Mr Barnes:** All of our standard contracts have that undertaking.

**Senator CADELL:** They have that undertaking that they aren't.

**Mr Barnes:** I can double-check that specifically for diesel.

**Senator CADELL:** When we came in and we heard that you replaced Mr Broad because the government doesn't like surprises and he surprised them, we reset the business models. We were at \$600 million. Are we due for a surprise there? What's the final cost of this going to be? What's the current budget on this?

**Mr Barnes:** We will be quite close to the approved amount that we announced late last year. Obviously, we're following through with some of our suppliers, because we've not been happy about the technical aspects of the commissioning, but we'll be close to the approved amount.

**Senator CADELL:** Was that \$600 million?

**Mr Barnes:** No. The approved amount was \$1.3 billion.

**Senator CADELL:** It was \$1.3 billion—and that's without the hydrogen capabilities?

**Mr Barnes:** That's without the hydrogen capabilities. Just to be clear, the plant can run on 15 per cent hydrogen without modification. With modification, it can run 30 per cent hydrogen. I think I've said in this chamber before that it would be about \$70 million to complete that, but we haven't spent that.

**Senator CADELL:** So it will be under \$1.5 billion.

**Mr Barnes:** Yes.

**Senator CADELL:** Okay. That is all I have on Kurri Kurri.

**CHAIR:** Thank you. Are there any further coalition questions? Senator Smith.

**Senator DEAN SMITH:** Thank you for your patience this evening. Can you give us an update in regard to the EBA that has been just negotiated with workers?

**Mr Barnes:** For Snowy 2.0?

**Senator DEAN SMITH:** Yes, for Snowy 2.0.

**Mr Barnes:** There was a bargain in process that ran from May through to August this year, and the Fair Work Commission approved those agreements in early September.

**Senator DEAN SMITH:** What was the nature of those agreements?

**Mr Barnes:** The main contractor for the Snowy 2.0 project is Future Generation Joint Venture. The employing entity is a company of FGJV which is called SC Hydro. The enterprise bargaining agreement had run its four-year course in June this year, so it was a renegotiation of that agreement. It covers the workers on the Snowy 2.0 site.

**Senator DEAN SMITH:** My understanding was that the tunnelling workers, if that's the correct terminology, received an 8½ per cent increase.

**Mr Barnes:** The Fair Work Commission result is obviously on their website, but the characterisation of it as just an 8½ per cent increase probably doesn't cover all of the various allowances and changes that were made to the arrangements.

**Senator DEAN SMITH:** Then is my understanding correct that, in addition to the 8½ per cent, they will then get another 2¼ per cent increase every six months?

**Mr Barnes:** I don't remember that detail, but it would be contained in the Fair Work Commission ruling.

**Senator DEAN SMITH:** What's the estimated cost to the project of the new EBA arrangements?

**Mr Barnes:** The line-by-line cost reassessment—our principal contractor will determine that. We don't have that right now.

**Senator DEAN SMITH:** Can you take that on notice?

**Mr Barnes:** It will be delivered as part of the cost reassessment next year.

**Senator DEAN SMITH:** Right.

**Mr Barnes:** I would not be able to answer it right now on notice.

**Senator DEAN SMITH:** I thought I saw some reporting in the *Australian* newspaper that suggested it might be an \$800 million to \$1 billion cost over the four-year period.

**Mr Barnes:** That can only be speculation by the journalists, because you've got to take the rate times the quantity, so you've got to do a full reassessment to measure the impact, which is part of the reassessment.

**Senator DEAN SMITH:** In your opening comments, you reflected on how some of the productivity benefits hadn't been realised in the project. What are the productivity benefits that have been negotiated around this most recent EBA?

**Mr Barnes:** There's nothing specific that I would say goes to that question, because the original EBA obviously had the foundations of a contract between the workers and the employer that allowed them to work on the projects for four or five years. There are some advantages to the workers in the new EBAs around transport on the days when they move on and off shift, but, in terms of the detail of whether you pay more to get more work, there are no measures of that nature. The workers are already working pretty hard. We just underestimated the amount of workers we needed to get the work done to the schedule we require.

**Senator DEAN SMITH:** So you're satisfied that the productivity benefits are there? Have I heard you correctly—there are no additional productivity benefits arising out of the EBA?

**Mr Barnes:** No. I'll just give you a bit of the background on the EBA. The EBA was struck in 2021. The normal process on an EBA renegotiation is that 'like project' EBAs set the new benchmark—and that's effectively what happened to our contract with the workers. The productivity elements of that were already in the original EBA; the workers do two weeks of 12-hour shifts and they take one week off. Obviously, all of that is done in a safe manner, so you wouldn't necessarily expect to see additional productivity measures. It was really just a renegotiation of the contract to reflect the current market.

**Senator DEAN SMITH:** You mentioned a 'like project'. What would be a similar project?

**Mr Barnes:** The North East Link project in Victoria is a fairly large project with complexity and tunnelling. There is the Western Harbour Tunnel project in Sydney. So there are relevant benchmarks that, during that negotiation, were pointed to.

**Senator DEAN SMITH:** What would be the expected annual benefit for a worker under the new EBA?

**Mr Barnes:** Again, that's not easy to answer through a simple question. There are various types of workers with various types of grades. The range of increases would be eight to 20 per cent. It depends on the role, depends on the conditions and depends on their skill level.

**Senator DEAN SMITH:** On notice, could you provide detail of what that eight to 20 per cent looks like in terms of skill types?

**Mr Barnes:** In the Fair Work Commission judgement they would be by skill level. There are different grades within the agreement.

**Senator DEAN SMITH:** Okay. Thank you very much.

**CHAIR:** Senator Walker.

**Senator WALKER:** How far off completion are we for Snowy 2.0?

**Mr Barnes:** We're targeting the end of 2028—so that would be three years from now.

**Senator WALKER:** How long is the project expected to be in operation?

**Mr Barnes:** The design life is 150 years.

**Senator WALKER:** How would you describe the importance of Snowy for broader system reliability and affordability?

**Mr Barnes:** The Australian Energy Market Operator has modelled what the system needs in 2050 and has said it needs 647 gigawatt hours of long duration storage. Long duration is more than batteries can provide—perhaps, say, more than eight hours storage level. Snowy Hydro will provide 350 gigawatt hours of that 647 gigawatt hours. So it's hugely important to those periods when it may not be sunny or windy.

**Senator WALKER:** Would you expect that Australian consumers would pay more for their electricity in 10 years time if there was no Snowy 2.0?

**Mr Barnes:** I believe that an electricity system that's got its backbone in wind-solar, supported by batteries, pumped hydro and gas, is the cheapest wholesale market solution for Australia. For every one megawatt of Snowy 2.0, we can enable three megawatts of solar and wind, bringing the cheapest source to the market. Now, we don't model the whole market, but we firmly believe that Snowy 2.0 will allow more wind and more solar to come to market.

**Senator WALKER:** Can you give a summary of the local economic benefits of Snowy 2.0 so far and to completion? We're talking jobs and additional local investment numbers, for example.

**Mr Barnes:** Snowy 2.0 currently has about 5,000 people working on it who are all largely Australian employees and Australian based. Of total spend, I think analysis in the past has said that close to 80 per cent will be spent in Australia. I don't have, in my head, the local community spend, but we do publish that from time to time, and I'd happily provide that on notice.

**Senator WALKER:** Thanks.

**CHAIR:** Senator Roberts.

**Senator ROBERTS:** Thank you for appearing again. I've got simple questions about Snowy. First, with reference to media reports on 24 November this year regarding a role for Snowy Hydro in saving the Tomago aluminium smelter, the report states that Snowy Hydro will provide Tomago with electricity subsidised by the taxpayer from 2028. Are those plans advancing? How much power will be supplied, and how much will the subsidy cost taxpayers?

**Mr Barnes:** It's always flattering to have the role of Snowy recognised, but that's a question for the department. We're not acting on that right now.

**Senator ROBERTS:** You can't tell me about Tomago's advancing?

**Mr Barnes:** No.

**Senator ROBERTS:** What about your role in that?

**Mr Barnes:** We've provided some limited advice to the department.

**Mr Duggan:** I answered this question earlier. The stage of discussions at the moment is sensitive from the point of view of commercial negotiations, so, in the interests of that, we're not providing any more information at this stage around the process.

**Senator ROBERTS:** Okay. The next question is about reviewing Snowy Hydro's generation capacity. I would have thought you were selling all the power you generate. How much spare capacity does Snowy Hydro have currently?

**Mr Barnes:** We currently have 5,500 megawatts of generation capacity.

**Senator ROBERTS:** That is 5.5 gigawatts.

**Mr Barnes:** Yes. We're obviously building 2.86 gigawatts with Kurri Kurri and Snowy 2.0. We sell to multiple channels, whether it's residential customers from our retail brands, large industrial customers or the wholesale market more generally—our competitors and anyone who participates in that market. The contract duration varies, so we don't necessarily have a 10-year home for all of our capacity, so our spare capacity does vary, but we are, of course, currently in the process of building 2.86 gigawatts, which we haven't sold.

**Senator ROBERTS:** Thank you. In fiscal year 2024, Snowy Hydro generated 3,937 gigawatt-hours in total. Even if your gas plant, the Hunter power project, is fully online by 2028, that's only another 2,900 gigawatt-hours. Snowy Hydro 2.0 is only another 375 gigawatt hours. They won't be available in 2028; you just said that's going to be finished at the end of 2028. Can you give me an honest assessment of how much power you will have available for Tomago in 2028?

**Mr Barnes:** I won't reference it to Tomago, but—

**Senator ROBERTS:** How much is available?

**Mr Barnes:** To describe how Snowy Hydro works: we're a provider of what you might call last-resort capacity. Our average capacity factor, or the amount of time our plant runs relative to its capacity, is only 10 per cent of the time. We expect, for example, Kurri Kurri to run for less than 10 per cent of the time. So we're not really an energy provider; the energy provision is from the solar and wind that we enable. We have now contracted more solar and wind than we will produce from the Snowy 1 hydro scheme.

**Senator ROBERTS:** You mean receive it?

**Mr Barnes:** That is to receive it and be able to sell to customers packaged as a firm supply. We're not really an energy provider; we are the provider who's there when, currently, a coal plant fails, the wind is not blowing or the sun's not shining. Energy provision isn't really our game. Being there when another plant isn't available is really our game. We enable energy to come to market.

**Senator ROBERTS:** Thank you for being honest with me. Very few people will actually admit would you just admitted—that Snowy 2.0 is not an energy provider.

**Mr Barnes:** No, we act more like an insurance company.

**Senator ROBERTS:** Or a battery.

**Mr Barnes:** We back that insurance with physical assets.

**Senator ROBERTS:** Thank you. You have the generation capacity in the Snowy scheme, but you're limited by water, and of course we need to balance water with real environmentalism—environmental needs for water as well. Minister, as coal comes out of the grid, will the government be forced to change the rules to allow more water for hydro and less for the environment?

**Senator Watt:** I don't really think that's a question in this outcome. I've only just arrived here, but I presume all those sorts of issues were canvassed with the department earlier in the day. If you've got questions for Snowy Hydro, now is probably the time to ask those, but those are much broader policy issues that the relevant officials aren't here for.

**Senator ROBERTS:** Mr Barnes, your water need is one of the vulnerabilities of Snowy 2.0. The catchment area for the upper reservoir is very small. I know you're going to recycle water, but nonetheless that surely must be a concern. I think someone identified it in the past as a concern that you will need to take water from other places, which means either farming or the environment.

**Mr Barnes:** Snowy Hydro is obviously subject to water regulation. We don't make those rules, so we comply with those rules. The purpose of the Snowy scheme is to capture, store and release water to provide reliable irrigation flows and support the electricity market. As you know, Snowy 2.0 is a recycling plan, so it doesn't actually rely on those inflows. As I say, there are a couple of current reviews underway on the balance of environmental flows versus flows for irrigation and the electricity market, but we don't make those. We are subject to water license compliance, which is the instrument that governs us 100 per cent each year.

**Senator ROBERTS:** I accept that you don't govern the water requirements and that you're governed by regulation, but you foresee any need for increases?

**Mr Barnes:** Again, it is not really a question for Snowy Hydro. We will be subject to whatever regulation is put in place.

**Senator ROBERTS:** That would tend to indicate that maybe Snowy 2.0 is not terribly secure.

**Mr Barnes:** Like I say, Snowy 2.0 is a recycling plant, so it doesn't really rely on any changes to inflows or outflows from the scheme.

**Senator ROBERTS:** Minister, is the proposal to use Snowy Hydro to keep Tomago open complete nonsense?

**Senator Watt:** As you may be aware, I've been a little bit focused on some other matters over the last few days, involving EPBC reforms!

**Senator DEAN SMITH:** I thought that was last week!

**Senator Watt:** It was. I was on the job again on that today in Tasmania, as you may have seen. So I will ask Mr Barnes to say what he can about that matter. You might get better information out of him than you might out of me, but I'm not sure what he's at liberty to discuss.

**Mr Barnes:** What is the question?

**Senator ROBERTS:** Is the proposal to use Snowy Hydro to keep Tomago open complete nonsense?

**Mr Barnes:** Again, it is not one for me to comment on. I think it's a process for the department and the government.

**Senator ROBERTS:** So Snowy Hydro can't comment and the minister can't comment?

**Mr Duggan:** I will repeat what I said earlier, which is that in earlier evidence we indicated that discussions with Tomago are ongoing. They're through the industry department, not through this portfolio. We're supporting them, but they are at a sensitive stage of discussions and therefore I wouldn't feel at liberty to provide further information on the process, as that may upset those commercial discussions.

**Senator ROBERTS:** I will reiterate that Snowy Hydro 2.0 is only 375 gigawatt-hours and Snowy Hydro's gas is almost half of Snowy Hydro's generated power, so there seems to be not much room for error there.

**Mr Duggan:** This is, again, probably a question more for the industry department about those discussions with Tomago.

**Senator Watt:** We would love to have a chat with you about that later in the week.

**Senator ROBERTS:** Okay. The Eraring Power Station produced 14,000 gigawatt-hours in fiscal year 2023. Minister, will you take over Eraring, extend the life of Eraring and keep Tomago smelter open to save the thousands of jobs it supports at the smelter and in the Hunter?

**Senator Watt:** I'm not aware of any of those discussions, but, again, we're here to answer questions about Snowy Hydro in this part of the program. I'm sure Minister Bowen will have more to say about that in coming—

**Senator ROBERTS:** I'm very concerned about the jobs in the Hunter though.

**Senator Watt:** As are we. You will be aware of the work that this Labor government has done to protect those jobs, as has the New South Wales Labor government.

**Senator ROBERTS:** And threatening coal.

**Senator Watt:** Well, it is a coal-fired power station that is coming to the end of its life whether we like it or not.

**Senator ROBERTS:** It was brought forward, and now it's been shoved back again. On the night of the election win in New South Wales state election in 2023, the incoming energy minister dropped a very big hint that they wanted to prolong the life of Eraring, and now they aren't doing that.

**Senator Watt:** You're talking about decisions of the New South Wales government. I couldn't comment on that.

**Senator ROBERTS:** Your Labor government. Thank you.

**CHAIR:** Senator Smith.

**Senator DEAN SMITH:** The *Australian Financial Review* recently reported that the secretary of the department, Mr Kaiser, was overseeing the support package in regard to Snowy Hydro and Tomago. Is that correct?

**Mr Duggan:** I read that same article. You are correctly recalling the article.

**Senator DEAN SMITH:** So the content of the article is correct?

**Mr Duggan:** I'll repeat the evidence I just gave. What you're talking about is industry policy led by the industry minister, supported by the industry department.

**Senator DEAN SMITH:** The *AFR* article says:

The people briefed on the proposal indicated that the value of the support package, being overseen by Energy Department secretary Mike Kaiser, is in the billions of dollars. The government declined to comment.

Is that paragraph accurate or inaccurate?

**Mr Duggan:** Again, I refer to the evidence I just gave. This is something being led by the industry department. We are supporting those discussions, but it's being led by the industry department, as you'd expect it would be.

**Senator DEAN SMITH:** So this reference to it being 'overseen by energy department secretary Mike Kaiser' is wrong?

**Mr Duggan:** I don't know how much clearer I can be. It's being led by the industry minister, supported by the industry department.

**Senator DEAN SMITH:** You can say it's wrong.

**Senator Watt:** I don't think it's fair to ask officials to comment on the journalistic accuracy of media reporting.

**Senator HENDERSON:** It's the content.

**Senator CADELL:** It's the content.

**Senator Watt:** I think you can understand, if you listen to what Mr Duggan is saying—and I'm sure you are. I think he's giving some direction as to who is running this process, and it may well be a different department. You can then interpret what you like.

**Senator DEAN SMITH:** No, Senator Watt. It's dangerous when senators leave the Senate estimates room and apply their own interpretation to events. I much prefer to hear it directly from officials.

**Senator Watt:** He's answered the question two or three times.

**Senator DEAN SMITH:** So there is an *AFR* article, and we can direct people to the *AFR* article. For Mr Barnes's benefit, I've been able to find a reliable media source. The ABC has reported:

The Australian Workers' Union ... confirmed workers would receive an 8.5 per cent up-front pay rise, followed by a 2.25 per cent increase every six months for the next four years.

It goes on to say:

Workers on the renewable energy project will now also receive double-time pay on night shifts and enhanced travel arrangements, after the Fair Work Commission approved the agreement last week.

It goes on to say:

The union confirmed workers' pay would increase by at least \$50,000, but the pay rises would depend on their experience—which speaks to the point that you made about skill sets. Can we get an update on what the costs are of the project. You mentioned that there was some work being done with the contractor in terms of cost assessments or re-evaluations, so can you give us an update in terms of what the cost of the project is.

**Mr Barnes:** That's the purpose of the cost reassessment to the—

**Senator DEAN SMITH:** Cost assessment or reassessment?

**Mr Barnes:** Reassessment. At the end June, we'd spent just over \$9 billion.

**Senator DEAN SMITH:** By the end of June this year?

**Mr Barnes:** Yes.

**Senator DEAN SMITH:** Is there an estimate that you can share for the committee beyond the 2025 number?

**Mr Barnes:** That's the purpose of the reassessment. We've determined that we will not be able to complete it for the \$12 billion budget and therefore—

**Senator CADELL:** How much?

**Mr Barnes:** Twelve.

**Senator CADELL:** You can't meet the 12?

**Mr Barnes:** Yes, and that's why we are doing the cost reassessment.

**Senator DEAN SMITH:** When will the cost reassessment exercise be completed?

**Mr Barnes:** Within nine months of October, so, at the latest, by June.

**Senator DEAN SMITH:** June 2026?

**Mr Barnes:** Yes.

**Senator DEAN SMITH:** Are there any external parties involved in that cost reassessment exercise—any independent auditing, any consultants?

**Mr Barnes:** We have expert quantity surveyors and risk assessors. We've certainly got two advisers, and our contractor has one adviser.

**Senator CADELL:** Are they the same advisers that said from two to six and from six to 12?

**Mr Barnes:** I only went to from six to 12.

**Senator CADELL:** But are they the same advisers?

**Mr Barnes:** There are a different range of advisers, but we are a bit further on than we were in 2023. We've completed a lot more of the project. We know a lot more. I have a sizeable oversight team that we didn't have in 2023.

**Senator DEAN SMITH:** What is the quantum of the Commonwealth's equity investment? Has it changed at all?

**Mr Barnes:** The Commonwealth has supported Snowy through the construction period in three ways: permanent equity—money that doesn't need to be repaid—of \$3.98 billion; a construction loan of \$4.5 billion, which will need to be repaid; and temporary equity of \$1.4 billion, which has to be repaid. The permanent contribution is only \$4 billion.

**Senator DEAN SMITH:** But our total contribution to date is—

**Mr Barnes:** \$9.9 billion.

**Senator DEAN SMITH:** \$9.9 billion.

**Mr Barnes:** I would characterise it as support because, like I said, the majority of it has to be repaid.

**Senator DEAN SMITH:** What effect, if any, is the cost-reassessment work and the increase in the project cost likely to have on the S&P ratings for the company?

**Mr Barnes:** Once we've concluded the cost reassessment, we would obviously work with our shareholding departments on whether there was any support required to maintain our credit rating of BBB+. Our shareholding departments recognise the importance of that for a business in the electricity market.

**Senator DEAN SMITH:** Excellent. Thank you, Mr Barnes, for your cooperation. Thank you for your cooperation, Mr Duggan, as well.

**CHAIR:** Senator Pocock.

**Senator DAVID POCOCK:** Good to see you again. I've got some questions about the upper Murrumbidgee. I understand that the *Draft upper Murrumbidgee drought operating framework* opened for feedback in August and submissions were due to be published two months ago, but we haven't seen that happen. I'm interested in what the delay is for.

**Mr Barnes:** Our role is advisory to DCCEEW water, who run the process, so I wouldn't be able to talk to the reasons for the time.

**Senator DAVID POCOCK:** Okay. I'll take that up with them. Do you accept the urgency of finalising the framework, given the health of the upper Murrumbidgee?

**Mr Barnes:** The drought contingency framework codifies a period of payments to Snowy Hydro for additional releases, but we work closely with WaterNSW all of the time to accommodate whatever might be required. I think in the last financial year we released 256 gigalitres for environmental flow. The connection and the urgency is not lost on Snowy Hydro. However, we don't run the process. As with all of the water instruments, we're subject to those processes.

**Senator DAVID POCOCK:** Are you across the draft framework?

**Mr Barnes:** We have a team working with DCCEEW water on, for example, what the triggers might be and how Snowy Hydro can respond. But, in terms of the whole process around timing, no. We provide our input and then the process runs.

**Senator DAVID POCOCK:** Do you know, if the current draft were in place, if it would have been triggered last summer?

**Mr Barnes:** I don't know, to be honest.

**Senator DAVID POCOCK:** What hydrological data are you relying on for those triggers to release water or request funding to purchase water to release in drought?

**Mr Barnes:** I think part of the framework conclusion is to determine what those triggers might be. Obviously, we collect a lot of data on water flows and climate triggers, but the triggers in the framework have not been finalised.

**Senator DAVID POCOCK:** Do you accept that the upper Murrumbidgee is basically always in drought, given how much water is diverted by Snowy? You're diverting 90 to 99 per cent of the flows.

**Mr Barnes:** I think, again, that's probably a question for the water authorities. We comply with our water licence, which determines those flows, and, of course, we work collaboratively with WaterNSW to release more flows when required. I think, obviously, you'd be aware of the Snowy water inquiry operational implementation deed review—

**Senator DAVID POCOCK:** The SWOID review, yes.

**Mr Barnes:** that we're also engaged with, which I think is due to report in the middle of next year.

**Senator DAVID POCOCK:** I'm trying to work this out. The government updated your statement of expectations last year.

**Mr Barnes:** Yes, last December.

**Senator DAVID POCOCK:** Part of the statement of expectations is:

• recognise environmental, social and sustainability responsibilities, including the health of the broader river system ...  
I'm hearing from river experts in the ACT that flows have never been lower; we're struggling. At this time of year we should be seeing more, with the snowmelt. I was down there yesterday; it's flowing very slowly. I'm interested as to how those releases square with your updated set of expectations.

**Mr Barnes:** I would say that posture statement in the statement of expectations has always been the way Snowy Hydro operates within its regulated instruments. We've been very engaged on both the contingency framework and the SWOID review to ensure that any changes that are made—and we're in no way resistant; it's for those authorities to strike the balance and instruct us through the legislation. Our role is to provide information: what is the consequence operationally and what is the consequence to the electricity market?

**Senator DAVID POCOCK:** Do you have a concern about the size of the outlet at Tantangara Dam?

**Mr Barnes:** For any significant increase in flows into the open Murrumbidgee, there is likely to be a capital cost of increasing the size of that outlet. It's going to be relatively limited.

**Senator DAVID POCOCK:** Coming to 2.0 coming online, I'm interested in what work is happening around concerns being raised about the mixing of water bodies and invasive species potentially being spread around, and whether Snowy is investing in research or potential interventions—gene drive technology or anything that you think might deal with that.

**Mr Barnes:** Under our approval for Snowy 2.0, there was a fisheries management plan required which included taking physical and research efforts on the potential for invasive species to move from the lower to the upper reservoir, including the design and build of fish screens. That was led by Cook university but had international peer review to reduce the risk of that occurring. We are very engaged and compliant with that management plan.

**Senator DAVID POCOCK:** Have you explored any other avenues? You have invasive species, and particularly carp are a huge issue in water bodies across the country. Has that been of interest to Snowy?

**Mr Barnes:** I think the fish that was of most concern was—I always forget which one is the invasive one and which one is the protected one. I think the concern was more the redfin perch, and how it could affect some species in the Tantangara upper reaches. There's been an awful lot of work done over the years on what the risk is and how to reduce that.

**Senator DAVID POCOCK:** Would Snowy be interested or willing to invest in potential interventions or technology that might deal with that in the future?

**Mr Barnes:** One of the things that's live at the moment with fisheries is that as we go out to tender to construct the fish screens we are looking at the complexity and cost of that, and we're in a conversation with fisheries as to whether there are more inventive ways to tackle the problem. I'll provide this on notice, but I think the funding for that is significant—maybe close to \$100 million.

**Senator DAVID POCOCK:** Thank you very much.

**CHAIR:** Senator Cadell.

**Senator CADELL:** Just for clarification: I don't want to know who's leading and I don't want to know about the negotiations, but do Snowy or Red have anyone involved in the work on Tomago?

**Mr Barnes:** We've provided some market data to DCCEEW.

**Senator CADELL:** But no-one's part of the team? Thank you. When you came in, we spoke about transparency. You want to be more transparent, with no more surprises. A couple of years ago we had a document produced under, I think, an order to provide documents that was censored and blacked out. There have been some court cases around that. In response to a question from another senator, you said Snowy spent over \$500,000 in the Administrative Appeals Tribunal fighting the release of the business case reset. Is that still as much as you spent or was it just \$507,000 at the time?

**Mr Barnes:** I don't know that number. I am happy to provide that on notice. That process, which I think has been brought by Rex Patrick, is currently in an appeal process.

**Senator CADELL:** At the ART, yes. But the number that's been disclosed in a previous answer is \$507,000 spent.

**Mr Barnes:** If that's the right number, which I would have to confirm on notice, we've not spent any more since.

**Senator CADELL:** You can confirm that on notice. The department spent about \$87,000 on the same case. What was the reason for the difference between the spending levels?

**Mr Barnes:** We were trying to protect commercial information that would be detrimental to Snowy 2.0 and Snowy, so I think we did most of the heavy lifting with the legal work.

**Senator CADELL:** I'm not sure if I heard this in estimates or elsewhere, but there was a case brought for a protective costs order, where you were appealing against a protective costs order. Was that successful?

**Mr Barnes:** I don't know the detail of that.

**Senator CADELL:** Is there anyone here that would know the detail of that?

**Mr Barnes:** No.

**Senator CADELL:** My understanding was that, if that was successful, we'd have no chance of recouping any of the costs spent on fighting keeping that document secret; is that right?

**Mr Barnes:** I'd have to take that on notice.

**Senator CADELL:** My concern is, for someone who wants to be transparent, we get the document under an order for the production of documents and it's all blacked out, and you then spend half a million dollars minimum, and the department spends close to \$90,000, fighting to keep that document secret when we're already in another transition where that no longer matters because we've gone well past the \$12 billion, as you've said, and we're moving to a new price setting. Why fight this anymore? Why not reduce the reset if we're now in a different price setting?

**Mr Barnes:** The detail in those documents which we're attempting to protect would be detrimental to the Snowy 2.0 project and Snowy Hydro.

**Senator CADELL:** Before, it was about commercial-in-confidence. When we were talking about taxpayer funds of a taxpayer owned entity, it was different. It's now about affecting the project itself, is it?

**Mr Barnes:** It's the same effect; it's the commercial-in-confidence protection we're looking for.

**Senator CADELL:** Do you have an estimate on what the total cost of keeping that document from the public will be?

**Mr Barnes:** It depends on the court process, but we've been through a few rounds on it. We're well prepared, so we should be close to the final—

**Senator CADELL:** Can you give us that on notice, if you have it?

**Mr Barnes:** Yes.

**Senator CADELL:** Thank you.

**CHAIR:** Senator Canavan.

**Senator CANAVAN:** I've got some questions about two different long-term wind and battery contracts. The media release from your organisation, Snowy Hydro, is only a few days old, so I'm sure this is fresh in your memory. These are PPAs with Aula Energy and TagEnergy. You've got the details about how much power and some of the details about how it's being produced. I want to know what the cost is to taxpayers in dollars per megawatt hour.

**Mr Barnes:** The cost is commercially confidential between the parties. The reason we do this is we believe the combination of our on-demand assets and, in particular, wind energy provides the lowest cost for our customers.

**Senator CANAVAN:** Can I surmise from that statement that it's below the current average wholesale price in the national electricity market?

**Mr Barnes:** These contracts are for 15 years. There is an observable market for battery offtakes or wind offtakes that last for 15 years.

**Senator CANAVAN:** But, if they're not below the current market, that would suggest you don't think prices are going to come down—or why would you sign a contract?

**Mr Barnes:** We believe that the combination of these contracts and our assets provide us with competitive energy for our customers.

**Senator CANAVAN:** I'll just ask it again. You're a taxpayer funded organisation using taxpayer funds. Are these contracts below current market averages? That can't be commercial in confidence; it's a very broad statement. Are they above or below the average in the national electricity market?

**Mr Barnes:** Firstly, they're not comparable 15-year fixed agreements. The market price for electricity is a state based price, so it's a different price per state, and there are different instruments within that market, so it's an impossible question to answer.

**Senator CANAVAN:** The averages have been roughly around \$100—a bit below and a bit above. Is this contract below \$100 per megawatt hour?

**Mr Barnes:** It provides competitive energy for our customers.

**Senator CANAVAN:** I think we can surmise it's not. There's an article in the *Australian Financial Review* titled 'Snowy Hydro inks deals to drive renewables expansion', which I think was on the same day you made your announcement. The article says:

David Dixon, senior analyst at Rystad, said the high costs of wind power purchase contracts were putting off many potential customers, so the Snowy deal stood out.

"It's unlikely that many proponents want to sign a power purchase agreement [PPA] at what would be above \$100 a megawatt-hour," Dixon said.

Is Mr Dixon right?

**Mr Barnes:** We've got a long track record of signing wind and solar PPAs, which we bundle with our on-demand power, and it continues to be competitive for our customers.

**Senator CANAVAN:** It's a 15-year contract. I'm just trying to understand what Snowy Hydro thinks. Because you've got to make a commercial decision over 15 years, you'd want to have an assessment of what the price of electricity would be over 15 years. That would depend a lot on the value of this contract to the taxpayer long term. Do you expect wholesale power prices to fall over the next 15 years from their current levels?

**Mr Barnes:** We don't model the whole market. That's not our role. What we do believe is that the combination of renewables with our on-demand power will be the most competitive supply of energy. And that's why we continue to—

**Senator CANAVAN:** That's my concern. If this is the most competitive and it's over \$100 a megawatt hour, then we're in big trouble, and certainly large parts of the manufacturing industry are in big trouble. So are you telling me that you didn't do any analysis of what future prices in the wholesale electricity market would be over the next 15 years, despite signing a 15-year contract locking you into a price for the next 15 years?

**Mr Barnes:** We believe that consumers will continue to use electricity.

**Senator CANAVAN:** It's good to know that we won't completely be going to the Stone Age, but I will bring it back to the question. Did you do any analysis of what the future prices would be in the wholesale market before signing an agreement to take the power at a particular price for the next 15 years?

**Mr Barnes:** We do structural analysis of what the electricity market will look like over that period. We believe the cheapest source of electricity will be renewables with our on-demand—

**Senator CANAVAN:** But you won't tell me what the price is.

**Mr Barnes:** And we believe that the market will recover that, so we'll make a return.

**Senator CANAVAN:** It sounds like you think prices will go up, because it sounds like this contract is well over \$100 a megawatt hour. Please tell me if I'm wrong, but you won't give us any other information. And, if that is the case, that means you, Snowy Hydro, believe that, under the government's current plans, wholesale power prices are set to go higher still.

**CHAIR:** At this point, I'll say thank you to the Snowy Hydro Ltd team and Mr Barnes. Thank you for your evidence and attendance here today. I now call officers from the Australian Energy Infrastructure Commissioner.

#### Australian Energy Infrastructure Commissioner

[21:09]

**CHAIR:** Welcome, Mr Mahar. I'll ask you if you want to make an opening statement, but, given the hour, if you are going to say anything I will ask that it be incredibly brief.

**Mr Mahar:** I'm happy not to. I've provided an opening statement and I'm happy for that to be tabled at the chair's wishes.

**CHAIR:** Wonderful. That's much appreciated. Senator McKenzie.

**Senator McKENZIE:** On what dates this quarter have you met with the federal Minister for Climate Change and Energy to provide advice on activities within your portfolio?

**Mr Mahar:** My recollection is that I met with the minister on 30 October, but I'm happy to have that confirmed.

**Senator McKENZIE:** Just the one meeting this quarter with Minister Bowen?

**Mr Mahar:** Yes, that's my recollection. Give me a second and I can check my diary, but that's my recollection.

**Senator McKENZIE:** When did you last meet with the Victorian Minister for Energy and Resources, and their department, to discuss emerging issues, share observations and provide operational support?

**Mr Mahar:** I'd have to, again, check my diary and come back to you, but it would have been probably three months ago. I can take that on notice.

**Senator McKENZIE:** During your most recent engagement—and that's your most recent engagement, which was three months ago?

**Mr Mahar:** With the Victorian minister? I'd have to check, but, right here, right now, it was about that time.

**Senator McKENZIE:** Did they raise any concerns relating to the VNI West transmission project?

**Mr Mahar:** They're regularly discussed in those meetings.

**Senator McKENZIE:** 'In those meetings' suggests you've had more than one meeting with the Victorian minister for energy.

**Mr Mahar:** I take part in a number of meetings. The minister, from my recollection, is at some of those meetings. I meet with the CEO of VicGrid, or Transmission Company Victoria; that's the new name of the company.

**Senator McKENZIE:** Can you clarify for me: you've had one meeting with the Victorian energy minister?

**Mr Mahar:** Yes.

**Senator McKENZIE:** And then you have other meetings that the minister is involved in?

**Mr Mahar:** I'm happy to give you a full schedule of the meetings. I met with the Victorian minister, I think, three months ago. I have regular meetings with Alistair Parker, who is the CEO of VicGrid, or Transmission Company Victoria—TCV. They're varied agendas of issues that are related to VNI West WRL transmission in Victoria.

**Senator McKENZIE:** Got it. Is it just a one-on-one?

**Mr Mahar:** No, there are other parties involved as well.

**Senator McKENZIE:** Who else is involved in this?

**Mr Mahar:** Related entities. Again, it varies from meeting to meeting. I'm happy to provide you with the full—there are minutes of the meetings, which are, I suspect, on the public record.

**Senator McKENZIE:** I'm still unclear on whether it's a set group.

**Mr Mahar:** It's definitely a set group.

**Senator McKENZIE:** Of the same participants?

**Mr Mahar:** That's right.

**Senator McKENZIE:** That meets monthly?

**Mr Mahar:** I think it is monthly.

**Senator McKENZIE:** Great. When you met with the Victorian minister, they raised concerns with the VNI West transmission project—or did you raise concerns?

**Mr Mahar:** We get an update. There's an update on the agenda. I raised—

**Senator McKENZIE:** Not the ones with VicGrid—your meeting with the Victorian energy minister.

**Mr Mahar:** Yes, VNI West WRL is a subject and agenda item in those meetings.

**Senator McKENZIE:** In terms of the dates of the VicGrid meetings, you say they're monthly?

**Mr Mahar:** Yes.

**Senator McKENZIE:** Are they online or in person?

**Mr Mahar:** They're a mix of both but mostly online.

**Senator McKENZIE:** The agenda has standing agenda items?

**Mr Mahar:** Yes.

**Senator McKENZIE:** What would they be?

**Mr Mahar:** They are updates on the progress and various commercial updates with parties—AusNet and others—that are party to the transmission rollout.

**Senator McKENZIE:** Are community concerns a standing agenda item?

**Mr Mahar:** I provide clear advice on what I've seen in my negotiations and discussions with the community.

**Senator McKENZIE:** You're responsible for reporting on that one?

**Mr Mahar:** I wouldn't say totally responsible, but, as part of my remit, I make sure the minister and those in those meetings know what observations and discussions I've had with various community representatives.

**Senator McKENZIE:** Just to be clear, your monthly meeting with the CEO of VicGrid doesn't include the Victorian energy minister?

**Mr Mahar:** Not the monthly meeting, no.

**Senator McKENZIE:** Does it involve her office?

**Mr Mahar:** I don't believe so, but—

**Senator McKENZIE:** If you could, take that on notice. You've personally met with community members affected by the proposed VNI West alignment?

**Mr Mahar:** Yes.

**Senator McKENZIE:** In which localities?

**Mr Mahar:** I'd have to come back to you and tell you exactly. I've had a number of meetings in Victoria—in the Wimmera, in and around Western Victoria. I've had over 350 discussions with various parties in the last 12 months.

**Senator McKENZIE:** What concerns were raised?

**Mr Mahar:** Community engagement, community disruption, transparency, decision-making around planning, community benefit, impacts on the environment, agriculture—

**Senator McKENZIE:** Positive benefits?

**Mr Mahar:** There are some inquiries and discussions about what the community benefit will be.

**Senator McKENZIE:** Yes. Who raised the positive benefits to the community?

**Mr Mahar:** The community is genuinely concerned about the net benefit to the community. They're looking at what's in it for the community. Is there going to be a net loss? Is there going to be a net benefit? It's part of a general discussion around the impact on the community and how we can be sure that there is going to be a net benefit to the community.

**Senator McKENZIE:** Have you formally raised these community concerns, including issues with land access, consultation, compensation and project impacts, with the federal minister or the department?

**Mr Mahar:** Yes. I've had a number of discussions with the minister around community benefit. I've made—

**Senator McKENZIE:** Have you formalised those discussions? Have you put in writing?

**Mr Mahar:** I provided an annual report to the minister, which would include documentation of the number of concerns that the office has taken, which are very much linked to concern from the community.

**Senator McKENZIE:** Are you aware that Victorian landholders impacted by VNI West are refusing VicGrid officers onto their properties?

**Mr Mahar:** I've seen reports of that.

**Senator McKENZIE:** I think it was on the 7.30 report.

**Senator HENDERSON:** She feels like the minister for me.

**Senator McKENZIE:** Have other community members in Victoria raised concerns with you about certain projects, other than VNI West?

**Mr Mahar:** Yes.

**Senator McKENZIE:** What are those projects?

**Mr Mahar:** There are a number of projects—

**Senator McKENZIE:** Yes, there are, Mr Mahar, and I would've thought you'd have brought a list of them here, instead of relying on your memory.

**Mr Mahar:** I haven't had discussions on every single project, but I'm aware of—

**Senator McKENZIE:** Which ones are you aware of?

**Mr Mahar:** I'm aware of Meadow Creek solar facility. I'm aware of discussions in and around the Wimmera, which I think are probably more related to VNI West, which is an ongoing discussion.

**Senator McKENZIE:** Any others, other than those two?

**Mr Mahar:** Yes, but I'm—

**Senator McKENZIE:** Outside of Victoria?

**Mr Mahar:** Yes, plenty. Victoria—

**Senator McKENZIE:** I'm here to get the list.

**Mr Mahar:** I thought you just said 'Victoria'.

**Senator McKENZIE:** No. I didn't just say 'Victoria'.

**Senator Watt:** You did initially.

**Senator McKENZIE:** Did I? Sorry. I meant—fine. There are two in Victoria. Are there any others?

**Mr Mahar:** The actual numbers are in the annual report—the number of complaints in each state—so I'm happy to provide that to you.

**Senator McKENZIE:** You said that, in relation to several projects, communities had raised their issues with you, and I wanted to understand which projects they were.

**Mr Mahar:** Yes. I'm very happy to give you the actual numbers and—

**Senator McKENZIE:** And which projects.

**Mr Mahar:** Specifically where they are.

**Senator McKENZIE:** Thank you. Did you travel to Brazil for COP30?

**Mr Mahar:** I did not.

**Senator McKENZIE:** Okay. Thank you.

**CHAIR:** At that point, then, we will take a short break.

**Senator Watt:** So we're finished with the commissioner?

**CHAIR:** Yes.

**Proceedings suspended from 21:19 to 21:32**

**Clean Energy Regulator**

**CHAIR:** I now welcome officers from the Clean Energy Regulator. Mr Parker, do you wish to make an opening statement? If you do have one, I'd implore you to be brief.

**Mr Parker:** I would just like to flag that this hearing will be the last hearing of many that my colleague two to my right, Mark Williamson, will attend. He is retiring very soon. Unlike some others here, he's showing up today. Mark has given 13½-odd years of exemplary service to the CER—most of that as No. 2—and, through that, service to successive governments and to the people of Australia. I would just like to note that.

**CHAIR:** Thanks for noting that, Mr Parker. Mr Williamson, we commend you for that service. Thank you for appearing here today.

**Mr Williamson:** Thank you, Senator.

**Senator HENDERSON:** Mr Williamson, on behalf of the opposition I just want to wish you all the very best, and to thank you for your service.

**Mr Williamson:** Thank you.

**CHAIR:** Senator Hodgins-May.

**Senator HODGINS-MAY:** Thank you, Chair. And congratulations on your upcoming retirement, Mr Williamson. In May 2020, Santos wrote to you asking whether they were going to have to account for the spike in methane emissions at their Darwin LNG facility, but you say that no document or correspondence exists. Can you explain this missing documentation?

**Mr Parker:** No, I can't explain it because it's missing. That is regrettable, but it's not correct to then imply that no action was taken by the regulator. Our powers in this space are limited. We do not regulate that facility's operations or approvals. Our only role in this respect is to record the emissions for the purposes of the National Greenhouse and Energy Reporting process. That was done when the methods for that reporting were updated in 2020. We included the estimated emissions from that plant in the emissions data so that has all been published since that time.

**Senator HODGINS-MAY:** I've actually just returned from Darwin and there is immense anxiety in that community and, as you would expect, significant mistrust and disappointment at missing correspondence around something so significant. I just really need to understand how can methane leak from a faulty gas storage tank for 19 years—nearly two decades—and the Clean Energy Regulator say or do nothing about it? I ask this on behalf of very anxious doctors and community members and families living in that area.

**Mr Parker:** I have taken issue with the premise of your question. I'm sorry, but if you're suggesting that we should act beyond the executive powers of the agency—it is part of the canon of a democratic system that executive agencies stay within the powers that are given to them by the parliament, and we have done that.

**Senator HODGINS-MAY:** So Santos came to you and said, 'We're leaking 832 tonnes of potent heat-trapping methane a year.' It said, 'Let us know if we should account for it,' and they weren't asked to do anything about it. Is that correct?

**Mr Parker:** No, that's not correct.

**Senator HODGINS-MAY:** Can you clarify this for me? What happened after they notified you of that?

**Mr Parker:** As I said, our powers in this space are limited. We don't regulate the facility. We do not approve its operation. We do not set conditions upon its operation. That is the role of another regulator, and in this space that is the Northern Territory EPA, okay? The respective roles of the regulators involved need to be very clear. There is little point in asking us to do stuff which we are not empowered to do. I'm more than happy to talk at any length that you would like about how those emissions are estimated and included in the material, which then feeds into the national data for Australia—happy to talk about that at length.

**Senator HODGINS-MAY:** Thank you. I understand the roles involved. I've already questioned NOPSEMA and other regulators at previous estimates, but I'm trying to understand the whole picture. Given the CER said that no documents related to Santos exist, I can presume that no response was issued to Santos and the massive leak was never mentioned again until public reporting earlier this year. Is that correct?

**Mr Parker:** No. It's in the report. I will pass over to my colleague.

**Senator HODGINS-MAY:** Please.

**Mr Binning:** The methodology for reporting methane emissions applies a leakage factor, which in this facility calculated it at 25.7 kilotonnes, so 25,700 tonnes of CO2 equivalent. The reporting of the leak from the facility by the Northern Territory EPA on 2 September this year is an estimate in the order of 20.8 kilotonnes of CO2 equivalent per annum. We are satisfied that the reporting is aligned and the factors that we used to take into account the leakage provide adequate coverage for this issue.

The other thing I would note is that the Darwin LNG facility, when it is operating at full capacity, has emissions in excess of a million tonnes of CO2 equivalent.

**Senator HODGINS-MAY:** Thank you, but given the persistent and ubiquitous under-reporting of dangerous methane, does the regulator have any plans to lift its game? Our planet is being cooked by methane. It's so dangerous and yet the view right across the government just seems to be a shrug of the shoulders. Minister, maybe you can respond to those anxious community members, who I know will be watching, who are pretty disappointed at the shoulder shrugging that is going on when their community is being abandoned by this government. Frankly, it really looks like this government has been captured by a gas industry with little regard for their community's health and wellbeing.

**Senator Watt:** I know that's the Greens political party's talking points.

**Senator HODGINS-MAY:** No, it's not the Greens. It's the community.

**Senator Watt:** No. I know that the way you have just asked your question is the Greens political party's talking points. I don't think it was fair to Mr Parker or his officials to say that they are shrugging their shoulders. I've been listening to his evidence, and his evidence is that he can only act within the extent of his powers.

**Senator HODGINS-MAY:** What about you?

**Senator Watt:** The representing minister or minister can only operate within the extent of their powers, and, as Mr Parker has said, the powers in this matter are exercised by the Northern Territory EPA. Just because someone doesn't like something doesn't mean that we can intervene. We can intervene in matters that we have powers for. We don't have powers here. The Northern Territory EPA does, and it's a matter for them.

**Mr Parker:** I can add one element to the answer. The measurement of methane emissions is difficult and a contentious matter. I completely agree with you on that.

**Senator HODGINS-MAY:** I'm aware of that, and I have some more questions about that coming up.

**Mr Parker:** As has been flagged, we can only act within the limits of our powers in this matter. So, without repeating myself, I just want to flag that the government has appointed a technical committee to provide advice to it on the measurement of methane. We await the outcome of that work with considerable interest. We're not disinterested. I don't want to give you that impression. So we await the outcome of that—

**Senator HODGINS-MAY:** Do you have a timeline for that? When are you expecting that?

**Mr Parker:** We're not involved in it.

**Senator HODGINS-MAY:** Do you know the timeline?

**Mr Parker:** No. Well, there's a quite extensive timeline, but it is a matter run by the department, so I'm happy to hand over to Ms Munro.

**Ms Munro:** Can you repeat those questions that you have?

**Senator HODGINS-MAY:** The last one was around the timeline that Mr Parker was speaking about. What did you call the review that was happening?

**Mr Parker:** It's a technical advisory committee. We can dig out the name of that for you because I believe it was incorporated in the minister's letter to Senator Waters.

**Senator HODGINS-MAY:** Which minister?

**Mr Parker:** It was from Minister Bowen to Senator Waters, which we may or may not have access to.

**Senator HODGINS-MAY:** Can I ask for that to be tabled?

**Mr Binning:** Yes.

**Senator HODGINS-MAY:** Did you have anything to add, Ms Munro?

**Ms Munro:** Yes. Just referring to the committee, it's the Expert Panel on Atmospheric Measurement of Fugitive Methane Emissions. They've had a number of meetings, and they have provided an update. The chair of the panel, the previous chief scientist, wrote to the minister on 8 September providing an update. It is technical work. The panel's term is 2.5 years, and that's to June 2027. There is a large amount of work. If you have specific questions, I would be happy to take them on notice.

**Senator HODGINS-MAY:** I think that timeline won't bring a lot of comfort to those who I was visiting with. Going forward, let's talk about Barossa. It just commenced operations a month or so ago. Are you allowing this empty, leaking tank to be filled up to continue leaking like it has for 19 years?

**Mr Parker:** As I said—

**Senator HODGINS-MAY:** You have no control.

**Mr Parker:** It is not for us to allow it or not. It's not within our power.

**Senator HODGINS-MAY:** You have no say over whether the leak will continue to be reported under method 1 or method 2.

**Mr Parker:** We have no say over the operation of it. As for the different methods that can be applied, let me just give Carl Binning the opportunity to reply.

**Mr Binning:** As Mr Parker has indicated and just to reiterate, the management of the facility and the industrial infrastructure that's established is a matter for the Northern Territory Environment Protection Authority. The responsibilities that lie with us at the Clean Energy Regulator are to report, consistent with the legislation established for the reporting of greenhouse gas emissions. In this case, leakage is not accounted for under method 1 or method 2 specifically. It is accounted for in a series of emission factors, and, based on the evidence that we have been provided by the EPA, we are satisfied that the leak that is currently occurring or has occurred at the facility lies below the threshold of that reporting. The actual reported emissions of 25.7 kilotonnes actually exceeds the reported leakage from the Northern Territory EPA of 20.8 kilotonnes. On that basis, we're satisfied that the leak has been appropriately reported.

**Senator HODGINS-MAY:** It's not method 1 or 2? What was the method? How are you calculating it? I missed that.

**Mr Binning:** The national greenhouse emissions reporting method requires that a leakage factor be applied, which is a standard factor that is used for LNG facilities. That accounts for leakages that occur across a facility. It sits, if you like, alongside method 1 and method 2.

**Senator HODGINS-MAY:** Method 1 and 2 are happening, but that's alongside it?

**Mr Binning:** Yes.

**Mr Parker:** If you're referring to the progressive—can I use a shortcut description here—ratcheting up of the rigour of the measurements from method 1 to method 2, then yes, that's occurring and we welcome that.

**Senator HODGINS-MAY:** Will ongoing verification and monitoring be required?

**Mr Parker:** I'm not sure what the Northern Territory EPA has required in that space.

**Mr Binning:** The monitoring of the actual industrial facility and any leakage from the facility, as we've said, is a matter for the NT EPA. At the Clean Energy Regulator, we've now been collecting emissions data from facilities for over 10 years. We have a team that closely verifies and checks all the reporting. There are various audit requirements along the way. This facility is in the process of being potentially recommissioned. We haven't yet received an application for that, but, when and if we receive an application, it will go through our standard process to establish the basis upon which it reports. We will watch very closely for any variation in the reporting that would cause us to be interested. If we identify any issues or have issues raised with us, we have a wide range

of compliance and audit powers that we don't hesitate to exercise to be able to verify the emissions claims that have been made.

**Senator HODGINS-MAY:** Can you just explain what you mean by potentially recommissioned?

**Mr Binning:** As I understand it, the facility has not been actively utilised over the last couple of years. As the new field comes on, the facility will be re-stood up. I'm not across the detail of that. I'm happy to take on notice any details that we have been provided around that process. What I am aware of is that we haven't, to date, as far as I'm aware, received an application for the facility.

**Senator HODGINS-MAY:** You don't have a date of when you anticipate that being?

**Mr Binning:** No.

**Senator HODGINS-MAY:** But please do—I would appreciate it if you would take that on notice.

**Mr Binning:** I will take that on notice, and I will check tonight that we have not received anything.

**Senator HODGINS-MAY:** When you say that you have a range of compliance and audit mechanisms available to you, is there any reason why those weren't triggered in the last two decades?

**Mr Parker:** The actual measurement method and inclusion arrangements in the NGER's reporting only came into effect in 2021, from memory. It is not quite over the last two decades to the extent where we've been—

**Senator HODGINS-MAY:** Maybe the last four years, then. For the last four years, they weren't activated.

**Mr Parker:** Yes. Where we have concerns that there may be much larger leaks from the plant, for example, than show up in the factors that have been mentioned by Carl, we could certainly launch an audit into a plant to see whether it was being appropriately reported.

**Senator HODGINS-MAY:** What's the threshold for a larger leak? What do you consider not a large leak and a large leak?

**Mr Binning:** It really comes down to a judgement on the basis of our assessment officers' work. We look at the overall scale of emissions from the facility. We look at the reported emissions and how they relate to the expected emissions or any intelligence we have about variation in those emissions. Then we will make a determination as to whether we seek further auditing or further information from the facility. I'm certainly very confident in the integrity of that process, as it's been running and established for many years now.

**Senator HODGINS-MAY:** On notice, can you please provide that data that you received so that we can actually understand what that threshold looks like and what you based that decision on.

**Mr Binning:** We're bound by certain requirements as to the information that we can release. But I'm happy to take on notice the information that we can release in relation to the facility. It will be made available.

**Mr Parker:** The essential story is set out in the letter which we've tabled.

**Senator HODGINS-MAY:** Okay. If there's any additional data, so we can get a full picture of—

**Mr Binning:** Yes.

**Senator HODGINS-MAY:** the threshold not being met, that would be very much appreciated. Have your officers visited the LNG facility?

**Mr Binning:** I'd have to take that on notice—not in recent months.

**Senator HODGINS-MAY:** Do they intend to, do you think, in coming months?

**Mr Binning:** It will really depend, again, upon the judgements that are made at the time of assessing any application that we receive. We regulate a large number of entities across Australia. We take a risk based approach to that. We will wait to receive the application, and we'll make the judgements we need to make around its processing once we have it on hand.

**Senator HODGINS-MAY:** It does seem like one of the bigger ones that has come across our desks, so, if you could provide on notice any of that information on the most recent visit, that'd be good. I'd say not all of these large entities are known to be leaking, and they're being imminently filled up. It does feel quite significant, and it doesn't feel like it's necessarily getting the attention that it deserves. Will the leak be considered an incidental leak for the purposes of the national greenhouse and energy reporting scheme act?

**Mr Binning:** As I indicated—

**Mr Parker:** Can I seek clarification. What do you mean by 'considered an incidental leak'?

**Senator HODGINS-MAY:** There's a definition in the act for 'incidental leak'. I think that there's a threshold around that and around whether or not it's considered incidental.

**Mr Binning:** I would have to take that specific language around 'incidental' on notice. As I've said, from 2021-22, as Mr Parker noted, there were updated LNG-specific emission factors for liquefaction storage and transfer. They include a leakage factor, which is the factor that I reported the results of earlier, which indicated the actual reported emissions from the Northern Territory EPA were lower than the emissions calculated and reported to us through that emissions factor.

**Senator HODGINS-MAY:** I'll await that info on notice.

My next set of questions relates to Barossa. Now that Australia's most carbon-intensive gas field, Barossa, has commenced operations, has the CER determined whether Barossa is a new gas project or magically part of the Darwin LNG facility, for the purposes of the safeguard mechanism?

**Mr Binning:** I'll ask one of my team to ensure that we haven't yet received the application, and I will report back later in these estimates if we have received one. Having said that, when the facility applies, we will carefully take into account the application of all of the legislation. As you're probably aware, new gas fields are determined under the safeguard mechanism to have a baseline of zero. Then there's the issue of how and where that gas is processed and whether that is seen to be undertaken within an existing facility or not. As we haven't received an application yet, I can't pass comment on the merits of that, but that is certainly an issue that we'll be looking at very closely.

**Senator HODGINS-MAY:** You haven't received an application, or you'll find out during the course of these estimates?

**Mr Binning:** I'll just confirm—

**Senator HODGINS-MAY:** Yes. If you could then, if a decision hasn't been made, give an indication, if you have received the application, of when it will be made—

**Mr Binning:** Yes.

**Senator HODGINS-MAY:** According to Santos, CER said it had discretion through the legislation to determine whether a new gas field like Barossa, feeding an existing plant like DLNG, constituted a material change in production and that the company would therefore need to pay for its emissions above net zero. Can you confirm whether that's the case?

**Mr Binning:** I'm not sure that I would use the word 'discretion'. What I would say is we administer the law as it is made. We will assess the application on its merits. As I indicated at a high level earlier, a new gas field is considered to be new and has a zero baseline applied to it. The issues around gas being transported and processed within a facility that has previously been operating are complex. I would reserve a view until we have received an application and have been able to consider that application in detail.

**Senator HODGINS-MAY:** But the act does include some discretion to be exercised.

**Mr Binning:** I think discretion is perhaps not quite the correct characterisation.

**Senator HODGINS-MAY:** Well, discretion or however you want to—

**Mr Binning:** We may well have to exercise some judgement, but we'll do that based on the information in the application when we receive it. I certainly wouldn't want to prejudice our assessment or our assessment officers in undertaking that process diligently and with the highest integrity.

**Senator HODGINS-MAY:** I suppose it begs the question: what's the point of having that discretion—or judgement, as you define it—when it seems like a company like Santos gets to choose whether or not it pays for extra emissions, and a Santos lobbyist complains to the regulator that it's an intolerable risk if the company has to pay for extra emissions? It doesn't instil us with confidence.

**Mr Parker:** Santos doesn't get to decide. We decide.

**Senator HODGINS-MAY:** Will the CER use this assessment process to require that the leaking storage tank be repaired before Barossa starts filling it up? Or are you saying that you can't?

**Mr Parker:** We have no power.

**Senator HODGINS-MAY:** So your power is just for compliance and audit.

**Mr Parker:** If I could just be permitted to comment. There has been a fair bit of sloppy reporting around this, which has then led to some angry responses and statements into parliament. My view is that's a bit regrettable, but it is as it is.

**Senator HODGINS-MAY:** I thought you meant sloppy reporting of the leak, not the actual data around the leak. Maybe a bit of both?

**Mr Parker:** No, I mean in the media.

**Senator HODGINS-MAY:** Yes. I'm sure you can imagine how it could be causing a lot of anxiety—a leaking tank very close to where many, many people live. The missing correspondence, again, doesn't fill us with confidence. Did you get an answer that you wanted to refer to?

**Mr Binning:** Yes, I can confirm we haven't received an application yet.

**Senator HODGINS-MAY:** Moving onto methane reporting, as we touched on earlier. There are a significant number of coalmines that have changed from method 1 to method 2 reporting and have magically and significantly lowered emissions without a change in production. This has created lots of financial revenue for coal companies via safeguard mechanism credits. Is this cooking the books while cooking the planet a serious threat to the integrity of the safeguard mechanism, would you say?

**Mr Parker:** It's not cooking the books. You're quite right; there have been a number of changes that coalmines have elected to opt into, and there is a deadline by which they have to do that. It's not a magical process. I'm sorry to react to your language. Some have gone up, and some have gone down as you would expect. The method 1 methodology, without getting too complicated about it, is an industry average thing. When you move to a more direct measurement of emissions under a higher order method, you'd expect some to go up and down, and that has happened. But that doesn't then create a free kick for them. I'll ask Mr Binning to go into further detail about that. What it does require is a re-baselining. Their numbers are then changed not only in the current period but in the previous periods as well.

**Senator HODGINS-MAY:** Thank you. Can I just confirm though that some companies have created financial value simply by changing the method.

**Mr Binning:** Again, with respect, I don't think that's quite the right characterisation, so bear with me for a moment. From 1 July 2024, all safeguard mechanism facilities reported more than 10 million tons run-of-mine had to use the high order method, so the shift, as you said, from method 1 to method 2. From 1 July 2026, all other facilities will have to report using the higher order method. We have a number of facilities that have already made the transition from method 1 to method 2. If their emissions fell, we took the decision that their energy intensity determination would be essentially re-baselined. What this means is that higher emissions under method 1 was back cast, if you like, to take account of method 2 so that you're comparing apples with apples rather than apples with oranges. The baseline they report against is adjusted based on their method 2 reporting, which contains a model which allows that casting to be done very accurately, so we are happy that any reduction in emissions reported reflects a genuine reduction based on consistent use of a consistent methodology.

**Senator HODGINS-MAY:** Does the CEO do anything to go out and verify 'claimed' versus 'actual' methane emissions at coal mines?

**Mr Binning:** Our task is to ensure that regulated entities report against the frameworks that have been established by government and those reporting requirements. A key distinction between method 1 and method 2 is that method 1 applies essentially a state average factor to all coal mines, whereas method 2 essentially requires infield testing at the mine site and the development of a model that, as accurately as possible, has made estimates the volume of methane emissions from that mine.

**Senator HODGINS-MAY:** Who verifies 'actual' versus 'claimed'? Who undertakes that work?

**Mr Binning:** If you can just clarify what you mean by 'actual versus claimed'.

**Senator HODGINS-MAY:** You're saying that method 2 requires going in and testing those and measuring those amounts. Who is measuring it? Is it the company, like the coalmine outfit, or is there an independent assessment that cross-references what they are saying versus—

**Mr Binning:** I'll give you an answer as I understand it. I'm happy to take on notice that will provide documentation to you around how that process works in detail. Essentially, the obligation is on regulated entity to commission the work from a relevant expert to undertake the infield measurements and calibrate a model that then estimates the volume of methane emissions. That model goes through an assurance, and, I think, an audit process. Then we receive that documentation and our assessment officers go through that documentation to ensure that it complies with the legislative requirements.

**Senator HODGINS-MAY:** I suppose it's just that audit process. Who undertakes that? How do we validate the different methods? If you could take that on notice as to that step between them measuring, that audit and then it coming to you. I just want to be really across that.

**Mr Binning:** With pleasure, Senator. I don't want to mislead you, so I'd rather provide those.

**Senator HODGINS-MAY:** I appreciate that. I'll leave my final questions and put them on notice. Do these accounting manipulations flow through into our national emissions accounts too. Do you know?

**Mr Binning:** Again, with respect, I wouldn't accept the characterisation of 'manipulation'. Our job is to apply the methodologies that have been established, and those methodologies are based on the best available information and best available science. As Mr Parker has also commented, we are actively interested in the work of the expert panel and the commitment to ongoing improvement in all of the methodologies that apply in the NGER system. The data collected through the National Greenhouse and Energy Reporting process are used to inform the national inventory, which the department has responsibility for. The insights derived from that data are very fundamental to the reporting of Australia's industrial emissions. That, in our view, is perfectly appropriate.

**Senator HODGINS-MAY:** Thank you. Do you think there's a possibility, though, that our national emissions are coming down based on the way that coal companies choose to present their data?

**Mr Binning:** I would say not. We're very confident in the reporting of all of the regulated entities. It is based, as I said, on the best available evidence. As we've discussed in the evidence in this line of questioning, those methodologies are aligned with the IPCC's standards; they represent international best practice. As I understand it, there is no complacency. The department is continuing to actively look at new technologies and whether they can give us better insight. I don't think that anyone is pretending that methane emissions are easy to measure. What we're doing is using the best available tools.

The final comment I would make is that, under the safeguard mechanism, the transition from method 1 to method 2 is a very important transition because it allows us to understand the specific emissions intensity of each mine rather than applying an average factor. That will allow over time lower emission mines greater opportunity. That will send a stronger signal to the regulated entities.

**Senator HODGINS-MAY:** Thank you. I didn't hear a categorical 'no', but I appreciate your attempts at responding. I'll keep an eye out for that information, because I do think that audit function is really, really important, if we're saying that we are genuine in our attempts to reduce methane emissions. Thank you for your time.

**CHAIR:** Senator Roberts.

**Senator ROBERTS:** Thank you for appearing again. Why did the Clean Energy Regulator appoint the Clean Energy Council, a private industry lobby group, as the product listing body for solar panels and inverters under the Small-scale Renewable Energy Scheme?

**Mr Parker:** Thank you, Senator. I well understand the question. I will flip the question to Mr Williamson in a minute, lest he not get asked a question today, which would be unfortunate in his final appearance! The appointment of the CEC was done through a process under the law which involved a competitive bidding arrangement, and CEC won that process.

**Senator ROBERTS:** Were government ministers involved at the time?

**Mr Parker:** Ministers set the legal framework. I don't think it was actually a decision from [inaudible]. We'll give it to Mark.

**Mr Williamson:** Senator, to help you with the context, originally in the legislation, the Clean Energy Council had been nominated as the body both to accredit installers and also to list approved components. In the original regulations, they were named, and they were effectively a co-regulator. Minister Taylor, a number of years ago, asked us to do a review with the department of the integrity of the Small-scale Renewable Energy Scheme. Out of that review, there was a recommendation that it be competitively tested, as Mr Parker says, for both the accrediting of installers and the listing of components. We went through a process of going to the market. The Clean Energy Council did not put in an application to continue being the accreditation body, and a new accreditation body was nominated out of that process. As Mr Parker says, for the listing of components, there were a small number of applications, and the Clean Energy Council was determined to be the best of those. The new system, though, is—we have greater control of both the accreditation body and the listing process. They were a co-regulator in the past. Now they are providing a service that we've nominated them to do.

**Senator ROBERTS:** They provide a service to you?

**Mr Williamson:** Yes. We're the regulator now. We're the single regulator, so that co-regulatory model that existed before went with that process. Solar Accreditation Australia, SAA, is the accreditation body, and that has nothing to do with the Clean Energy Council. The CEC is, in fact, still the listing body, but they're doing that for us, as is SAA for the accreditation of installers.

**Senator ROBERTS:** What probity checks were undertaken before granting this role to an organisation that actively advocates for its members' commercial interest?

**Mr Williamson:** There was an extensive process, and I can pass to Mr Binning, who was involved in that. There was a very lengthy process where a lot of questions were asked of the small number of bodies that applied. Mr Binning was actually the decision-maker, and he did not make that decision until we had done a range of checks of the applications and asked a lot of questions and made a lot of requests for further information. I might throw to you, Carl, to add anything else to that.

**Senator ROBERTS:** Before you elaborate, what was your role at the time? Who was your employer?

**Mr Binning:** The Clean Energy Regulator. I was the delegate for the final decision. As I recall, it was a very thorough process run through our procurement. There was probity advice along the way. A preliminary decision was made. Under the act, we were required to publish that decision. A range of submissions were made in relation to the proposed decision. Those comments were then taken into account, and a final decision was made against the criteria that were established for the process.

**Senator ROBERTS:** That's fairly loose, but it was a long time ago. How does the Clean Energy Regulator manage the inherent conflict of interest in allowing an industry lobby group to control product eligibility for government incentives?

**Mr Binning:** We do that through the ongoing governance of our arrangements. We have a regular cadence of meetings and reporting to us. In that reporting, what we've really sought to do over the last 18 months—there are two issues that really run intention through that product-listing process, if you like. On the one hand, we are looking for those assessments to of course be comprehensive and rigorous, and that requires that new products, as they come into the country, are compliant with the standards that have been established for those products, whether it is solar panels, inverters, batteries, solar water heaters et cetera.

Most of the feedback we got from industry was associated with long wait times for the processing of applications. We've had less concerns, relatively speaking, with the rigour of the process and greater concerns with ensuring that the assessments are processed in a prompt and efficient manner. We've been working quite closely with the CEC to ensure that there is no compromising of the integrity of the process but that their ability to process applications has been improved.

**Senator ROBERTS:** Is the process open to inspection from the public?

**Mr Binning:** I'd have to take the detail of that on notice. I wouldn't say there's anything that overtly precludes that, but there would be the usual commercial in confidence and those sorts of arrangements. I'm happy to take it on notice and provide advice.

**Senator ROBERTS:** I'd appreciate that, and if you could provide the specifics around that on notice. Has the Clean Energy Regulator assessed whether this arrangement complies with Commonwealth probity standards for regulatory functions? I assume there are some.

**Mr Binning:** As I said, we have a procurement team at the Clean Energy Regulator. They closely observe the process, and the decisions were made consistent with the requirements that are set out in the act. If my recollection is correct—and I think it is—this process is largely governed by the requirements that are set out in the regulations and in the act. Mr Williamson can probably add to this.

**Mr Williamson:** The government and the minister at the time wanted to work within amendments within regulations.

**Senator ROBERTS:** That was Mr Taylor.

**Mr Williamson:** Correct. To work within the regulations and amend the regulations to give effect—and not to have to go back and amend the act—limited the way in which this could be set up. It wasn't set up strictly as a procurement but rather as a nomination that required us to go through a set of statutory steps to go out to the market on a number of occasions. Then, as Mr Binning said, with decisions both on the product listing and the accreditation of installers, we had to say that this was our proposed decision and invite further comments. It was a statutory nomination process, but we did actually follow Commonwealth procurement and probity arrangements. While it wasn't strictly a procurement, we did follow such arrangements in arriving at the decision on the nomination process. It took a very long time. The reason it took a long time was to make sure that the applicants were bringing their applications up to a standard where we could make a decision and get a body for each process over the line. It wasn't fast because those initial applications weren't adequate to make a nomination. There was a very iterative process with those who applied to make sure that, ultimately, they had put in a satisfactory bid where Mr Binning could make a decision and say, 'That passes muster.'

**Senator ROBERTS:** What governance framework exists to ensure that decisions made by the Clean Energy Council in its regulatory capacity are impartial and not influenced by its lobbying activities?

**Mr Binning:** As I indicated, after awarding the role to the Clean Energy Council, an action plan around the service that they are providing has been established. There is a regular reporting arrangement which ensures, as I said, that they're meeting the various performance targets that have been established.

**Senator ROBERTS:** Does the Clean Energy Regulator audit or review the CEC's product listing decisions? If so, how frequently and what were the findings? Or do you just have meetings?

**Mr Binning:** I would say that we certainly closely scrutinise their performance under the requirements of the agreement that we have in place with them. In addition, we closely observe, monitor and interact with the Clean Energy Council around issues that arise or any industry intelligence that we receive. We will regularly be in contact with the CEC team to check and verify the processes that they are undertaking.

**Mr Williamson:** I can add to that. We have also taken samples ourselves. Through separate arrangements with others, we've arranged to actually grab samples of products that have been listed and get them tested ourselves. That was both pre and post the nomination of the Clean Energy Council.

**Senator ROBERTS:** That still happens.

**Mr Williamson:** I believe that happens in batches every now and again. There are limits to the funds we have for this, but we have sampled it because some have claimed that companies may have had a golden sample taken and production runs may subsequently be of a lower quality. We have done that, and, as part of the listing process, the CEC also does more real world sampling.

**Senator ROBERTS:** Thank you.

**CHAIR:** Senator Roberts, can I ask how many more questions you have?

**Senator ROBERTS:** Probably another 10 minutes, but I'm happy to hand the call over.

**Senator Watt:** I know you've been trying, Chair, but is it really necessary for officials for outcome 2 to remain if we're going to be at least 10 more minutes before we get to the Bureau of Meteorology?

**CHAIR:** Let me sound out fellow senators on that point, but I think it's a very good point.

**Senator Watt:** Sure.

**Senator ROBERTS:** Okay, I'll put the other questions on notice.

**CHAIR:** Thank you very much, Senator Roberts. I'm sure that is appreciated by your colleagues. If that's the case, then we would say thank you very much for your evidence and your attendance here today.

#### Bureau of Meteorology

[22:23]

**CHAIR:** Thank you. Welcome, Dr Stuart Minchin, the CEO and Director of Meteorology, as well as other officers from the Bureau of Meteorology. Dr Minchin, do you have an opening statement?

**Dr Minchin:** Yes, begging your indulgence, given it's my first time representing the bureau at Senate estimates and the strong interest in the website, I'd like to make a short statement if possible.

**CHAIR:** Thanks.

**Dr Minchin:** I'm honoured to represent the Bureau of Meteorology as the incoming CEO and Director of Meteorology. The bureau is a unique organisation relied on by millions of Australians. We provide essential data and services to enable national security and defence operations, inform our energy and resources enterprises, support aviation and agriculture activities, underpin the nation's burgeoning space industry and, most importantly, safeguards communities from severe weather events and plays an important role in helping Australians respond to a changing climate.

The bureau's website has been a key focus of late, and I want to put some context around that project on the record. In 2015, the bureau experienced a significant cyberintrusion followed by major technology outages in 2016. The bureau needed to completely transform its vast information and observing technology systems. The Robust program was created in response to this. The Robust program was funded in three tranches to provide the government with multiple assessment and review opportunities. Tranche 1 was funded in the 2017-18 budget at \$91.5 million. Tranche 2, in the 2018-19 budget, was funded at \$346.9 million, and tranche 3, in the 2020-21 budget, was funded at \$350 million. The total original budget across the three tranches was \$788 million, and the original program end date was set at 30 June 2023. There was no contingency funding provided, and the bureau

had to manage the program in line with the strict ASL caps that were in place at the time, which meant the delivery of the program relied on vendors and contractors.

The program was delivered throughout the extended COVID-19 pandemic, which impacted key labour markets. It was also delivered through a period of higher-than-forecast inflation, which particularly impacted technology costs. Accordingly, the Robust program ultimately closed on 25 July 2024, having materially met over 90 per cent of its intended outcomes. Total expenditure was \$866 million. The \$78 million difference between the original budget and the final amount was funded out of departmental funding, in line with budget process operational rules. At the closure of the Robust program, the Robust Transition program was established to deliver a number of remaining uncompleted items. The Robust Transition program cost \$47 million and was also funded out of departmental funding. The Robust Transition program formally closed on 7 November 2025, having met all of its exit criteria.

Robust has delivered transformative security, stability and resilience benefits for the bureau and the Australian community. This includes two new geographically separated data centres that are now operating with new technology infrastructure in place. A new, second supercomputer is in place, providing backup in the event of catastrophic failure of the bureau's primary supercomputer. The data and integration platforms, the means through which data is collected, stored and moved through bureau systems to form public weather and climate products, have been redesigned and rebuilt with improved security, system monitoring support and incident response capability.

High-risk observation sites have been replaced, including new radars, automated balloon launchers, flood warning equipment and associated communications networks. The bureau's data stores and data management practices have been redesigned, strengthening the integrity of bureau data holdings and minimising the possibility of data corruption or loss. Improved connectivity between bureau sites has been established, enabling multi-site failover of forecasting services. The security of bureau software applications has been improved, including quarantining them from malicious attack. More than 20 legacy software applications have been decommissioned.

A new asset management system has been implemented, including support for mobile field work. End-user security has been addressed, including by modernising devices, introducing multifactor authentication, migration to cloud services and upgrades to new operating systems. International data-sharing connections, including for millions of satellite imagery data points, has been rebuilt to modern and secure protocols.

The bureau's new website was also delivered as part of the Robust program. The new website accounted for approximately \$96 million of the overall cost of the Robust program. This cost reflects the significant investment required to fully rebuild all the layers of technology and the system that underpins the website. We needed to make sure that it is secure and stable and that it can draw in the huge amounts of data gathered from our observing network and weather models, as we handle millions of visits each day.

However, the response to the launch of the new BOM website shows that we didn't get it right for some sectors of the community. We accept this feedback, and I have personally seen firsthand just how committed the bureau staff are to understanding and addressing this feedback.

The bureau is rightly recognised across the world for the contribution it makes to the meteorological and scientific community. We know that the BOM holds a privileged place in the hearts and minds of many Australians. We are also fortunate to have an expert and highly dedicated workforce, committed to providing the best possible service to the Australian community, so we accept and embrace the feedback we've received, and I'm personally committed to ensuring that a significant investment leads to better outcomes for those that we serve.

**CHAIR:** Senator Cadell?

**Senator CADELL:** I might start on a different phase but still on that. How often since the launch of the website has real-time rainfall, storm warning, flood modelling or river-gauge data been unavailable or delayed?

**Dr Minchin:** I'll pass that to my colleague Nichole Brinsmead.

**Ms Brinsmead:** I don't know the number off the top of my head, but we've had three to four occurrences of either small interruptions of data flow or some delays associated with data flow over the last couple of weeks.

**Senator CADELL:** Is that related to switching data between servers, or is it just—

**Ms Brinsmead:** No. It's predominantly related to some backend what we would call load balancing—balancing the load against some of the servers in the back end. We just had a CPU spike, which needed to be resolved, and that delayed some processing.

**Senator CADELL:** Is that a problem we think will continue, or is it being resolved?

**Ms Brinsmead:** No. We think we've resolved that.

**Senator CADELL:** You mentioned that we've now got two supercomputers. We've got redundant sites there. If we have a flood and one goes down, if we have a think, what's the switchover time? What's the go-live time?

**Ms Brinsmead:** It's about a 48-hour failover period between being able to produce models from the primary supercomputer to the secondary supercomputer. Depending on what the event is, then there will be additional time to restore all the processing applications and the forecasting applications that deliver products and services. The failover time of being able to establish the secondary supercomputer with all the relevant data flows is about 48 hours.

**Dr Minchin:** To compare, without the second supercomputer, we might be looking at months or years to have replacement.

**Senator CADELL:** From an emergency management hat, these questions are all related. When we were in western Queensland a few months ago you mentioned you had new flood meters—water-height meters—and stuff like that. A lot of them were inundated and under the river height, so they failed to give data. How often do we get recorded instances where river-height data, flood-modelling outputs or rainfall intensity data are inaccessible? How often does that happen?

**Ms Brinsmead:** I'm probably not the right person to answer that question.

**Senator CADELL:** Is there anyone who might be the right person to answer that question? Someone's leaning forward back there! I'll move on if we haven't got that data. Could we potentially take that on notice?

**Dr Minchin:** We can take that on notice.

**Ms Brinsmead:** Let's take that one on notice.

**Senator CADELL:** Has NEMA, SES or any other body raised concerns about the reliability of BOM's digital platforms during weather events in the last 12 months?

**Ms Brinsmead:** I'm not aware of any concerns related to the reliability, but I don't interact with those agencies directly.

**Senator CADELL:** Who would?

**Dr Minchin:** That would be our operations team primarily and our customer team. I'll perhaps ask my colleague Michael to answer that one.

**Mr Logan:** I don't have a direct answer, but I'm not aware of anything that's been raised with us from NEMA in terms of concerns in that space.

**Senator CADELL:** If the public systems fail and we're looking at a 48-hour changeover, is there any mechanism or processes in place to give peak bodies and emergency services specialised access to different parts of the system?

**Ms Brinsmead:** There's one component to us being able to produce models, but we can also source models from other international agencies as well. For a lot of our forecasting systems and our product-producing systems, we can actually failover, and there's actually no interruption to our products being able to be delivered. So it depends on where the failure is in the end-to-end flow of the data being processed and delivered. For example—Mick's probably the prime person to articulate that—if our main forecasting platform that the Melbourne team are using fails, then they can actually fail over to another state's forecasting platform. It's almost an uninterrupted failover.

**Senator CADELL:** I think there's a fair chance that Senator Barbara Pocock will ask questions, but we may get to some on the testing before we go there. I think, historically, Accenture had some of the testing contracts for your website. Do you test for ICT failures during operations and did you as part of the rollout of the new website? Did you simulate a disaster or a failure? Did you simulate these things falling over?

**Ms Brinsmead:** All the systems that we produce have a disaster recovery plan, and those plans are tested. They're tested when they're deployed, and there's also an ongoing testing regime. One of the deliverables for the Robust transition programs was the demonstration of the failover to the new supercomputer. That had nothing to do with Accenture. Before we launched the beta website, we did some failover testing, and before we launched it we did additional failover testing recently to demonstrate that that capability was still available.

**Senator CADELL:** I think the Black Summer fires royal commission had a recommendation about continuous, reliable hazard intelligence. Did you use that as a benchmark in failovers, to be able to continue to provide that, as per that recommendation?

**Ms Brinsmead:** Not that I'm aware of, we didn't. We came up with a set of non-functional requirements which demonstrate what the availability of each system needs to be and what the failover service levels need to be for each system. They made up a requirement. They then determined the design of the system. That goes into the build and then it also goes into the testing. So, when the business were defining the requirements, some of the requirements may have been drawn from that, but I'm not aware that that was the specific origin of some requirements.

**Senator CADELL:** Did the requirements have an acceptable-down-time threshold? Was that one of the things that was looked at?

**Ms Brinsmead:** Some of our systems have availability targets. They vary depending on what the system is used for and what the requirements are. That also stands for our observing systems. There's not one target for all our systems. It depends on the system and it depends on what it's used for.

**Senator CADELL:** I have more questions, but I'm changing topics before I come back to cost. I can keep going. I'll be another 10—five if we go quickly.

**CHAIR:** If you can be five, and then I'll go to Senator Pocock and then back to Senator Henderson.

**Senator CADELL:** I believe some of my questions may back onto Senator Pocock's, so if she wants to go I can come back later, because they'll be costing related.

**CHAIR:** Senator Pocock.

**Senator BARBARA POCOCK:** Thank you. That's generous. Thanks for being here and welcome to the torture hall. I, along with others, have been questioning for some time the whole basket of projects under Robust. I've got some questions about the website but also more broadly. I feel this project has been a nightmare Harvard case study of failure in management of contracts, of failure of leadership and the completely unacceptable and unethical behaviour of the very big consultants that have been at the trough through BOM—I'm thinking of the 'land and expand' strategies, which I believe are very evident; the panels for the selection of contractors, which are dominated by the big five; the predatory billing; the failure to give value for money; the absence of penalty clauses when things fall over; and the kind of path dependency that those big consulting firms mine at the great cost to the Australian taxpayer. I'm asking you, Minister, and you, Dr Minchin, whether you view this as a failure of leadership over some years and a failure of management of contracts. I wonder what your view is overall about the lessons here for us as a public sector providing such an important service.

**Senator Watt:** Sure. Why don't I kick off, and then Dr Minchin may care to expand. In doing so, I put on record my gratitude to all the staff at the BOM. I know you share that view, Senator Pocock. The BOM has been through a pretty tough few weeks. Dr Minchin has only been in the job for about three weeks and is certainly throwing himself at all of these issues. But I recognise that, even before Dr Minchin arrived in the job, a number of other BOM staff were involved in addressing some of the issues that emerged with the website. I think it's important for the staff to know that they are supported by all of us, despite what's been a difficult time.

You may have seen, Senator Pocock, in some of the media coverage of this lately that when Dr Minchin started about three weeks ago—I met with him on his first day. I've met with him again since, and we've spoken a number of times on the phone—I certainly asked him to get on top of the issues that had emerged with the website, around, initially, its design and some of the complaints that people were expressing but also the costs, the contracting and those kinds of things.

What Dr Minchin has been able to establish—I think you were here for the opening statement. It went through the steps about the contracting and the tranches of payments. The original Robust project was funded well before this government ever arrived. What's clear to me is that three large sums of money were approved by the former government as part of that project—of which the website was only a relatively small component of about 10 per cent. I guess my interpretation of that, not having been around at the time, is that that project was always going to cost a significant amount of money. Even the first three tranches of funding that were approved by the then coalition government end up being in the order of \$800 million. Again, I'll emphasise that's not all for the website.

Then, of course, there were additional extensions after the change of government, largely to deal with issues arising from COVID. But I know that Dr Minchin and his team—Dr Minchin particularly, being the new CEO—are still reviewing and looking at what has happened around the contracting of this. I'm not criticising anyone for not telling me, but I was not aware—because I didn't ask the question before this—about the history of this project and how far it goes back. I might hand over to Dr Minchin to address that further.

**Dr Minchin:** As the minister has outlined, the original program was for \$788 million. There were extra costs that came to bear—over a program of that length of time and then extended by COVID; that brings extra costs on board. In delving into the systems there were extra things found that were not visible beforehand.

The Robust program as a whole has undergone multiple external reviews by the Department of Finance; eight gateway reviews have been undertaken by the Department of Finance. The most recent one finished last week, and the program received a green light from that external review, the gateway review. It's also been subject to multiple Digital Transformation Agency assurance reviews, throughout the program. The program as a whole went roughly 15 per cent over budget, looking at the whole program end to end. That is, I believe, well within the expectations of major technology projects, which would normally start with a 20 per cent contingency. As I mentioned in my opening statement, there was no contingency provided for this program when it was originally funded. To actually only go 15 per cent over—despite COVID and the extension of the program overall—was seen, through those reviews, as consistent.

**Senator Watt:** I'll just add one other point on that—again, Dr Minchin made this point in his opening statement. It seems curious to me that the then government did not budget for any contingency on a large IT project that was going to cost in the order of \$800 million.

The other point that Dr Minchin made in his opening statement that is relevant here was that no ASL public servants were appointed or employed in order to manage this project additional to the BOM's existing staff. You know probably better than anyone, Senator Pocock, that the former government had a policy of outsourcing work to consulting firms, whether it be the design of websites or anything, with no public servants appointed specifically to manage the project. So, to the extent that there have been cost overruns or other problems with this project, I would suggest that it might have been wise to have spent a little bit of money employing some public servants in the BOM who could actually manage this project, rather than requiring the BOM to manage it with their existing resources and then outsourcing everything to consultants.

**Senator BARBARA POCOCK:** I just want to say that I'm really concerned about what you've said. I understand what you're saying about insourcing the expertise and building a public sector capability. That's always a challenge in a massive new project, of course. But I don't hear either of you saying that leadership failed, because I think it did, and, if you look back at some of the footage of what's occurred here and estimates, it is shocking how appalling the challenge was met in terms of openness about what went wrong. I also haven't heard from either of you about the massive—I think there has been a massive feeding on the public sector by the big consulting firms. That, I think, is a major lesson for us. As a case study of how not to do something really important, that's why we need to learn that lesson. Let's go to an Accenture contract.

**Senator Watt:** Can I just say one thing, Senator Pocock. I have already made media comments in the last two or three weeks, as we've all learned more about this contract. I've made a number of media comments expressing my view that all government agencies, whether it be the BOM or anyone else, need to spend taxpayer's money wisely. I think there are some questions about how this project has been managed. I think many of them predate Dr Minchin's arrival, many of his team, and this government. So please don't be under any illusions about how seriously I and any other ministers take these issues. Also, to your point around the benefits that consulting firms have generated from these types of contracts, as you're aware, our government has expressed a lot of concern about that and is trying to turn that around, and this may well be a contract that demonstrates the need for greater oversight of consultants and greater use of public sector capacity wherever possible.

**Dr Minchin:** I'll make one comment, Senator. I wouldn't want you to get the—and I know this has been discussed in the press—perception that any of these consulting firms were extended and extended and extended again. That is not actually correct. I mentioned the tranches that were funded. At the beginning of the program, the size of the program was defined, and those tranches were set. It was not possible, for example, in tranche 1, to contract someone for the full cost of the whole program because tranche 2 was not certain at that point. The contracts were to apply to the tranches so that the work of a contractor might be a small amount in the first year, in the 2017-18 budget year, and be a larger amount that is dependent on the funding of the tranche in the following year and so on and so forth. So these were actually planned expansions of those consulting contracts.

**Senator BARBARA POCOCK:** But there were some very significant contracts that were amended 10 times, from \$31 million to \$77 million, for example. I'm referring to a particular Accenture contract—CN3623750—where the lead managing partner was Accenture. There were 10 contract amendments to that, and the current value is now \$77 million, which is two and a half times the initial contract. It's due to conclude in August 2027. Are there further extensions coming down the pipe on that? That's an example. I mean, the average nurse on 80,000 bucks—if she does something wrong, she's going to lose her job. This is just stratospheric in terms of understanding how something that begins at \$33 million ends up at \$77 million. This is a firm that is famous for land and expand, for example.

**Dr Minchin:** I will pass to Ms Brinsmead to give you some extra context around this.

**Ms Brinsmead:** The original contracts, in the way they were framed, were for an initial piece of work. Particularly in the early days of the program, it was to conduct some discovery so we could understand what the work following that would be. The extensions, particularly related to the Accenture contract, were additional work that the bureau actually asked for, particularly as we started to understand the complexity of what we were doing. So the full complexity of the program was not understood in the early days, and it definitely took us some time to really understand the complexity and what it was going to take to unpick a lot of the old legacy bureau systems.

I do take umbrage to some degree, in that I don't think these contracts were as badly managed as you make out. We did actually have quite strong governance over the projects. They had contract managers, there were steering committees, there were meetings with the vendors, there were project control groups that had external members on them, and then we had the eight gateway reviews and external DTA reviews as well. That all fed into how those contracts were managed. Never once did we get any commentary or recommendations from those reviews that related to how we managed those contracts.

**Dr Minchin:** If I could just add, there is no doubt—these are absolutely legitimate questions you are asking. I'd just say that hopefully what you have seen from me in the last three weeks is a commitment to being open and learning from these challenges that have been faced by the bureau. It's the case that there will be lessons we have learnt about how to do this from the last eight years of development. I can commit to you that we will be applying those lessons to any future work that we do. It's my intention as the new CEO to be as transparent as we can be with the Australian people and have the conversation.

I totally understand the public's reaction to the cost being revealed to the public. That might have been better explained in a more stepwise way to explain the scale of what was being undertaken at the bureau. That is why, in my statement, I have listed all of the work that was done under the Robust program, which I think you will agree is an incredible system of technology. It's not just about a website; the website is the tiny tip of the iceberg. Underpinning all of that was a huge investment in technology the likes of which have not been seen in the country before. I can absolutely commit that we will internally review what we could have done better during that time, and we'll learn from that. I intend to be as open and transparent as we can be going forward with these sorts of projects.

**Senator BARBARA POCOCK:** Thanks for your answer.

**Senator CADELL:** I'm going to try and get in on this speed-dating round; even though we cannot harass witnesses, I'm going to be a bit harrassy. That contract Senator Pocock was just—what was that for? Channels marketing through Accenture? That's not part of the Robust program?

**Ms Brinsmead:** The Accenture contract included the digital platform that underpins the website—

**Senator CADELL:** So the contract number Senator Pocock said is the website program?

**Ms Brinsmead:** It is the underlying technology, the build and the running of the platform as well.

**Senator CADELL:** Let's go to that. We mentioned a 10 per cent figure on the website. What was the interface and what was the underlying technology? Was there a breakdown on what the website was originally meant to cost between interface and technology?

**Ms Brinsmead:** The original budget for the website build was in the order of \$80 million to \$85 million. I'm not sure exactly what it was, but it definitely was in that—

**Senator CADELL:** Was that broken down into interface versus underlying technology?

**Ms Brinsmead:** We haven't got it broken down to that granular level.

**Dr Minchin:** The challenge, Senator—

**Senator HENDERSON:** Can we get that on notice—the breakdown of the website costs—so we can understand how that—

**Dr Minchin:** We'll provide that as much as we can. The challenge is that there are clearly things that were directly related to the website, and they're easy to include. There are other things that are platform issues that are not just used for the website but used for many other parts of the process.

**Senator CADELL:** How would we come up with 96, then? What are we including?

**Ms Brinsmead:** They're attributed to the website, all the ecosystem that supports it—the testing, security testing and performance testing, as well as all the operational tools.

**Senator CADELL:** But there were other expenses in the background on top of that?

**Ms Brinsmead:** We would've had them anyway, regardless of whether we built the website or not.

**Senator Watt:** But I'm sure that something can be provided on notice to step that out. There are different figures—

**Senator CADELL:** That's the concern.

**Senator Watt:** and it's a bit hard to follow, but I'm sure something can be provided on notice. And, referring back to the opening statement, that was an attempt to take us through it, but that can be elaborated on.

**Senator CADELL:** We now know that the Accenture contract, which was raised by Senator Pocock, is part of the ongoing thing—that says expiry in 2027.

**Ms Brinsmead:** That's correct.

**Senator CADELL:** I thought we'd said that this was all completed by 7 November 2025 with all criteria?

**Ms Brinsmead:** All our major contracts have a build component, which is the project. Then, it gets transitioned to business as usual, and they have an operational run component.

**Senator CADELL:** So the BAU is just maintenance and support and stuff like that?

**Ms Brinsmead:** That's correct, and that contract covers the run contract through to 2027.

**Senator CADELL:** So I don't expect to see an amendment A10 that says 'the contract amendment reflects additional and unexpected complexity'?

**Ms Brinsmead:** Not anymore.

**Senator CADELL:** That's it; understood. Very quickly, on international travel, 139 international trips were funded in the first eight months of 2025. What was the total cost of this travel?

**Ms Heward:** That was cost of travel from which dates, sorry?

**Senator CADELL:** It was the first eight months of 2025. There were 139 international trips, supplementary question on notice SQ25-000540 says, from 1 January to 31 August 2025.

**Ms Heward:** I've got 1 July to 30 September 2025, which is \$1,685,569. And I've got the total for 2024-25.

**Senator CADELL:** That's okay. I got that previously. So the last quarter is that \$1.6 million number?

**Ms Heward:** Yes.

**Senator CADELL:** When we go to the website testing, my understanding was that it took a voluntary opt-in basis for the beta testing versus the old website. Is that correct?

**Ms Brinsmead:** This is in terms of beta testing?

**Senator CADELL:** Yes.

**Ms Brinsmead:** There were a number of testing phases, which included private testing where we invited people to provide testing. Then on 25 June 2024 we opened the beta website for the Australian community to review, have a go at the website and give us feedback. That was available until we launched it and that was an opt in. We promoted it on social media and we promoted it on our old website, and people could come and use it, explore and provide us with feedback.

**CHAIR:** Senator Henderson.

**Senator HENDERSON:** Dr Minchin, it's very late. I want to cut to the chase. How could \$96 million be spent on building a website? That is an extraordinary amount of money in anyone's language.

**Dr Minchin:** As I've said publicly in the press and also in my statement earlier, it was not just what you would call a website. It's very simple to say it's a website as the website is what people see. But underpinning that is a whole technology stack that comes from 10,000 instruments in the field feeding that data through into, ultimately, one of our supercomputers. It's fed through multiple models and gets spat out into operational systems. Our meteorologists pull those models together and create the forecast that then makes it onto the website. It was actually the end-to-end chain that cost \$96 million, not just the front end if you like. It's been categorised in the press as being a blowout from \$4 million, which was the cost of the design component only, to \$96 million. That's not the case. It was actually funding that whole chain, which is a significant technology chain of processing that had to be hardened and made secure to ensure that the network of the bureau could not be hacked again.

**Senator HENDERSON:** So are you suggesting that this is value for money?

**Dr Minchin:** I think there is no doubt that, as I said in my opening statement, the website itself and the front end have not met all user needs in the community. There are active programs underway to improve and act on that feedback. So I think it's reasonable for the Australian public to ask us what's going on. But what I would say is that categorising it just as a website development that cost \$96 million is incorrect. It's actually a whole

technology stack and a whole process all the way through, of which the website is the final step. That final step is a very important step that the community care a lot about. Our website has two million hits a day from the Australian community, so it's the most-used website in the country. So I absolutely accept that we have to get that right and we have to make those improvements on the website. We have received that feedback from the Australian community.

**Senator HENDERSON:** This is my last question. I have many more, but I need to wrap up. Obviously this has caused widespread outrage right across this country—that the website that people loved and knew they could use because it was user-friendly basically became a bit of a dog's breakfast. Now you are having to redesign it. How did this go so terribly wrong?

**Dr Minchin:** The old website that everyone loved was actually not accessible to many people in the community—people that have sight impairment, for example, and rely on text readers to read. It was completely unable to meet those needs. It had 70,000 webpages in it, many of which were using language that you needed to have a PhD to understand. So I don't accept that the old website was perfect. The old website was well known by people, but it had many improvements to make. It was also insecure, as was highlighted. That all had to be updated. I totally accept, though, that, with the feedback we are receiving from the community, there are parts of the community for whom the website has not met their needs. We are working hard in the background to make changes to improve that over time.

**Senator HENDERSON:** How much are those further changes going to cost?

**Dr Minchin:** As we mentioned, it was always intended that the website would go through multiple iterations and updates over the first few months of release. We are using that resource that was always set aside as part of our business-as-usual development to deliver those changes.

**Senator HENDERSON:** Thank you.

**CHAIR:** That concludes today's hearing. Thank you to all witnesses who appeared and to Hansard and Broadcasting for their assistance. I also thank my colleagues for their patience and cooperation during the course of the day. I remind senators that the committee has agreed that any written questions on notice should be lodged with the secretariat by 11 December 2025. Thank you.

**Committee adjourned at 23:03**